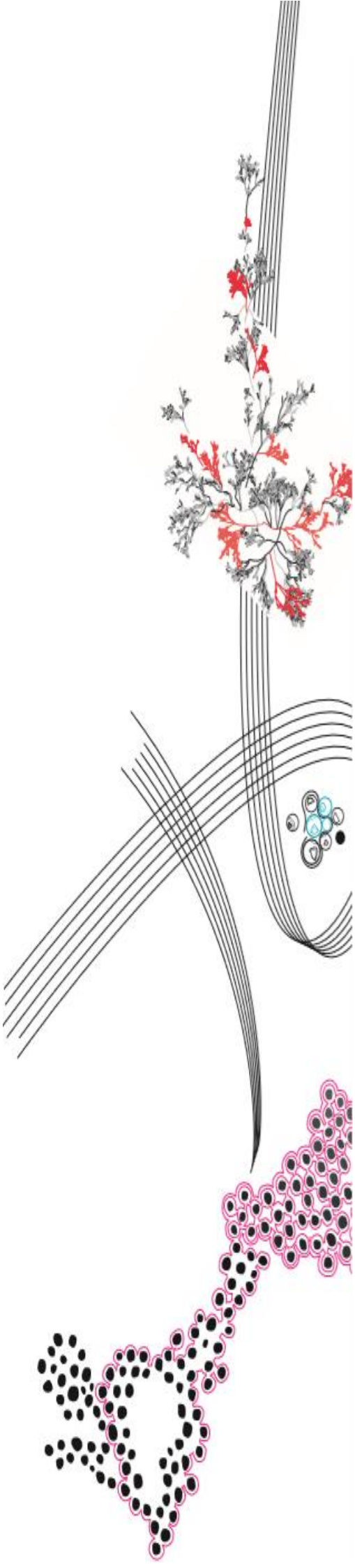

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Bachelor Thesis

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The use of experiential avoidance as indicator for anxiety and depression disorders

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Abstract

Orientation: Avoiding events and experiences which elicit undesired inner states is central to human nature. Currently, there is evidence that the use of experiential avoidance is associated with higher internal distress and related to anxiety and depression.

Research purpose: The aim of this study was to examine the impact of experiential avoidance on anxiety and depression disorders.

Motivation for the study: Research is needed to externalize the potential threat of the use experiential avoidance in the domain of clinical psychology. In fact, its use seems to work counterproductive when trying to control and deal with unwanted internal states. Due to previous findings, that experiential avoidance is associated with psychopathology – particularly anxiety and depression– it is further necessary to determine its impact on these disorders.

Research design, -approach and method: Research was conducted with an explorative, cross-sectional, and electronic-based survey design. Convenience sample of 107 was gathered in the region around Enschede in the Netherlands.

Main findings: Results indicated significant relations among all constructs (experiential avoidance, anxiety, depression), as well as support for a positive effect of experiential on both anxiety and depression disorders.

Practical/managerial implications: Less avoidance use could diminish the likelihood of developing anxiety and depression disorders. As such, therapy could train sufferers to be less avoidant when confronted with undesired emotions or thoughts to reduce the harm due to the particular disorder.

Contributions/value-add: This study contributes to clinical psychology, examining the role of applying experiential avoidance as a way of controlling undesired internal states and the potential threats associated with it.

Keywords: Anxiety, Convenience Sampling, Depression, Experiential Avoidance, Internal Distress

Samenvatting

Oriëntatie: Het vermijden van gebeurtenissen en ervaringen die ongewenste innerlijke toestanden oproepen is centraal in de natuur van de mens. Er is inmiddels bewijs dat het gebruik van experiëntiële vermijding is geässociëerd met hoger psychologisch stress, angst en depressie.

Doel: Het doel van dit onderzoek was te onderzoeken in hoeverre experiëntiële vermijding invloed heeft op angst en depressie.

Motivatie voor onderzoek: Onderzoek is van node om te kijken naar de potentiële gevaar van experiëntiële vermijding in de domain van klinische psychologie. Het gebruik is in feite contraproductief wanneer het wordt toegepast om ongewenste interne toestanden te controlleren. Gezien het feit dat experiëntiële vermijding wordt geässociëerd met psychopathologie – met name angst en depressie – it is verder nodig om de invloed te bepalen die de copingsstijl heeft op deze stoornissen.

Onderzoeks opzet, design en methode: Onderzoek werd uitgevoerd met een exploratief, cross-sectioneel, en elektronisch-gebaseerd survey design. 'Convenience sample' van 107 werd verzameld in de regio om Enschede in Nederlands.

