The role of experiential avoidance for the quality of life in a sample of patients with diverse personality disorders

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Abstract

Introduction. The Quality of Life (QOL) a person experiences can be influenced by many variables, two of them being Experiential Avoidance (EA) and having a personality disorder (PD). EA has been conceptualized as the avoidance of negative thoughts, feelings, and emotions with the aim to alleviate or reduce negative affect, despite the harmful consequences, like a lower quality of life, in the long term. Personality disorders have been known to be associated with a lower quality of life in various samples as well. The present study examines how the QOL is influenced by EA in a sample of people with diverse PDs.

Method. Using a non-experimental, cross-sectional design, it was assessed whether EA is equally present in subjects with Bipolar personality disorder (BPD), a disorder recently often studied with regard to EA, as in subjects with other personality disorders, that did not receive much attention in research yet. Furthermore it was tested whether all domains of the QOL (psychological health, physical health, social relationships and environment) are negatively influenced by EA and whether there are differences between BPD and other PD subjects. The sample consisted of people diagnosed with a personality disorder (N = 502) and subjects were tested using the SCID-II, the AAQ-II and the WHOQOL-BREF. People were divided into two groups, one consisting of patients with BPD and one consisting of patients with other PDs. A *t*-test for independent groups and a moderation analysis were carried out.

Results. The *t*-test showed that EA is higher in people with BPD than in people with other PDs ($t(299) = 2.14$, $p = 0.03$). As the AAQ-II tested for acceptance, the conceptual opposite of EA, in the moderation analysis all QOL domains showed a significant, positive correlation with EA (Psychological health: $\beta = 1.41$, $p = 0.00$; Physical health: $\beta = 0.95$, $p = 0.00$; Social relationships: $\beta = 0.65$, $p = 0.03$; Environment: $\beta = 0.64$, $p = 0.00$). An interaction between EA and the type of PD was found within the QOL domain psychological health ($F = -2.67$, $p = 0.01$), where EA had more influence on the psychological health in people with BPD.

Discussion. The present study showed that EA is influential on the QOL in more PDs than BPD and can be seen as a transdiagnostic process for PDs. Even though EA plays a more central role in BPD it should be addressed in therapies for other PDs as well. More research is needed to draw conclusions for single personality disorders other than BPD.

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Introduction

According to the World Health Organization (WHO) Quality of Life is "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment." (W.H.O.Q.O.L. Group, 1993). As Quality of Life is such a broad and comprehensive concept it has become a popular outcome measure in psychological research (Drummond, Sculpher, Torrance, O'Brien, & Stoddart, 2005). By measuring someone's QOL, researchers can get a good insight into a person's subjective experience of their life and their satisfaction with different domains of it in an effective way (Drummond, et al., 2005). To make this broad concept more comprehensive and more practical for research Quality of life can be specified into the four following dimensions: Physical health, psychological health, social relationships and environment (World Health Organization, 1996). According to the WHO each of these domains incorporates a number of facets that can play a role in the quality of life of a person. All of these 24 facets and the domain they belong to can be seen in Table 1.

Table 1.

The World Health Organization Quality of Life domains including their facets

Domain	Facets incorporated within domains
Physical health	Activities of daily living
	Dependence on medicinal substances and medical aids
	Energy and fatigue
	Mobility
	Pain and discomfort
	Sleep and rest
	Work Capacity
Psychological health	Bodily image and appearance
	Negative feelings
	Positive feelings
	Self-esteem

	Spirituality / Religion / Personal beliefs
	Thinking, learning, memory and concentration
Social relationships	Personal relationships
	Social support
	Sexual activity
Environment	Financial resources
	Freedom, physical safety and security
	Health and social care: accessibility and quality
	Home environment
	Opportunities for acquiring new information and skills
	Participation in and opportunities for recreation / leisure activities
	Physical environment (pollution / noise / traffic / climate)
	Transport

Many different things can pose a threat to someone's quality of life. Each facet can be affected by changes in a person's life or by characteristics of that person and even slight differences in one facet can influence someone's overall QOL. It is therefore interesting to find out how the quality of life is influenced by different variables and research has been focused on this extensively.

One concept that has recently come more to the attention of psychological research, also in regard of its influences on the quality of life, is Experiential Avoidance (EA). Experiential avoidance is a pathological pattern of behavior, where people try to avoid unpleasant emotions, thoughts, memories, bodily sensations and other internal experiences (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). The term avoidance hereby not only refers to the actual avoidance of named sensations but also includes any escape from these experiences that tries to change the frequency or form of them or that alters the context in which they occur (Hayes et al., 1996). EA can therefore take on numerous different forms and can be seen in diverse behavior. Examples of Experiential Avoidance are avoiding certain situations completely, escaping from them once they occur, dulling own emotions by taking drugs or drinking alcohol or working too hard. Numerous other examples can be thought of.

So far only the negative aspects of experiential avoidance have been named. Yet people tend to make use of it for a certain reason. By using EA people are able to achieve

short term relieve from negative sensations. They are able to distract themselves from a negative feeling or to escape from it completely. Not having to experience a negative sensation can therefore be seen as a short term positive outcome of experiential avoidance. Still it has been shown that EA is associated with a number of negative psychological outcomes in the long term (Kashdan, Morina, & Priebe, 2009). Research has shown that EA can be linked to the etiology and maintenance of affective disorders, such as depression or anxiety (Spinhoven, Drost, de Rooij, van Hemert, & Penninx, 2014), eating disorders, such as Anorexia nervosa and Bulimia nervosa (Levin, MacLane, Daflos, Seeley, Hayes, Biglan, & Pistorello, 2014), and substance abuse (Hayes et al., 1996). Furthermore, experiential avoidance is known to be linked to certain personality disorders, such as Borderline personality disorder (BPD) (Hayes et al., 1996) or Obsessive Compulsive personality disorder (OCPD) (Wheaton, & Pinto, 2016), and it has been shown that it generally promotes a lower quality of life (Hayes et al., 2004). Experiential avoidance can therefore be seen as a transdiagonstic process, that is not bound to the development or maintenance of simply one psychological issue but that can be connected to numerous negative outcomes, an important, comprehensive one being a lower quality of life.

