An Investigation into the Relationship between Unconditional Self-Acceptance, Self-Compassion and Anxiety

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Abstract

The construct of Unconditional Self-Acceptance (USA) has been proposed as an essential ingredient in the area of mental well-being for more than half a century. USA entails accepting oneself regardless of external circumstances. More recently, the construct of self-compassion, which involves being kind and understanding towards oneself in times of difficulty, has been proposed as a more beneficial way of dealing with adversity and enhancing well-being. This study sought to focus on anxiety, looking at its' relationship with both of these constructs and ask the question whether self-compassion would be a stronger predictor of anxiety than USA in a non-clinical sample. It was predicted that a negative correlation would be found between both USA and anxiety, and self-compassion and anxiety, and furthermore that self-compassion would significantly predict anxiety. Participants (N = 94), recruited via social media, using a convenience sampling method, were presented with three questionnaires for completion. Statistical results found a small negative correlation between USA and anxiety and a medium negative correlation between self-compassion and anxiety. Furthermore, self-acceptance was found to significantly predict anxiety while controlling for USA and demographic variables. Results suggest a closer examination into the role of self-compassion in lowering levels of anxiety is warranted.

Key words : unconditional self-acceptance, self-compassion, anxiety.

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An Investigation into the Relationship Between Unconditional Self-Acceptance, Self-Compassion and Anxiety

Closely related to our natural response to fear known as the "Fight or Flight" response, feelings of anxiety are not, in themselves, believed to be pathological, and may help to keep us safe in times of threat by motivating us to act judiciously (LeDoux, 1998, p., 228). However excessive anxiety – that which is more recurrent and persistent than what is reasonable under the circumstances - can be seriously debilitating, causing a multiplicity of complications including poor quality of life, risk for depression and even death (Sapolsky, 2014). Recent figures from the World Health Organization inform us more than 264 million people worldwide are believed to suffer from a level of anxiety that can be classified as a disorder (WHO, 2017). Furthermore, it is claimed, levels are rising, with an increase of 15% between 2005 and 2015, making anxiety disorders one of the most common psychiatric conditions in the world. At any point in time it is estimated that approximately 3.6% of the population are clinically affected. Prevalence tends to be higher among females, with approximately 4.6% of the population affected, while the figure for males is approximately 2.6% (Somers, Godner, Waraich & Hsu, 2006; Bandelow & Michaelis 2015). Large population based studies generally estimate about in in four people are affected by an anxiety disorder in their lifetime with some estimates as high as 33% (Bandelow & Michaelis, 2015; Kessler, Berglund, Demler, Jin, Merikangas, & Walters, 2005). Explanations that have been proposed to explain this difference between the genders include hormonal differences and differing coping strategies, with some theorists positing more rumination among females in contrast with more problem-focused coping among males as a factor (Remes, Brayne, Van der Linde & Lafortune, 2016). Age of onset varies among different anxiety disorders often running a chronic course, fluctuating between periods of

relapse and remission, with older people tending to suffer somewhat less anxiety in general (Bandelow et al., 2017).

All animals have evolved processing systems that help them to detect danger and subsequently take action to avoid or cope with the threat (Sapolsky, 2014). Anxiety is part of that system that motivates us to take self-protective measures to ensure our survival, also known as "better safe than sorry processing" (Gilbert, 2009). The complex interaction of many risk factors such as genes, environment, adverse childhood experiences and personal appraisals have all been seen as contributing to the possibility of anxiety spiralling out of control and becoming problematic (Somers et al., 2006; Anda, Felitti, Bremner, Walker, Whitfield, Perry, ... & Giles, 2006). A higher basal arousal level in some individuals has been proposed as an explanation as to why some people respond more strongly when faced with anticipated threat or danger (Clark & Beck, 2010). Beck (1985) proposed that core beliefs come about as a result of our life experiences and formed the basis of our responses to certain kinds of threat. Up to now cognitive behavioural therapy (CBT) has been regarded as the psychotherapy with the highest level of evidence of effectiveness for anxiety (Bandelow et al., 2017; Hofmann, Asnaani, Vonk, Sawyer & Fang, 2012; Twomey, O'Reilly, & Byrne 2015). However it could be argued that a large proportion of research in psychotherapy in recent decades has involved CBT which gives it an advantage in finding evidence for it's efficacy. As an antidote to anxiety, CBT seeks to help the individual identify the thoughts that stem from core beliefs – such as "I am helpless" or "I am unlovable" - which hinders them from successfully dealing with life's challenges.