Resultaten: Resultaten gaven indicaties voor significante relaties tussen alle constructen (experiëntiële vermijding, angst, depressie), en ondersteuning voor een positive effect van experiëntiële vermijding op zowel angst als depressie.

Praktische implicaties: Ten opzichte van de resultaten, minder gebruik te maken van experiëntiële vermijding zou de kans op een mogelijke ontwikkeling van angst en depressie kunnen verminderen. Met btrekking daarop,therapie zou lijders kunnen trainen minder vermijdend te zijn tegenover ongewenste interne toestanden om van de stoornis veroorzaakte klachten te reduceren.

Contributie van onderzoek: Dit onderzoek draagt bij in het gebied van klinische psychologie, door te kijken naar het gebruik van experiëntiële vermijding als middel om met ongewenste innerlijke toestanden om te gaan en de potentiële gevaren die ermee verbonden zijn.

Sleutelwoorden: Angst, Convenience Sampling, Depressie, Experiëntiële vermijding, Intern stress

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Introduction

Experiential avoidance

Human beings tend to avoid negative emotional, behavioural and social situations (Blanchard & Blanchard, 1968; Chawla & Ostafin, 2007). This includes events which elicits undesired emotions or experiences (Kashdan, Barrios, Forsyth, Steger, 2006; Hayes, Wilson, Gifford, Follette & Strohsal, 1996; Carvalho, Dinis, Pinto-Gouveia and Estanqueiro, 2015). When negative perceived experiences become central to the life story of an individual, they can act as reference point for inferences in daily life, what can lead to greater unwillingness to not get confronted with these experiences and the negative associated feelings (Carvalho et al., 2015). When exposed to unwanted internal thoughts or memories and there is made the attempt to not get in contact with the emotions and experiences associated with it, the term *Experiential Avoidance* is used (Chawla & Ostafin, 2007; Hayes et al., 1996; Berman, Wheaton, McGrath & Abramowitz, 2009; de la Cruz et al., 2013; Fergus, Bardeen & Orcutt, 2012). The construct of experiential avoidance currently gains increasing attention in the domain of clinical psychology (Chawla & Ostafin, 2007; Shi, Zhang, Zhang, Fu & Wang, 2016). It is described as a behaviour, which is employed to control the own emotions, and can be focused on both subjective experience and physiological arousal of emotions (Kashdan et al., 2014). Moore and colleagues (Moore, Zoellner & Mollenholt, 2008) stated that avoiding emotions is associated with higher levels of negative effect. There is currently evidence that experiential avoidance is strongly related to internal, psychological distress (Fergus, Bardeen & Orcutt, 2012; Bond et al., 2011). Although the use of avoidance decreases the perception of the undesired sensation in the short-term, applying it over longer periods does not seem effective (Kashdan et al., 2014; Fergus, Bardeen & Orcutt, 2012; Berman et al., 2009). Due to the fact that avoided negative stimuli directly get associated with other negative ones, the avoidance of an unpleasant feeling leads to a mentally gain, what makes it more instead of less accessible for the individual (Hayes et al., 1996; Chawla & Ostafin, 2007; Robertson, 2009). Literature indicated that high scores in experiential avoidance are associated with a higher amount of psychological distress (Bond et al., 2011). In addition to that, several studies examined the role of experiential avoidance in psychopathology and gave indications of possible relations of the construct to both anxiety- and depression-related disorders (Mohammadkhani, Abasi, Pourshahbaz, Mohammadi & Fatehi, 2016; Robertson, 2009; Kashdan et al., 2014).

Anxiety and depression

There is currently evidence for a positive relationship between experiential avoidance and internal/emotional distress (Fergus, Bardeen & Orcutt, 2012; Bond et al., 2011). Avoiding undesired feelings over a longer period can lead to an amplification of the perceived distress associated with it. Furthermore the construct of avoidance is also linked to mood (Hayes et al., 1996). Current studies indicated that experiential avoidance is related to different psychopathological domains (Mohammadkhani et al., 2016; Robertson, 2009; Bond et al., 2011; Kashdan et al., 2006; Kashdan et al., 2014). Robertson (2009) associated experiential avoidance with anxiety- and depression-related disorders. Riskind and colleagues (Riskind, Williams, Gessner, Chrosniak & Cortina., 2000) and Kashdan et al. (2006) suggest that individuals high in experiential avoidance tend to see undesired stimuli as more dynamic, what increases the likelihood of developing emotions-regulated problems. According to Hayes et al. (1996) when not evaluate negative emotions it could lead to an enhancement of these emotions, associating them with related stimuli what could enhance the perceived anxiety. Recent studies indicated a positive relationship between experiential avoidance and anxiety disorders (Fledderus, Bohlmeijer & Pieterse, 2010; Wolgast, Lundh & Viborg, 2013; Robertson, 2009; Berman et al., 2009). Further researches also suggested experiential avoidance to be related to depression (Fledderus, Bohlmeijer & Pieterse, 2010). Fledderus et al. (2010) argue that individuals have problems with finding a direction in life when using experiential avoidance in a higher amount. This could decrease the perceived pleasure and well-being of an individual (Kashdan et al., 2006), what possibly could increase the likelihood of developing depression disorders.