As the consequences of EA are clearer it is interesting to get a better idea of how it plays a role in people's everyday life and how it affects their wellbeing. Therefore, a form of therapy in which EA plays an important role will be discussed further. The concept EA received a more central role in third-generation cognitive-behavioral therapies, such as Acceptance and Commitment Therapy (ACT), but has historically also been described within numerous other psychological theories, including Psychoanalysis, Client-Centered therapy or Gestalt therapy (Hayes, Strosahl, Wilson, & Bissett, 2004). The aim of Acceptance and Commitment Therapy, in which EA plays a central role, is to help people live a value driven life through enhancing their psychological flexibility. That includes being able to accept negative aspects in one's life in order to be able to focus on the positive things one can do in the context of these negative aspects. Within ACT experiential avoidance is the opposite of acceptance, one of ACT's six core processes (Dindo, Van Liew, & Arch, 2017). Acceptance is described as the embrace of such private events that might be seen as difficult or unpleasant in order to create room to lead a value driven life. EA, the opposite of acceptance, therefore plays an important role in what makes people inflexible, as the attempts to avoid negative sensations make them unable to focus on anything but the avoidance itself. Following own values therefore becomes more difficult if not impossible. It comes as no surprise that ACT therefore also makes use of the earlier discussed QOL as an outcome

measure. Someone who acts inflexible, with high experiential avoidance, might generally also has a lower quality of life. EA is a crucial factor within ACT and the quality of life is an important outcome measure to evaluate the wellbeing of a person, which is what ACT tries to promote. Taking a closer look at the connections between these two concepts in previous research can therefore give a better understanding of how they affect one another.

In terms of ACT, a person with high experiential avoidance is focused on avoidance-goals and might therefore not be able to focus on his or her values which would promote his wellbeing. Therefore, a person with high EA is more likely to have a decreased QOL. To make the relation between EA and QOL more comprehensible a number of practical examples, how EA could influence different aspects of the QOL, will be given. Someone trying to avoid the fear of failure for example, might not make use of a promising opportunity that could have had a positive impact on their career or social relationships, therefore resulting in a lower quality of life. Another example is someone not doing physical exercises because they are trying to avoid the muscular pain that it might cause and therefore having a lower physical health, which plays an important role in someone's QOL. Regarding the QOL domain of environment, a person with high EA might not be able to make use of public transport or health and social care due to a fear of anxiety in public places, which they are trying to avoid.

The relationship between EA and the QOL has been established in a number of studies already. A study by Karekla and Panayiotou (2011) showed that in a sample of a randomly collected community members from Greece all of the four QOL domains were significantly, negatively impacted by experiential avoidance. Taking into account that experiential avoidance constrains a person's life space by taking up time and energy to avoid situations and sensations seen as unmanageable or unpleasant, it is no surprise that Kashdan, Morina and Priebe (2009) also found that in a sample of people with post-traumatic stress disorder (PTSD) and social anxiety disorder (SAD) the quality of life decreased when EA was higher. The study made use of The Manchester Short Assessment of Quality of Life (MANSA) (Priebe, Huxley, Knight, & Evans, 1999) and therefore assessed the subjective QOL within the fields social relationships, family relationships, work, leisure, sex life, financial situation, living situation, personal safety, and physical and mental health. Hence it becomes obvious how higher experiential avoidance can cause problems with the quality of life a person experiences. This relationship has been established for numerous samples. One sample that has not been extensively studied with regard to named relationship is the sample

of people with personality disorders. Why this might be an interesting sample to take a closer look at will be discussed further.

Just like experiential avoidance, personality disorders can be influential on the quality of life. A study by Cramer, Torgersen and Kringlen (2006) showed that all personality disorders of the DSM-III-R, an earlier version of the DSM-IV, had a significant negative correlation with the quality of life and that personality disorders were even more important in predicting QOL than socio-demographic variables were. It was shown that subjects with avoidant, schizotypal, paranoid, schizoid, and borderline PDs had the largest reduction in the QOL. Another study by Narud, Mykletun, & Dahl (2005) showed that subjects who were in treatment at an outpatient clinic for their personality disorders had a significantly lower quality of life when compared to their age- and gender-adjusted norms. The same reduction of the quality of life in people with personality disorder was found in a study with a sample of 1651 inpatients in the Netherlands (Soeteman, Timman, Trijsburg, Verheul, & Busschbach, 2005). With the current state of research one can therefore infer that PDs influence the quality of life in a negative way. In order to see how people with PDs can be an interesting sample when researching the relationship between EA and the QOL, the relation between experiential avoidance and PDs will be discussed in the following paragraph.

As stated before experiential avoidance has been linked to numerous negative health outcomes in a number of studies (Kashdan, Morina, & Priebe, 2009). Still research on experiential avoidance within the field of personality disorders has mainly focused on the Borderline Personality Disorder (BPD) (e.g., Hayes et al., 1996; Chapman, Specht, & Cellucci, 2005; Berking, Neacsiu, Comtois, & Linehan, 2009; Iverson, Follette, Pistorello, & Fruzzetti, 2012) and in just two cases on Obsessive Compulsive Personality Disorder (OCPD) (Wheaton, & Pinto, 2016) and Antisocial Personality Disorder (ASPD) (Yavuz, Şahin, Ulusoy, İpek, & Kurt, 2016). People with personality disorders might be more prone to use experiential avoidance and to therefore experience an even lower quality of life as they are more likely to have unfavorable ways of dealing with negative sensations already.

Within research regarding BPD, Experiential Avoidance has been identified to play a role in different parts of the epidemiology and maintenance of BPD. In some studies it has been found to have a moderate, positive correlation with the onset and maintenance of BPD (e.g., Chapman, Specht, & Cellucci, 2005) whereas other studies, such as the one by Berkin et al. (2009), put the focus on EA's role in depressive symptoms and their change throughout the course of treatment within BPD patients. One study (Sharp, Kalpakci, Mellick, Venta, & Temple, 2015) even suggests that the correlation between BPD and symptoms such as

depression or anxiety is mediated by Experiential Avoidance. Experiential avoidance can therefore be seen as a risk factor that is related to borderline personality disorder in a number of different ways. In other studies (e.g., Iverson et al., 2012) it was chosen to control for depressive symptoms, yet regression analyses still revealed an association between EA and the severity of BPD symptoms. That means that EA does not only influence depressive symptoms in BPD patients but correlates with other symptoms as well. To sum up one can therefore say that experiential avoidance has been established as a crucial factor within borderline personality disorder through numerous studies.