By challenging these negative thoughts the individual can "cognitively reappraise" they're thinking and thereby overcome the associated anxiety (Beck, Emery & Greenberg, 2005). One core element of this therapeutic process is that the patient accepts themselves as they are, without conditions. This belief in oneself is known as unconditional self-

acceptance and is believed by many theorists to be a driving force in the therapeutic process (Ellis, 1995; Dryden, 2011).

Unconditional Self-Acceptance

"Fully and unconditionally accepting yourself, regardless of whether you behave correctly, intelligently or competently, and regardless of whether people respect, accept or love you" (Ellis, 1977)

USA is recognized as a major contributor to good mental health by many schools of psychotherapy (e.g., Rational-Emotive Behaviour Therapy (REBT), CBT), and the importance of accepting oneself has been emphasized by many theorists down the years such as Alfred Adler, Karen Horney and Harry Stack Sullivan (Williams & Lynn, 2010). USA can be understood as involving an acknowledgment of one's unique, complex, infallible humanity, no matter what is happening in the world and regardless of other's approval, validation, love or their opposites (Dryden, 2011).

If this theory is correct then higher levels of USA should help the individual to face difficult challenges with the advantage of not being critical of themselves and thus be associated with lower levels of anxiety (David, Szentagotai, Mcmahon & di Giuseppe, 2013). Chamberlaine and Haaga (2001a) endeavoured to test the hypothesis that higher USA would be reflected in lower anxiety scores and developed the Unconditional Self-Acceptance Questionnaire (USAQ) as a means of measuring USA levels. They also sought to distinguish between self-esteem and USA to emphasise it's usefulness, as much of the research in the area of mental health had, up to then, involved self-esteem as opposed to self-acceptance. Their research did indicate that indeed an inverse relationship between levels of USA and anxiety was found when self-esteem was statistically controlled for. MacInnes (2006) argues that Chamberlaine and Haaga concluded that the two constructs – USA and self-esteem - may be closely linked as they had a high positive correlation

between them which raises the question as to the difference between self-esteem and USA, as measured using the USAQ.

A limited number of experimental studies have been conducted involving USA. Davies (2006), for example, set out to determine if participants could be primed to think rationally or irrationally, would it have an effect on levels of USA. Results suggested (beliefs led to increased USA while irrational beliefs led to its' decrease. Irrational beliefs are held to be detrimental to psychological health and are given close attention in rational emotive behavioural therapy (REBT) and CBT (Ellis and Harper, 1961).

To investigate the effects of USA levels on several mental health variables including anxiety Popov, Radanovic & Biro, (2016), using an experimental design involving 182 students, where a realistic stressor – participants were required to do a short presentation with little time to prepare – found that people with higher USA scores were less anxious in response to feedback than those lower in USA. While the authors acknowledge that the evidence presented is not sufficient to claim therapeutic usefulness for USA, it does suggest that it qualifies as worthy of inclusion with any other self-evaluative constructs in predicting mental health variables such as anxiety.

The effects of USA on psychological health have also been researched in a clinical population. MacInnes, (2006) reported higher levels of anxiety, depression and psychological ill health in participants with enduring mental health problems with lower levels of USA, suggesting the potential for its' promotion in the treatment of general psychological problems. Popov, (2019), is in agreement, finding that USA is a better predictor than self-esteem for good mental health when affectivity traits were taken into account and making the case for the greater therapeutic utility of USA over self-esteem.

However, recently, some theorists have made the argument that cognitive reappraisal and the acceptance of oneself, without judgement, is not enough in times of difficulty and

that the directing of compassion towards the self is more beneficial in lowering the person's anxiety levels (Neff, 2013). The theory behind Compassion Focused Therapy (CFT), for example, proposes that many individuals develop extremely sensitive threat systems and need to be helped to recognize that fact and also the fact that it is not their fault. The development of self-compasssion then, where the patient is trained to "self-soothe", to treat themselves as they would a good friend, with kindness and understanding, is seen as a *necessary* element in the face of anxiety.