Due to the findings this research will examine the impact experiential avoidance performs on anxiety and depression disorders, to either support or challenge the findings of previous research. The following research question is formulated:

RQ: *"To what extent does experiential have impact on anxiety- and depression disorders?"*

According to the discussed literature, experiential avoidance is used to not get in contact with several internal and emotional states. It is used to reduce and control the upcoming internal distress due to these unpleasant sensations. However, this solution is only effective for short-term gains. The use of avoidance seems to work counterproductive if it is used over longer periods of time. In that case, the mentally representation of the unwanted

feeling becomes more accessible (Hayes et al., 1996; Chawla & Ostafin, 2007; Robertson, 2009) and thus more influential for the individual trying to avoid it. The amplification of distress may increase the likelihood of developing anxiety and depression disorders (Hayes et al., 1996; Mohammadkhani et al, 2009; Bond et al., 2011). According to that it gets assumed that experiential avoidance not only shows positive correlations to anxiety and depression, but also affects both positively. As such, the following hypotheses were formulated to investigate the research question:

$H_{1.1}$: *Experiential avoidance positively relates to anxiety*
$H_{1.2}$: *Experiential avoidance positively affects anxiety*

$H_{2.1}$: *Experiential avoidance positively relates to depression*
$H_{2.2}$: *Experiential avoidance positively affects depression*

Figure 1 shows the conceptual model for this study. As explained it gets assumed that a more frequent use of experiential avoidance leads to an increasing of both anxiety and depression disorders.

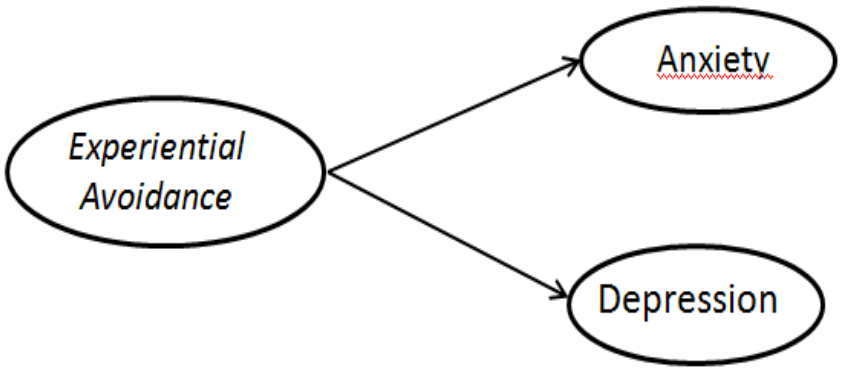

Figure 1. Conceptual model for the relationship between experiential avoidance, anxiety and depression

Methods

Research approach

The study was employed with an explorative, cross-sectional, electronic- and survey-based research design to determine the relationship between the variables.

Participants

In order to obtain data, a *convenience sampling strategy* was employed. Participants were chosen by their disposability in the region of Enschede, the Netherlands, to reduce the time of data collection. Convenience sample (n=137) was drawn. Due to missing values or incomplete responses, some questionnaires had to be removed for the analysis (n = 30). Therefore, 107 participants were retained. The demographic and biographic information were summarized in table 1. The majority of the participants was German (93.3%), female (68.2%), between the ages of 21 and 30 (53.2%) and followed a higher secondary education (62.6%).

Table 1.

Demographic and biographic information of the sample (N=107)

Variable	**Category**	***f***	**%**
Gender	Male	34	31.8
	Female	73	68.2
Age	18-20	16	14.9
	21-30	57	53.2
	31-40	10	9.4
	41-50	14	13.1
	51-60	5	4.6
	60+	2	2.0
	Missing	3	2.8
Nationality	German	100	93.5
	Dutch	3	2.8
	Others	4	3.7
Highest education	Secondary education (e.g. Realschule, MAVO)	7	6.5
	Higher secondary education (e.g. Abitur, Fachhochschulreife, HAVO, VWO)	67	62.6
	Bachelor's degree	18	16.8
	Master's degree	14	13.1
	Doctorate degree	1	0.9
Marital status	Single	47	43.9
	With partner	42	39.3
	Married/Registered partnership	18	16.8

Measuring Instruments

A *self-developed demographic questionnaire*, including questions over gender, age, nationality, highest education, and marital status, was used to gather the demographical information of the participants. To determine the relevant constructs, the *Avoidance and*

Action Questionnaire - II (AAQ-II) and the *Hospital Anxiety and Depression Scale* (HADS) were applied. The whole item battery is attached in appendix A.