With regard to obsessive compulsive personality disorder, the study by Wheaten & Pinto (2016) found that OCPD patients experienced higher EA when compared to a non-clinical group. In addition, EA was correlated with all dimensions of OCPD as well as with the severity of symptoms and lastly, when controlling for depression, anxiety and stress, EA still accounted for OCPD traits and their severity.

The study investigating EA and antisocial personality disorder (Yavuz et al., 2016) found that people suffering from ASPD had not only higher levels of EA, but EA also correlated with social functioning in ASPD, as indicated by lower scores on the Social Functioning Scale (SFS). These lower scores meant that people with high levels of EA also had higher levels of social withdrawal, worse interpersonal functioning and participated in fewer prosocial activities. It can be seen that experiential avoidance is influential in many ways when it comes to the personality disorders described and is a transdiagnostic process that may also be underlying a larger number of personality disorders. Firstly, EA plays a role in the onset and maintenance of said disorders, secondly it has influence on symptoms such as anxiety or depression and lastly these influences can be seen in three different types of personality disorders already. Yet not all personality disorders have received attention when it comes to experiential avoidance and whether EA can in fact be seen as a transdiagnostic process for more PDs still needs to be ascertained. Furthermore, only BPD has been studied extensively with regard to EA, so more research is needed when it comes to OCPD and ASPD as well.

To draw a conclusion from what has been laid out so far, one can say that the quality of life is affected negatively by not only experiential avoidance but also by personality disorders and that experiential avoidance affects borderline personality disorder negatively. It still remains unclear whether EA plays the same role for all personality disorders or whether its influence is only present in BPD. Should EA play a role in all personality disorders, it is unclear whether it is more present in BPD, as this is the only PD extensively studied in regard

to EA so far, or if it is equally present in all PDs. We found no study that gives an overview of different personality disorders and their relation to EA. Furthermore, it remains unclear whether the effect EA has on the QOL can also be seen in the context of personality disorders. In most studies quality of life was assessed within a sample consisting of subjects with different disorders so that no specific information is present for only people with personality disorders. No study examining the correlation between EA and the quality of life for patients with personality disorders can be found. As it has been shown, EA plays a central role in reducing the quality of life within a number of different disorders so it would be interesting to see whether that is the case for people with PDs as well. If these relationships were established and as the QOL is an important outcome in psychological research, this would mean that EA could be a transdiagnostic factor for diverse personality disorders, which could in turn have implications for the treatment of personality disorders.

Furthermore, no study has yet focused on the different aspects of the quality of life, namely physical health, psychological health, social relationships and environment, when examining the relation with EA in the context of personality disorders. The question remains whether certain domains of the quality of life are especially negatively influenced by experiential avoidance. Extensive literature research has not given an answer to this question yet. Also other personality disorders, such as Paranoid, Schizoid, Schizotypal, Histrionic, Narcissistic, Avoidant and Dependent personality disorder, have not been researched with regards to EA or the association between EA and the quality of life yet. It is unclear whether the associations found between the QOL and EA in the context of BPD are similar or different from EA's influences in the context of other personality disorders.

Coming to a conclusion, the first aim of this study is therefore to examine the presence of experiential avoidance in other personality disorders and to compare it to the presence of EA in borderline personality disorder. The second aim is to determine the influences of EA on the different dimensions of the quality of life within a sample of patients with a diagnosed personality disorder and to see whether this influence is the same for people with BPD as it is for people with other PDs.

As mentioned above, research has thus far established associations between experiential avoidance and a large number of different psychopathological issues and has generally shown a negative influence of EA on the quality of life. It can be inferred that similar relations would be found when testing within the domain of personality disorders. The two following hypotheses are proposed:

Hypothesis 1: Experiential avoidance is equally present in patients with borderline personality disorder as it is in patients with other personality disorders.

Hypothesis 2: All domains of the quality of life are negatively influenced by experiential avoidance with no difference between borderline personality disorder and other personality disorders.

Method

Participants

All participants were patients at a Dutch hospital specialized in personality disorders and were categorized as treatment resistant. That means that they had received outpatient treatment previous to the study, that they were released from said treatment and were re-referred into treatment by an experienced clinician (cfm. Clarke, Kingston, Wilson, Bolderston, & Remington, 2012). Participants were recruited between 2013 and 2015 and were included in the sample if they met the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) (American Psychiatric Association, 2000) criteria for a minimum of one personality disorder. Exclusion criteria consisted of the DSM-IV diagnosis of borderline intellectual functioning (V62.89), of Schizophrenia or another psychotic disorder and of a Pervasive developmental disorder. The sample consisted of a total of 502 participants, with 387 female subjects and 115 male subjects. The average age was 31, with a minimum of 17 and a maximum of 61 years of age. Table 2 shows descriptive statistics about the personality disorder diagnoses received including how these groups were composed age and gender-wise. In total there were 192 subjects diagnosed with a borderline personality disorder and 310 subjects diagnosed with other personality disorders.

Table 2.

Diagnostic composition of the sample.