The AAQ-II, developed by Bond and colleagues (Bond et al., 2011), was used to measure *experiential avoidance*. The scale measured the construct in the dimension of psychological inflexibility, applying seven negative (e.g. 'It seems like most people are handling their lives better than I am.') and three positive (e.g. 'It's OK if I remember something unpleasant') formulated items on a 7-point Likert-scale, ranging from 1 ('never true') to 7 (always true') (Bond et al., 2011). There is evidence for a more reliable measure of experiential avoidance through the AAQ-II than through his ancestor (Bond et al., 2011). Research over psychometric properties of the scale showed a very acceptable range of the alpha coefficient (0.78 - 0.88), as well as a good concurrent, predictive and convergent validity (Bond et al., 2011). According to that, high scores on the AAQ-II also indicated a higher amount of psychological distress and thus a higher likeability of avoidance use (Bond et al., 2011). In addition to that, the scale was not associated with age, gender, or race across several samples (Bond et al., 2011), what made it suitable for this study and the used sample.

The HADS was designed to examine disorders in regard to *depression* and *anxiety* (Snaith, 2003; Mykletun, Stordal & Dahl, 2001). Participants could give answer through a 4-point ranging-scale, from 0 (Not at all) to 4 (Most of the time). The items asked for both current states of the participants (e.g. 'Worrying thoughts go through my mind.') and current in comparison to past states (e.g. 'I still enjoy the things I used to enjoy.'). In total the scale consisted out of 14 items, seven for anxiety (e.g. 'I feel tense or wound up.') and seven for depression (e.g. 'I feel as if I am slowed down.'), formulated positive (e.g. 'I can sit at ease and feel relaxed'; 'I feel cheerful.) and negative ('I feel restless as I have to be on move'; 'I have lost interest in my appearance') in turns. According to Snaith (2003) the scale was designed and used for the clinical environment, but it also showed to be valid in the social context. The examination of internal consistency of the subscales indicated reliable measures of the alpha coefficient in a range of 0.73-0.85 (Mykletun, Stordal & Dahl, 2001). However, the HADS could not diagnose psychopathological problems - it could only give indications for anxiety- and depression-related disorders (Snaith, 2003).

Data Analysis

Scaled Numeric Data was collected and processed by the statistical program *IBM SPSS Statistics 22* (IBM, 2015). First, the descriptive statistics were computed, including

means, standard deviations, skewness and kurtosis, to determine the normality of distribution of the data. Thereafter, the internal consistency or 'reliability' of the measuring instruments was computed according to Cronbach's alpha. In compliance to the distribution both Pearson and Spearman correlation were conducted, to examine the assumed relations of the constructs. The significance level was set at $p < 0.05$. Effect sizes were set at 0.30 for a medium effect, and 0.50 for a large effect, to determine the practical significant relationships among the constructs (Field, 2009). Subsequently, linear regression analysis was executed, to measure the assumed effects.

Research Procedure

Permission to execute the research was received through the ethical committee of the University of Twente. The link to the Qualtrics online survey was copied and spread across the campus of the university, social media (e.g. 'Facebook'), and other public domains (e.g. central station Enschede) from April 6th until May 3rd 2017. This research was part of a greater data collection, including four other studies over experiential avoidance. First, people received information that the questionnaire only was available in English. People without knowledge of the language could not participate. When receiving an inquiry of participation, people further were asked to remit the link in their social environments (e.g. work, family, and friends). People who were not able to speak English were asked to remit the link to known people speaking the language. Further, each person got the request to inform the people to whom they forwarded the link over the necessity of being able to speak English. When opened the link to the Qualtrics questionnaire, participants first received an informed consent with general information over the duration of the questionnaire and the anonymity of the data. Further, participants had to give agreement that their data got gathered before starting with the questions. The informed consent is attached in appendix A. The data received through Qualtrics was imported as '.sav' file into the program *IBM SPSS Statistics 22* (IBM, 2015), where not usable data was removed.

Results

Descriptive statistics and correlations

The results of the analysis, including Cronbach's alpha, means, standard deviations, and distributions of the data, are summarized in Table 2. With the exception of the score for anxiety, the data seemed to be normally distributed. Further, all instruments showed a

reliability of α > 0.7. Referring to the distributions both, Pearson and Spearman correlation were conducted to examine the correlation of the constructs.

Table 2

Descriptive statistics, Cronbach's alpha, and correlations of the constructs

Construct		M	SD	Skewness	Kurtosis	α	1	2	3
1	**Experiential Avoidance**	**32.88**	**9.71**	**0.54**	**0.61**	**0.84**	**-**	**-**	**-**
2	**Anxiety**	**12.89**	**3.59**	**0.86**	**1.61**	**0.81**	**0.74****	**-**	**-**
3	**Depression**	**6.89**	**2.79**	**0.39**	**0.11**	**0.76**	**0.45****	**0.43****	**-**

M, mean; SD, standard deviation

**, Correlation is significant at the 0.01 level

According to the Spearman correlation, Table 2 shows that both anxiety (r = 0.74, p < 0.01; large effect) and depression (r = 0.45, p < 0.01; medium effect) were correlated significantly to avoidance. This provides sufficient evidence for the correctness of hypotheses 1.1 and 2.1. Further, the correlation between anxiety and depression also showed to be statistically significant (r = 0.43, p < 0.01; medium effect). Pearson correlation showed the same significant relations (Appendix B). Accordingly, hypotheses 1.1 and 2.1 were accepted.

Table 3

Linear regression analyses with Avoidance as independent variable and Anxiety and Depression as dependent variables

		Unstandardized		Standardized	*t*	*p*	*F*	*R*	R^2
Model	**Construct**	**B**	**Std. Error**	**BETA**					
1							**125.95**	**0.76**	**0.58**
	(Constant)	**3.49**	**0.873**	**-**	**3.99**	**0.000**	**-**	**-**	**-**
Predictor	**Experiential Avoidance**	**0.28**	**0.025**	**0.76**	**11.22**	**0.000**	**-**	**-**	**-**
Outcome	**Anxiety**								
2							**20.18**	**0.60**	**0.36**
	(Constant)	**-0.27**	**1.64**	**-**	**-0.16**	**0.000**	**-**	**-**	**-**
Predictor	**Experiential Avoidance**	**0.19**	**0.04**	**0.60**	**4.49**	**0.000**	**-**	**-**	**-**
Outcome	**Depression**								

Regression analysis

Linear regression analyses were conducted to determine the effect and predictability of experiential avoidance on both anxiety and depression. The results of the analyses are summarized in Table 3. The examination of avoidance as predictor for anxiety (Model 1) indicated a statistically significant model ($F_{(1, 92)}$ = 125.95, p < 0.01), declaring 58% of the

variance. Regression analysis of avoidance as predictor for depression also indicated to be statistically significant ($F_{(1, 36)} = 20.18$, $p < 0.01$). Model 2 declares 36% of the variance. The results further give evidence for positive standardized regression coefficients in both Model 1 ($\beta = 0.76$; $t = 11.22$; $p < 0.01$) and Model 2 ($\beta = 0.6$; $t = 4.49$; $p < 0.01$). According to these results, experiential avoidance makes statistically significant contributions in predicting anxiety and depression. Results gave sufficient evidence for the correctness of hypothesis 1.2 and 2.2. Thus, both hypotheses 1.2 and 2.2 were accepted.

With regard to the analysis, the conceptual model can get extended, with the computed values. Figure 2 shows the adapted and extended working mechanisms examined in this study.

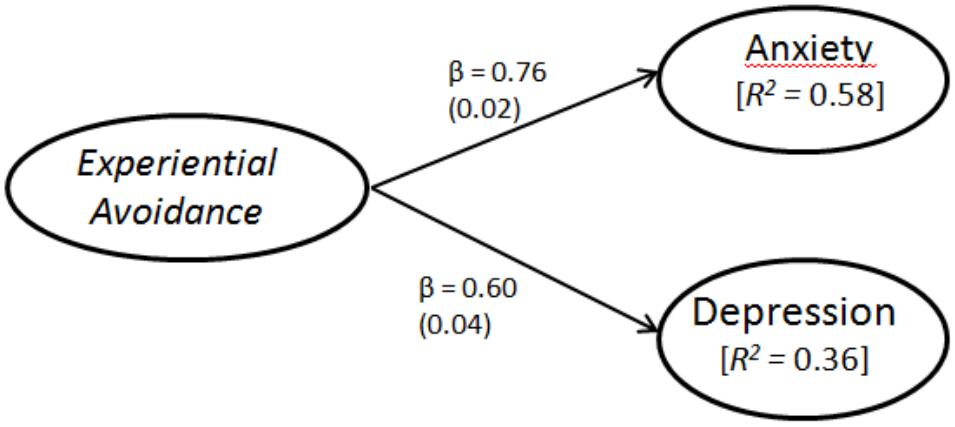

Figure 2. Assumed working mechanism extended with computed regression coefficients and explained variance of the constructs

Discussion

The purpose of this study was to examine the impact experiential avoidance performs on both anxiety and depression. The results provided evidence for significantly correlations between all constructs, with an effect size of either medium or large. Analysis further indicated that the use of experiential avoidance could act as predictor for anxiety and depression disorders within this sample.