PD Diagnosis	N	Percent	M Age	N Male	N Female
Paranoid	2	0.4	29.5	1	1
Schizoid	1	0.2	28.0	1	0
Schizotypal	1	2.0	21.0	0	1
Obsessive-compulsive	11	2.2	34.5	3	8
Dependent	17	3.4	28.6	1	16

Antisocial	1	0.2	22.0	0	1
Narcissistic	5	1.0	38.8	5	0
Avoidant	82	16.3	31.1	29	53
Borderline	192	38.2	29.5	16	176
Personality disorder n.o.s.	190	37.8	33.0	59	131
Total	502	100	31.2	115	378

Note. PD = personality disorder; n.o.s. = not otherwise specified

Measures

As the used data was part of a larger study where a number of two interviews and four questionnaires were conducted, not all of them are relevant to this study: The Structured Clinical Interview for DSM-IV Axis-I Disorders (SCID-I) (First, Spitzer, Gibbon, & Williams, 1995), the Structured Clinical Interview for DSM-IV Axis-II Disorders (SCID-II) (First, Gibbon, Spitzer, Benjamin, & Williams, 1997), The Acceptance and Action Questionnaire, second version (AAQ-II) (Bond, Hayes, Baer, Carpenter, Guenole, Orcutt, Waltz, & Zettle, 2011), the Outcome Questionnaire 45 (OQ-45) (Lambert, & Finch, 1999), the World Health Organization Quality of Life-BREF questionnaire (WHOQOL-BREF) (World Health Organization, 1996) and the Dutch Hechtingsstijllijst (Attachment style questionnaire) (HSL) (Van Oudenhoven, & Hofstra, 2004). Only the interviews and questionnaires relevant to this study will be discussed further, meaning that the SCID-I, OQ-45 and the HSL will not be used.

Diagnosis

The SCID-II was used to test for the DSM-IV PD diagnosis. It is a semi-structured interview that is to be conducted by health care professionals and indicates the pathology, persistency and pervasiveness of a personality characteristic (First, & Gibbon, 2004). The SCID-II has a very low rate of false negatives and is therefore a highly sensitive (First, & Gibbon, 2004) and its reliability has been rated as substantial to (almost) perfect (Maffei et al., 1997) when using the English version of the interview. In this study both the SCID-I and the SCID-II were conducted in Dutch. This version of the SCID-II also showed adequate internal consistency and a moderate to excellent inter-rater agreement in a mixed sample of inpatients and outpatients, and non-patient controls (Lobbestael, Leurgens, & Arntz, 2011).

Experiential avoidance

The AAQ-II is a widely used self-report measure that examines a person's experiential avoidance and psychological inflexibility (Bond et al., 2011). It was assessed using a 10-item Likert-scale version where people are asked to rate statements on a scale from 1 (never true) to 7 (always true). Higher scores indicate a lower level of experiential avoidance. Based on a number of studies the AAQ-II should be reduced to a unidimensional 7-item scale to enhance internal and external validity (Bond et al., 2011), therefore it was chosen to carry out analyses with only 7 of the original 10 items in this study as well. The AAQ-II shows high reliability with a mean alpha of .84 and a mean test-retest reliability of 0.8 (Bond et al., 2011). Furthermore it shows an appropriate discriminant validity (Bond et al., 2011). Also for the Dutch version, used in this study, the reliability and validity were adequate (Fledderus, Oude Voshaar, Ten Klooster, & Bohlmeijer, 2012).

Quality of life

The WHOQOL-BREF is a 26-item self-report questionnaire developed by the World Health Organization in order to assess a person's quality of life. It makes use of the four domains physical health, psychological health, social relationships and environment including their 24 facets described earlier in this paper. Each of the 24 facets is tested by one item with two additional items testing the overall quality of life and general health (Skevington, Lotfy, & O'Connell, 2004). The WHOQOL-BREF is scored on a 5-point-Likert-scale where subjects are asked to answer questions concerning their last two weeks prior to answering the questionnaire. Answers range from 1 (Not at all) to 5 (Completely) with a higher score indicating a higher quality of life. Following the guidelines of the WHOQOL-BREF domain scores for each of the four domains need to be calculated for further analysis, by assessing the mean and multiplying it by four. The WHOQOL-BREF is not suitable for calculating an overall mean of all quality of life domains. The WHOQOL-BREF shows acceptable internal consistency and significant discriminant validity when comparing sick to well subjects (Skevington, Lotfy, & O'Connell, 2004). For the Dutch version, used in this study, construct and content validity and reliability were classified as good (Trompenaars, Masthoff, Van Heck, Hodiamont, & De Vries, 2005).

Design and procedure

The research design of the present study was non-experimental and cross-sectional. The variables studied are EA, QOL, and PD diagnoses. The presence of a PD diagnosis served as a between subjects factor, which was not randomly assigned. As mentioned above

participants were recruited into the study when being successively referred into treatment for their personality disorder. Data was collected for routine measurement in the context of Routine Outcome Monitoring (ROM). First informed consent was obtained from all participants. The participants were informed that their ROM data should be used anonymously for scientific research in order to improve diagnosis and treatment for people with personality disorders. The SCID-II was conducted by master-level psychology students, who were supervised and trained by certified clinical psychologists, having prior experience with rating the SCID-II. The questionnaires were completed online which could be done at home or at a computer in the treatment center they were referred to. Filling in the questionnaire was not supervised and all data was collected before a patient started treatment.

Analysis

For further analysis data was entered into IBM SPSS Statistics Version 22.0. First all subjects not meeting the inclusion criteria or meeting any of the exclusion criteria were deleted. Secondly subjects needed to be divided into two groups, one containing all subjects with a borderline personality disorder and one containing all subjects diagnosed with another personality disorder. Means were calculated for each of the WHOQOL-BREF domains, which were then multiplied by four. In addition a total score was calculated for the AAQ-II by summing up the items. Reliability analyses for each of the QOL domains and for the AAQ-II were carried out. Where reliability was low, inter-item correlations, producing the "Cronbach's alpha if item is deleted", were calculated for the items of that scale, in order to see which items might be problematic for the reliability and to assess whether deleting the item is an option. The following classifications for Cronbach's alpha are proposed by Gerorge en Mallery (2003): $\alpha > 0.9$ – Excellent, $\alpha > 0.8$ – Good, $\alpha > 0.7$ – Acceptable, $\alpha > 0.6$ – Questionable, $\alpha > 0.5$ – Poor, and $\alpha < 0.5$ – Unacceptable" (pp. 231). Then descriptive statistics were computed and a *t*-test for two independent groups was conducted to test whether EA is equally high in people with BPD as it is in people with another PD. After that moderation analyses were carried out. In order to do so, the AAQ-II-scores were centered on the mean, meaning that the mean value was subtracted from each score. By that the new mean became 0. The centered AAQ-II total score served as independent variable and the four domain scores of the WHOQOL-BREF served as dependent variables. The type of personality disorder (BPD vs other PD) served as a moderator. This was done to check for main effects EA has on the QOL in the whole sample, as well as for whether there is an

interaction with the type of PD a person has. For all analyses a significance level of $\alpha = 0.05$ was used.