Spearman and Pearson correlation indicated a significant positive correlation between experiential avoidance and anxiety with a large effect size. This provides sufficient evidence

for hypothesis 1.1, that avoidance is positive related to anxiety. This result is congruent with the findings of Kashdan et al. (2006) and Robertson (2009), who also found a positive relationship. According to hypothesis 1.2, it can also be concluded that the use of experiential avoidance has a significant effect on anxiety within this sample, explaining 58% of the variance in the conducted model. The found effect is congruent to the findings of diverse other literature (e.g., Robertson, 2009; Riskind et al., 2000; Bardeen, 2015). Fledderus and colleagues (Fledderus, Bohlmeijer & Pieterse, 2010) suggested that individuals high in experiential avoidance are more likely to get overwhelmed by their negative thoughts. Referring to Hayes and colleagues (Hayes et al., 1996), when not evaluate or altercate negative emotions like anxiety, it could lead to an increase of these feelings, connecting directly negative evaluated experiences with other negative ones. According to Fledderus, Bohlmeijer and Pieterse (2010) experiential avoidance is an inflexible way of coping with unwanted private events, and can enhance the likelihood of developing anxiety disorders. Thus, it is possible that when people associate a particular emotion as negative, this emotion gets associated with other negative ones. This could result in an enhancement of internal distress, the overall negativity towards the emotion, and the possibility of developing anxiety-disorders.

With regard to correlation analysis, Spearman and Pearson also indicated a positive correlation between experiential avoidance and depression with a medium effect size. Results supported a significant relation between the two constructs and provided sufficient support for hypothesis 1.2, that avoidance positive relates to depression. The finding is congruent with those of previous research (e.g., Bond et al., 2011; Robertson, 2009; Carvalho et al., 2015). In their study, Carvalho and colleagues (Carvalho et al., 2015) examined the role of negative evaluated experiences in the relation of experiential avoidance and depression. According to their findings it was suggested that the experience itself not necessarily impact depression, but the unwillingness to get confronted with these negative experiences, as well as the attempt to control their occurrence. As concluded in the study of Hayes (Hayes et al., 1996), trying to avoid negative thoughts, emotions or experiences leads to an increase of these feelings what could explain the significant positive relationship founded between experiential avoidance and depression. Further, with regard to hypothesis 2.2, it was assumed that experiential avoidance also affects depression positively. Linear regression analysis indicated such an effect, with a variance of 36%. The significance of the current findings is supported by the results of Carvalho and colleagues (Carvalho et al., 2015) and Robertson (2009). It is possible that when an individual is confronted with negative and undesired experiences, the associated

emotions become central to the life story of the individual (Carvalho et al., 2015). Carvalho et al. (2015) further argue that these emotions then act as reference point for daily inferences, what results in a greater unwillingness to get confronted with experiences, associated with the one caused the amplification. According to Fledderus and colleagues (Fledderus, Bohlmeijer & Pieterse, 2010) people who dedicate their lifetime in controlling unwanted internal states could have more difficulties to focus on their own values and directions in life. Further, as suggested by Hayes et al. (1996), the attempt of reducing emotional distress, elicited by negative experiences, thoughts, or emotions only provides a temporarily decrease of perceived distress and works counterproductive in the long-term. Even if it is proven that experiential avoidance is associated with an increase of the undesired emotions (Hayes et al., 1996), people are likely to apply it because of the short term gains in the moment of suppression (Robertson, 2009). This recurring use of avoidance in conjunction with the long-term amplification of unwanted feelings could be a reason for the effect of experiential avoidance on depression disorders.

Practical implications

The current research provided sufficient support for all hypotheses, what indicates that experiential avoidance can be seen as predictive variable for both anxiety and depression disorders. However, experiential avoidance does not explain the whole variance in anxiety and depression, what contemplates other factors to affect the two constructs. Nonetheless analysis shows that experiential avoidance explains anxiety with 58% and depression with 36% of the variance in the tested model. On a practical manner, therapy and interventions thus could focus on reducing experiential avoidance among patients who suffer from anxiety or depression disorders, for example by helping them to altercate with their undesired internal states. Due to the explained variance, reducing the frequency of use among sufferers both anxiety and depression could significantly diminish, regardless the other potential factors. According to that, the significant correlation found between anxiety and depression could further indicate an effect of one disorder on the other or even an interaction effect between the constructs. This could explain the remaining variance within the model. As such, anxiety and depression possibly affect each other. If this would be correct, a decrease of experiential avoidance would not only affect a direct reduction of anxiety and depression. Due to the significant relationship, it is possible that a decrease of anxiety also reduces depression and vice versa. Whether this effect is one-sided or interactional was not examined in this study.

Limitations and future research

Although the study was conducted with reliable and valid measuring instruments and indicated significant results according to the assumed relationships and effects, the current research also provides several limitations which have to be taken into account. For example, the scores for anxiety and depression were measured through a subscale of 7 items, respectively. The *Hospital Anxiety and Depression* Scale further only gives indications for anxiety- and depression-related disorders (Snaith, 2003). In addition to that, after exclusion of not usable data the gathered sample only had an amount of $n = 107$. The use of convenience sampling also provided several problems. According to the findings of Henrich, Heine and Norenzayan (2010) a convenience sample which is composed with people of the western, educated, industrialized, rich and democratic world, including both America and Western Europe, are not representative populations to generalize the findings among other domains. As such, it cannot be said that experiential avoidance also affects anxiety and depression positively and with the same variance in slightly educated populations of less industrialized or democratic countries. Due to the fact that data was gathered around Enschede in the Netherlands and most of the participants were Germans, findings only can be used as indications and, with regard to the demographical information of the sample, as only generalizable in the examined subpopulation (Snaith, 2003; Henrich, Heine & Norenzayan, 2010). The majority of the sample had an age between 18 and 30 years (63.1%) and was female (68.2%). Further, over 60% of the participants reported to have followed a higher secondary education (62.6%). However, it is not possible to say whether each participant was able to speak English on a sufficient level, due to the fact that participants only were asked to inform others when they forwarded the link to the questionnaire.

According to the findings of the current study, there can be made several recommendations for future research. Beside the assumed relations, analysis further showed a significant correlation between anxiety and depression, with a medium effect size. This seems comprehensible, regarding the fact that both constructs are seen to be strongly related to experiential avoidance and psychological distress (Hayes et al., 1996; Robertson, 2009; Bond et al., 2011; Kashdan et al., 2006). Additionally, with regard to the discussed literature, experiencing undesired stimuli which elicit anxiety (Kashdan et al., 2006) does not directly suspend other stimuli in the same situation which elicit depression (Carvalho et al., 2015), nor the possibility that both disorders are influenced by a common stimuli. According to that, it does not get bared, that the increase of one construct could also have impact in the development of the other. For example, an individual trying to avoid associated feelings of

negative experience is in fact more likely to elicit symptoms of depression, but could also be afraid of getting confronted with such feelings again. As a result, feelings of that nature also get avoided, what leads to a greater likelihood for the individual to also develop anxiety-related disorders or *vice versa*. The relation between the constructs of anxiety and depression was not examined in this study.

In addition to that, Robertson (2009) also found a significant difference of age in the AAQ scores of participants. He found that younger adolescents score higher in the use of experiential avoidance and overall psychological distress, than older ones. However, the analysis was conducted with the original *Acceptance and Action Questionnaire*, which only had an adequate internal reliability in a range of 0.60 – 0.67 (Robertson, 2009). According to Bond et al. (2011), this is due to the item complexity. Nonetheless, Biglan and colleagues (Biglan et al., 2015) also indicated an effect of age between experiential avoidance and depression. Although the current study did not examine any effects of age, it could be possible, that demographics could moderate or mediate the examined model entirely. Based on the findings of Robertson (2009) and Biglan et al. (2014) it is indicated that younger adults use more experiential avoidance. Due to that, they could be more vulnerable for anxiety and depression disorders than older ones. Examining the role of age and other demographical factors among the domain of experiential avoidance could provide a new view on this broad construct, as well as new ways of treatment in therapy.

Conclusion

The current study used valid and reliable measurements and found significant relationships between experiential avoidance, anxiety and depression. Further it is indicated that the use of experiential avoidance can act as predictor for both anxiety, as well as depression disorders. To give answer on the research question, experiential avoidance explains over the half of the variance in anxiety, as well as over one third of the variance in depression disorders in the examined sample. Although the analysis provided sufficient support for all hypotheses, due to the sample of research the results could not get universalized and only give indications for the examined subpopulation.