Results

Results from the reliability analyses can be seen in Table 3. Most of the measures had an acceptable or good reliability and only the WHOQOL-BREF Social relationships domain showed poor reliability. Inter-item correlations within that domain were $r = 0.24$ (Item 20 and 21), $r = 0.28$ (Item 20 and 22) and $r = 0.37$ (Items 21 and 22), meaning that they all had a weak positive relationship with one another. All these correlations were significant at the 0.01 level. As the reliability analyses showed good results, with exception of the Social relationships domain, the outcomes are not produced due to error and can be trusted. The social relationship domain consists only of three items, which might have been the reason for the low Cronbach's alpha. Also one of the items (Item 20) had a lower mean than the other two and didn't correlate with the other items of the scale very strongly. With only three items this might have caused alpha to decrease. As the scale still represents a valuable addition to the study it was decided to keep all items as well as the whole scale in the analysis. Nevertheless results on the scale of Social relationships need to be interpreted more carefully.

Table 3.

Reliability of the used measures.

	Cronbach's Alpha
AAQ-II	0.89
WHOQOL-BREF Environment	0.80
WHOQOL-BREF Social relationships	0.55
WHOQOL-BREF Physical health	0.81
WHOQOL-BREF Psychological health	0.78

Then, to give an overview of the mean scores within the whole sample as well as for both groups separately, descriptive statistics were computed. For the WHOQOL-BREF, normative scores from a study by Jang, Hsieh, Wang and Wu (2004) were also included, in order to make the results comparable to healthy subjects. No norm scores for the way we

used the AAQ-II were available. All scores can be seen in Table 4. With the exception of the WHOQOL-BREF Social relationships domain, means were generally higher in people with other personality disorders than in people with borderline disorders, indicating a better quality of life and a lower level of experiential avoidance. When compared to a healthy sample, only the QOL domain of Environment showed lower scores for the healthy sample as compared to all other groups. In all other domains people with any personality disorder scored lower than the healthy sample.

Table 4.

Descriptive statistics of all measures for the whole group and both groups separately.

	Whole group			Borderline Personality Disorder			Other Personality Disorder			Healthy Sample	
	N	Mean	SD	N	Mean	SD	N	Mean	SD	Mean	SD
AAQ-II	301	23.00	7.60	122	21.88	8.06	179	23.78	7.18		
WHOQOL-BREF Environment	343	13.30	2.22	134	13.02	2.33	209	13.48	2.13	12.85	2.13
WHOQOL-BREF Social relationships	343	11.50	3.18	134	11.83	3.21	209	11.29	3.14	14.25	2.21
WHOQOL-BREF Physical health	343	11.72	2.60	134	11.54	2.74	209	11.83	2.48	15.44	1.84
WHOQOL-BREF Psychological health	343	9.45	2.62	134	9.31	2.80	209	9.54	2.51	13.75	2.12

An independent samples *t*-Test was conducted to see whether EA was equally high in people with BPD as it was in people with another PD. Results from the *t*-Test indicated that the group of patients with other personality disorders scored significantly higher on the AAQ-II, indicating a lower amount of experiential avoidance and more psychological flexibility ($M = 23.78$, $SD = 7.18$), when compared to the BPD group ($M = 21.88$, $SD = 8.06$) ($t(299) = 2.14$, $p = 0.03$).

To check for main effects and interaction effects moderation analyses were performed. As the diagnosis was specified in two groups, it could be used as a dummy variable. The EA scores from the AAQ-II were centered around the mean. An interaction

term had to be calculated by multiplying the dummy variable Diagnosis (BPD vs. Other PD) with the variable Experiential Avoidance (AAQ-II centered scores). To carry out the moderation analysis linear regression was used. First the two predictors EA and Diagnosis were entered separately into the first block, and then the interaction term was entered into the second block. Results from the moderation analysis can be seen in Tables 5 and 6. Using the two predictors EA and type of personality disorder (Diagnosis), between 4% and 16% of the variation in the QOL could be explained. Only for the domain of Psychological health more variation (18%) was explained when using the interaction model. Experiential avoidance was a significant predictor for all of the quality of life domains (see Table 6.). No main effects for the type of personality disorder were found in the moderation analysis. With the exception of the domain psychological health, no significant moderation effects of the type of personality disorder could be found when examining the relationship between EA and the quality of life.

Table 5.

Explained variances for the two-predictor and the interaction model.

WHOQOL-BREF domain	R Square	
	Two-predictor model	Interaction model
Environment	0.07	0.07
Social relationships	0.04	0.04
Physical health	0.10	0.10
Psychological health	0.16	0.18

Table 6.

Moderation coefficients for the interaction model.

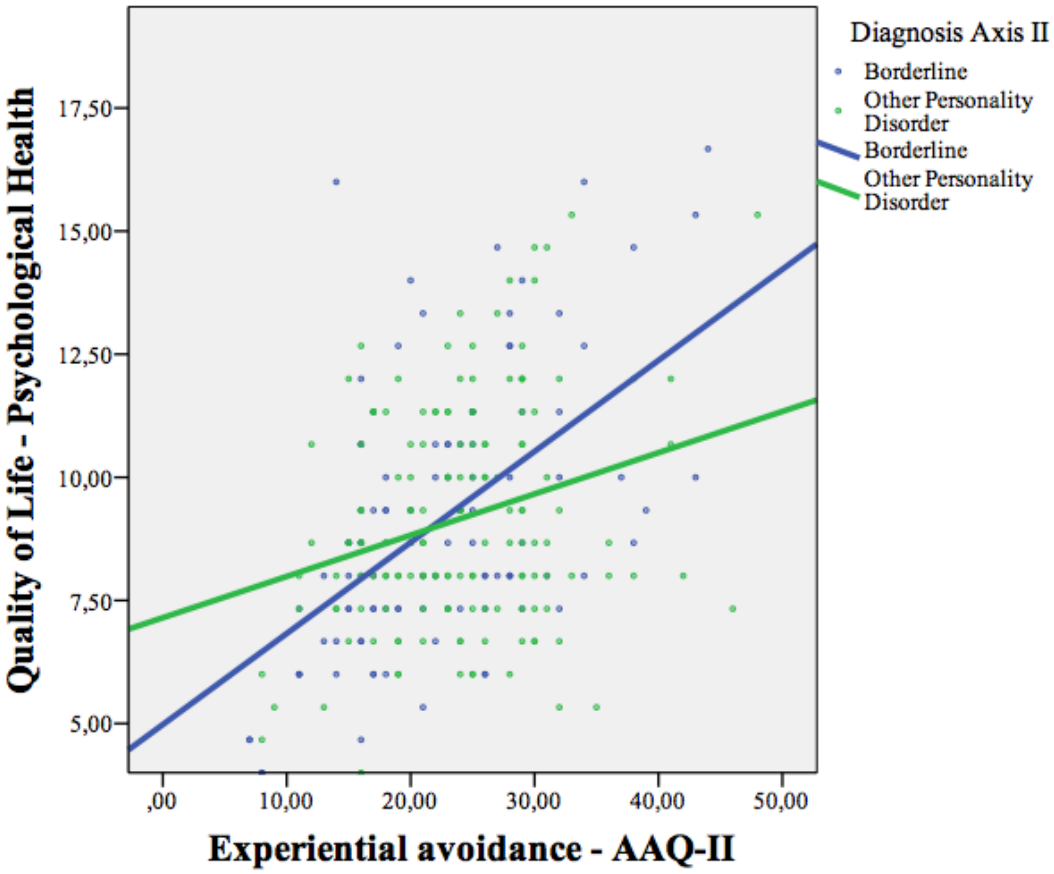
WHOQOL-BREF domain		*β*	F	*p*
Environment	Type of Personality disorder	0.37	1.35	0.18
	Experiential avoidance – AAQ-II	0.64	3.20	0.00
	Type of Personality disorder x Experiential avoidance – AAQ-II	-0.16	-0.60	0.55
Social relationships	Type of Personality disorder	-.49	-1.20	0.23
	Experiential avoidance – AAQ-II	0.65	2.18	0.03
	Type of Personality disorder x Experiential avoidance – AAQ-II	-0.01	-0.02	0.99

Physical health	Type of Personality disorder	0.04	0.12	0.91
	Experiential avoidance – AAQ-II	0.95	4.26	0.00
	Type of Personality disorder x Experiential avoidance – AAQ-II	-0.31	-1.01	0.31
Psychological health	Type of Personality disorder	-0.16	-0.54	0.59
	Experiential avoidance – AAQ-II	1.41	6.62	0.00
	Type of Personality disorder x Experiential avoidance – AAQ-II	-0.77	-2.67	0.01

As a significant interaction was found between the diagnosis and EA when predicting the psychological health of someone, Figure 1 displays the interaction found within the psychological health domain of the WHOQOL-BREF. For any AAQ-II-values under approximately 21.5 people with BPD experience a lower quality of life than people with other PDs, whereas the opposite is the case for any AAQ-II-value above said 21.5. That means that the amount of EA has more influence on the quality of life in people with BPD than in people with other PDs, as the slope is steeper for people with BPD. In other words, the level of experiential avoidance is more predictive for the psychological health for people with BPD than it is for people with other PDs.

Figure 1.

Scatterplot for the interaction between the Axis II diagnosis and the amount of EA found in the domain Psychological health.



Discussion

Opposed to the first hypothesis, there was a significantly higher level of experiential avoidance in people with borderline personality disorder than there is in people with other personality disorders. The first hypothesis therefore needs to be rejected. This indicates that EA may be more relevant for BPD patients than for other PDs, although EA is prevalent in all PDs. The second hypothesis can only partly be confirmed. All quality of life domains were, as assumed, negatively influenced by experiential avoidance. Within the QOL domains social relationships, environment and physical health no difference between patients with borderline personality disorder and patients with other personality disorders could be seen regarding this relationship. Only within the domain psychological health, there was a difference found between BPD and other PD patients. Here EA was more influential in determining the psychological health for BPD patients.

The finding that EA was more present in people with BPD than in people with other PDs will be discussed in the following paragraph. In the DSM-IV borderline personality disorder is described as “a pervasive pattern of instability of interpersonal relationships, self-

image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts." (American Psychiatric Association, 2000). People with BPD are known to have instable interpersonal functioning, mood-changes, identity-problems and instable cognitions (American Psychiatric Association, 2000). Furthermore they tend to have difficulties with effective emotion regulation and often make use of destructive and impulsive strategies in order to avoid undesired emotions (Skodol, Siever, Livesley, Gunderson, Pfohl, & Widiger, 2002). It has been shown that they seek less social support and attempt to escape when confronted with a stressor. Individuals with BPD frequently make use of coping strategies such as denial, self-distraction, behavioral disengagement, and alcohol/drug use (Chapman et al., 2005). In addition a number of BPD patients use self-harm to intentionally escape emotional pain (Chapman et al., 2005). As all of the described characteristics of people with BPD can be seen as attempts to avoid unwanted sensations, it appears as no surprise that they score high on EA and maybe higher than people with other PDs. Unfortunately no comparison of the results of the present study with results of earlier studies is possible, as all studies investigating EA and personality disorders used different versions or different scoring of the AAQ-II than this study.

The finding that EA is more influential in determining the psychological health of people with BPD than that of people with other PDs will be discussed in the following paragraph. Within the QOL domain of psychological health a significant interaction effect was found. It can be seen that EA plays a more important role in the prediction of the psychological health within the group of BPD patients. As their psychological problems mainly include problems related to experiential avoidance, such as ineffective emotion regulation and attempts to escape unwanted emotions, the results are understandable. The higher someone with BPD scores on EA, the more severe his or her illness probably is. On the other side the lower someone with BPD scores on EA, the healthier he/she probably is. The severity of the disorder, that in the case of BPD patients probably strongly correlates with the amount of EA, may account for the influences on the psychological health. As EA can be seen as one of the main problems for people with BPD and for a lower amount in people with other PDs the interaction can be explained.