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Appendix

Appendix A – Item Battery

Informed Consent

Welcome, Thank you for taking part in our survey. It is part of the Bachelor programme 'Positive Psychology and Technology' of the University of Twente. The aim of the survey is to study how people cope with difficult or aversive situations or experiences, and what factors are related to such coping styles. We will present you several questionnaires that cover different topics, including important life-events, personality, sleep patterns, and the way you cope with stressful situations and feelings.

Completing the survey will take about 30 minutes. All data will be treated purely confidential and anonymous. The participation in this survey is voluntary which means that you have the right to cancel participation at any point.

For further questions please do not hesitate to contact the researcher:

Joel Fey (j.fey@student.utwente.nl)

I understand the information provided above and want to take part in this study.

❍ Yes

Demographical Questions

Q1 What is your sex?

- Male (1)
- Female (2)

Q2 How old are you?

Q3 What is your marital status?

- Single (1)
- With partner (2)
- Married/ registered partnership (3)
- Divorced (4)
- Widowed (5)

Q4 What is your nationality?

- German (1)
- Dutch (2)
- English (3)
- Others (4)

Q5 What is your highest educational qualification?

- Primary School (Grundschule, Basisschool) (1)
- Vocational Education (e.g. Hauptschule, LBO, VMBO) (2)
- Secondary Education (e.g. Realschule, MAVO) (3)
- Higher Secondary Education (e.g. Abitur, Fachhochschulreife, HAVO, VWO) (4)
- Bachelor's Degree (5)
- Master's Degree (6)
- Doctorate Degree (7)

Avoidance and Action Questionnaire – II (AAQ-II)

This questionnaire is about aversive situations or experiences in general. People differ a lot in the way they cope in stressful situations.Please indicate to what extent the statements are true for you.

	Never true (1)	Very seldom true (2)	Seldom true (3)	Sometimes true (4)	Frequently true (5)	Almost always true (6)	Always true (7)
Its OK if I remember something unpleasant. (1)	❍	❍	❍	❍	❍	❍	❍
My painful experiences and memories make it difficult for me to live a life that I would value (2)	❍	❍	❍	❍	❍	❍	❍
I'm afraid of my feelings. (3)	❍	❍	❍	❍	❍	❍	❍
I worry about not being able to control my worries and feelings. (4)	❍	❍	❍	❍	❍	❍	❍
My painful memories prevent me from having a fulfilling life. (5)	❍	❍	❍	❍	❍	❍	❍
I am in control of my life. (6)	❍	❍	❍	❍	❍	❍	❍
Emotions cause problems in my life. (7)	❍	❍	❍	❍	❍	❍	❍
It seems like most people are handling their lives better than I am. (8)	❍	❍	❍	❍	❍	❍	❍
Worries get in the way	❍	❍	❍	❍	❍	❍	❍

of my success. (9)							
My thoughts and feelings do not get in the way of how I want to live my life. (10)	❍	❍	❍	❍	❍	❍	❍

Hospital Anxiety and Depression Scale (HADS)

This questionnaire contains statements about different thoughts, feelings and actions.Please indicate to what extend the statements suit you.

	Almost never (1)	Sometimes (2)	Most of the time (3)	Almost always (4)
I feel tense or wound up (1)	❍	❍	❍	❍
I feel as if I am slowed down (2)	❍	❍	❍	❍
I still enjoy the things I used to enjoy (3)	❍	❍	❍	❍
I get a sort of frightened feeling as if something awful is about to happen (4)	❍	❍	❍	❍
I can laugh and see the funny side of things (5)	❍	❍	❍	❍
I feel restless as I have to be on the move (6)	❍	❍	❍	❍
Worrying thoughts go through my mind (7)	❍	❍	❍	❍
I look forward with enjoyment to things (8)	❍	❍	❍	❍
I feel cheerful (9)	❍	❍	❍	❍
I get sudden feelings of panic (10)	❍	❍	❍	❍
I can sit at ease and feel relaxed (11)	❍	❍	❍	❍
I can enjoy a good book or radio or TV program (12)	❍	❍	❍	❍
I get a sort of frightened feeling like ‘butterflies’ in the stomach (13)	❍	❍	❍	❍
I have lost interest in my appearance (14)	❍	❍	❍	❍

Appendix B – Pearson correlation table

Construct		1	2	3
1	**Experiential Avoidance**	-	-	-
2	**Anxiety**	**0.76****	-	-
3	**Depression**	**0.59****	**0.56****	-

M, mean; SD, standard deviation

**, Correlation is significant at the 0.01 level