The moderation analyses further revealed that EA played a role in all of the quality of life domains when assessing the whole group of people with PDs. This can be seen as all of the tests for main effects within the moderation analyses came out as significant. It means that, not only for borderline personality disorder, EA can play a central role in reducing the perceived quality of life. As the sample mostly consisted of people with borderline,

obsessive-compulsive, dependent and avoidant personality disorders and of people with a personality disorder n.o.s. these are the groups of patients most interesting for future research. The present study showed that EA could play an important role in these disorders as well, so that research with larger groups of people with that disorders might reveal interesting results. For the moment it appears as though EA is a relevant risk factor to the QOL for all PDs that were assessed. This is also reflected in the fact that the explained variation was up to 16%. EA as well as having a personality disorder therefore explained at least some part of why someone experiences a higher or lower quality of life.

Within the QOL domains of social relationships, physical health and environment no interaction effects with the type of personality disorders were found. It appears as though the type of personality disorder does not influence the relationship between EA and these QOL domains. This is another finding that indicates that EA might be just as relevant in other personality disorders as it is in borderline personality disorder. It appears as though EA is in fact a transdiagnostic process when it comes to personality disorders. Further research has to reveal to which degree it plays a role in which personality disorder but that EA does play a role in other PDs than BPD has been established.

Taking into account all of the found results from moderation analyses, hypothesis 2 can at least for the most part be confirmed. Only for psychological health a difference between BPD and other PDs was found.

The result, that EA plays a role for all personality disorders and not only for borderline personality disorder, is one that yields a number of implications for the diagnosis and treatment of personality disorders. Other studies, such as the one by Levin et al. (2014), already showed that EA plays a role in a number of Axis I disorders. The field in which EA can be seen as a transdiagnostic factor therefore keeps broadening, as this study indicated that it is a transdiagnostic factor for a large part of Axis II disorders as well. Taking that into account, the development of broadly applicable interventions focusing on the reduction of experiential avoidance can be an interesting approach for therapeutic practice. All kinds of patients might benefit from such an intervention and seeing that all kinds of personality disorders are influenced by EA as well, treating EA should also help these patients. The present study had a large number of patients with a personality disorder not otherwise specified, where treatment can be very different from one patient to another. Seeing that EA might play an important role for PD n.o.s. as well, focusing on EA in therapy might be beneficial for all of these patients, which might otherwise need quite varying therapeutic approaches. As EA is one of the processes targeted by ACT interventions, the present study

provides support that a variety of personality disorder patients can benefit from an ACT treatment, specifically targeted at minimizing experiential avoidance and maximizing acceptance.

The implications for practice can be seen as one of the greatest strengths of the present study. It is one of the first studies focusing on the role of experiential avoidance in people with different personality disorders and therefore provides an important first insight in how important EA can be for the treatment of personality disorders. Furthermore, the study made use of a large sample size, which makes it highly probable that the findings are representative. As the sample mostly consisted of people with borderline or avoidant personality disorders or with a personality disorder not otherwise specified, conclusions should only be drawn for these disorders. As people with paranoid, schizoid, schizotypal and antisocial personality disorders were rarely represented in the sample more research is needed to draw conclusions for their therapy. It can be seen that the present study therefore also had some limitations. Most importantly the composition of the sample did not allow for any claims regarding a specific PD other than BPD. As the PDs that made up the group other than BPD are quite diverse, inferences are to be handled with more precaution. So far it may seem as though EA played an important role for all other PDs but that cannot be said with certainty. Another limitation is that with the current study it is not possible to see the exact way EA influences the personality disorders. We only saw that EA is higher in people with BPD than in people with other PDs but no inferences on how EA promotes or influences a personality disorder can be made.

Still this research gave a good first implication to base future research on as it has been shown that EA in fact does influence the QOL for all personality disorders. It is up to future research to investigate in which of the other PDs than BPD EA plays a relevant role. Furthermore it would still be interesting to see in what part of the development, maintenance or symptom severity of the personality disorder EA plays the most important role. Future research should try to assess this using longitudinal methods rather than with just a cross-sectional design.

Concluding, the present study showed that EA is an interesting concept that should receive more attention also when it comes to other personality disorders than BPD. Focusing on reducing EA in therapy settings might help personality disorder patients of any kind to enhance their quality of life in all domains.

References

American Psychiatric Association. (2000). *DSM-IV-TR: Diagnostic and statistical manual of mental disorders, text revision*. Washington, DC: American Psychiatric Association.

Berking, M., Neacsiu, A., Comtois, K. A., & Linehan, M. M. (2009). The impact of experiential avoidance on the reduction of depression in treatment for borderline personality disorder. *Behaviour Research and Therapy*, *47*(8), 663-670.

Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., Waltz, T., & Zettle, R. D. (2011). Preliminary psychometric properties of the Acceptance and Action Questionnaire–II: A revised measure of psychological inflexibility and experiential avoidance. *Behavior Therapy*, *42*(4), 676-688.

Chapman, A. L., Specht, M. W., & Cellucci, T. (2005). Borderline personality disorder and deliberate self-harm: does experiential avoidance play a role?. *Suicide and Life-Threatening Behavior*, *35*(4), 388-399.

Clarke, S., Kingston, J., Wilson, K. G., Bolderston, H., & Remington, B. (2012). Acceptance and Commitment Therapy for a heterogeneous group of treatment-resistant clients: A treatment development study. *Cognitive and Behavioral Practice, 19*(4), 560-572.

Cramer, V., Torgersen, S., & Kringlen, E. (2006). Personality disorders and quality of life. A population study. *Comprehensive Psychiatry*, *47*(3), 178-184.

Dindo, L., Van Liew, J. R., & Arch, J. J. (2017). Acceptance and Commitment Therapy: A Transdiagnostic Behavioral Intervention for Mental Health and Medical Conditions. *Neurotherapeutics*, *14*, 1-8.

Drummond, M. F., Sculpher, M. J., Torrance, G. W., O'Brien, B. J., & Stoddart, G. L. (2005). Methods for the economic evaluation of health care programmes: Oxford University Press. *New York*.

First, M. B., & Gibbon, M. (2004). *The Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) and the Structured Clinical Interview for DSM-IV Axis II Disorders (SCID-II)*. Washington, D.C.: American Psychiatric Press, Inc.

First, M. B., Gibbon, M., Spitzer, R. L., Benjamin, L. S., & Williams, J. B. (1997). *Structured clinical interview for DSM-IV axis II personality disorders: SCID-II*. Washington, D.C.: American Psychiatric Press, Inc.

First, M. B., Spitzer, R. L., Gibbon, M., & Williams, J. B. (1995). Structured clinical interview for DSM-IV axis I disorders. *New York: New York State Psychiatric Institute*.

Fledderus, M., Oude Voshaar, M. A., Ten Klooster, P. M., & Bohlmeijer, E. T. (2012). Further evaluation of the psychometric properties of the Acceptance and Action Questionnaire–II. *Psychological assessment*, *24*(4), 925.

George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston: Allyn & Bacon.

Hayes, S. C., Strosahl, K., Wilson, K. G., & Bissett, R. T. (2004). Measuring experiential avoidance: A preliminary test of a working model. *The Psychological Record*, *54*(4), 553.

Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology*, *64*(6), 1152.

Iverson, K. M., Follette, V. M., Pistorello, J., & Fruzzetti, A. E. (2012). An investigation of experiential avoidance, emotion dysregulation, and distress tolerance in young adult outpatients with borderline personality disorder symptoms. *Personality Disorders: Theory, Research, and Treatment*, *3*(4), 415.

Jang, Y., Hsieh, C. L., Wang, Y. H., & Wu, Y. H. (2004). A validity study of the WHOQOL-BREF assessment in persons with traumatic spinal cord injury. *Archives of Physical Medicine and Rehabilitation*, *85*(11), 1890-1895.

Karekla, M., & Panayiotou, G. (2011). Coping and experiential avoidance: Unique or overlapping constructs?. *Journal of Behavior Therapy and Experimental Psychiatry*, *42*(2), 163-170.

Kashdan, T. B., Morina, N., & Priebe, S. (2009). Post-traumatic stress disorder, social anxiety disorder, and depression in survivors of the Kosovo War: Experiential avoidance as a contributor to distress and quality of life. *Journal of anxiety disorders*, *23*(2), 185-196.

Lambert, M. J., & Finch, A. E. (1999). *The Outcome Questionnaire.* Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Levin, M. E., MacLane, C., Daflos, S., Seeley, J. R., Hayes, S. C., Biglan, A., & Pistorello, J. (2014). Examining psychological inflexibility as a transdiagnostic process across psychological disorders. *Journal of Contextual Behavioral Science*, *3*(3), 155-163.

Lobbestael, J., Leurgans, M., & Arntz, A. (2011). Inter-rater reliability of the Structured Clinical Interview for DSM-IV Axis I disorders (SCID I) and Axis II disorders (SCID II). *Clinical Psychology & Psychotherapy*, *18*(1), 75-79.

Maffei, C., Fossati, A., Agostoni, I., Barraco, A., Bagnato, M., Namia, C., Novella, L. & Petrachi, M. (1997). Interrater reliability and internal consistency of the structured clinical interview for DSM-IV axis II personality disorders (SCID-II), version 2.0. *Journal of Personality Disorders*, *11*(3), 279-284.

Narud, K., Mykletun, A., & Dahl, A. A. (2005). Quality of life in patients with personality disorders seen at an ordinary psychiatric outpatient clinic. *BMC psychiatry*, *5*(1), 10.

Priebe, S., Huxley, P., Knight, S., & Evans, S. (1999). Application and results of the Manchester Short Assessment of Quality of Life (MANSA). *International journal of social psychiatry*, *45*(1), 7-12.

Sharp, C., Kalpakci, A., Mellick, W., Venta, A., & Temple, J. R. (2015). First evidence of a prospective relation between avoidance of internal states and borderline personality disorder features in adolescents. *European Child & Adolescent Psychiatry*, *24*(3), 283-290.

Skevington, S. M., Lotfy, M., & O'Connell, K. A. (2004). The World Health Organization's WHOQOL-BREF quality of life assessment: psychometric properties and results of the international field trial. A report from the WHOQOL group. *Quality of life Research*, *13*(2), 299-310.

Skodol, A. E., Siever, L. J., Livesley, W. J., Gunderson, J. G., Pfohl, B., & Widiger, T. A. (2002). The borderline diagnosis II: biology, genetics, and clinical course. *Biological Psychiatry*, *51*(12), 951-963.

Soeteman, D. I., Timman, R., Trijsburg, R. W., Verheul, R., & Busschbach, J. J. (2005). Assessment of the burden of disease among inpatients in specialized units that provide psychotherapy. *Psychiatric Services*, *56*(9), 1153-1155.

Spinhoven, P., Drost, J., de Rooij, M., van Hemert, A. M., & Penninx, B. W. (2014). A longitudinal study of experiential avoidance in emotional disorders. *Behavior Therapy*, *45*(6), 840-850.

Trompenaars, F. J., Masthoff, E. D., Van Heck, G. L., Hodiamont, P. P., & De Vries, J. (2005). Content validity, construct validity, and reliability of the WHOQOL-Bref in a population of Dutch adult psychiatric outpatients. *Quality of Life Research*, *14*(1), 151-160.

Van Oudenhoven, J. P., & Hofstra, J. (2004). De Hechtingsstijllijst (HSL) Handleiding. *Groningen: Rijksuniversiteit*.

Wheaton, M. G., & Pinto, A. (2016). The Role of Experiential Avoidance in Obsessive–Compulsive Personality Disorder Traits. *Personality Disorders: Theory, Research, and Treatment, June 16th, 2016*, No Pagination Specified.

W.H.O.Q.O.L. Group (1993). Study protocol for the World Health Organization project to develop a Quality of Life assessment instrument (WHOQOL). *Quality of life Research*, *2*(2), 153-159.

World Health Organization. (1996). *WHOQOL-BREF: introduction, administration, scoring and generic version of the assessment: field trial version, December 1996*. Geneva: World Health Organization.

Yavuz, K. F., Şahin, O., Ulusoy, S., İpek, O. U., & Kurt, E. (2016). Experiential avoidance, empathy, and anger-related attitudes in antisocial personality disorder. *Turkish Journal of Medical Sciences*, *46*(6), 1792-1800.