Self-Compassion

The concept of compassion – for self and others – as a sensitivity to suffering combined with an intention to relieve it, which has existed in Buddhist traditions for millennia, can be likened to the emotion a loving mother has toward alleviating the suffering of her distressed child (Hoffman, Grossman & Hinton, 2011). It has been described as a regulator of negative affect by communicating emotional warmth and security and through caring behaviour (Leaviss & Uttley, 2015). Compassion directed towards oneself has been labeled "self-compassion. As a relatively recent construct in psychology Kristin Neff has described self-compassion as involving 3 main aspects:

1) *Being kind and understanding toward oneself in instances of pain or failure rather than being harshly self-critical.*
2) *Perceiving one's experiences as part of the larger human experience rather than seeing them as isolating.*
3) *Holding painful thoughts and feelings in mindful awareness rather than over-identifying with them* (Neff, 2003a).

As such it has been adopted as an integral component of the "third wave" cognitive therapies such as Compassion Focused Therapy. The theory of how self-compassion works can be traced back to the pioneering work of John Bowlby, Mary Ainsworth and others in

relation to attachment theory which maintains that children who are soothed by their caregiver at times of separation or distress develop a healthy sense of security in themselves and in their relationships, whereas those who do not receive soothing as children develop an insecure (e.g., anxious or avoidant) style of reacting to distress which persists into adulthood (Bretherton, 1992). Self-compassion theory maintains that at times of distress or suffering one is able to offer oneself support, comfort and understanding instead of its' opposite - harsh criticism and self-judgment (Yarnell, Neff, Davidson & Mullarkey, 2019). Thus negative affect resulting from adverse experience such as rising anxiety may be attenuated by directing compassionate feelings of warmth and safety towards oneself, helping to deactivate the threat system and bring about feelings of security and emotional calm (Gilbert, 2009).

Research on self-compassion has generally found it to be positively correlated with psychological well-being. Zessin, Dickhauser & Garbade, (2015), for example, in a meta-analysis, found a strong positive relationship between self-compassion and well-being, with a subsample of studies suggesting a causal effect. In a meta-analysis of the association between self-compassion and psychopathology, McBeth and Gumley (2012) observed a large effect size between the two, suggesting the results provide empirical evidence for the role of self-compassion in lowering levels of depression and anxiety, developing well-being and enhancing resilience to stress.

Many individual studies have found evidence if favour of the beneficial effects of self-compassion. Searching for a possible association between self-compassion and anxiety Neff, Kirkpatrick & Rude (2007) found that self-compassion helps to buffer against anxiety when participants were made to experience an ego-threat in an experimental setting. In a second study the same trio found self-compassion predicted a high percentage of variance in

psychological well-being beyond that predicted by personality (Neff, Rude & Kirkpatrick, 2007).

Investigating the physiological effects of stress Breines, McInnis & Kuras, (2015) found self-compassion to be a significant negative predictor of physiological changes – specifically salivary responses to a laboratory stressor – concluding that self-compassion may serve as a protective factor against stress.

Leary, Tate, Adams, Batts-Allen & Hancock (2007) conducted five studies investigating the effects of self-compassion concluding it attenuates peoples reactions to negative events.

One group of people who are faced with unique challenges are parents of children with autism spectrum disorder (ASD). Severities of the disorder and the accompanying behaviours have been seen to be the strongest predictors of parental stress (Ingersoll & Hambrick, 2011). Neff and Faso, (2014), however, proposed that parent's personal characteristics would influence how they faced up to extreme stressful events, suggesting a coping strategy involving self-compassion ought to be helpful. They found self-compassion strongly predicted parental well-being over and above the severity of the child's condition.

Several studies have sought to find evidence for the effectiveness of a program to increase self-compassion by utilising an experimental design (Finlay-Jones, 2017). One such study involved the presentation of a brief self-compassion intervention over three weeks where self- report questionnaires were filled out by both the experimental group and a control group (who were taught time management skills before and after). The self-compassion group were found to gain significantly greater increases in optimism and self-efficacy and significantly less rumination, with both groups reporting increased life satisfaction and connectedness. Notably, however, no differences in scores were seen for mood and worry (Smeets, Neff, Alberts & Peters, 2014).

A review of the literature by Raes, (2010), suggests that one possible way that self-compassion may act as a buffer against depression and anxiety is its' beneficial effects on unproductive negative thinking such as rumination and catastrophizing. Finally, a study looking at the potential for self-compassion to influence others found its' benefits are not confined to the individual, in that people who accept and embrace their own flaws are more likely to accept the flaws in others, leading to better relationships, implying that being compassionate to wards oneself leads to being compassionate towards others also (Zhang, Chen, & Shakur 2019).

Rationale

Given the increasing levels of anxiety worldwide it would be prudent to investigate the possible variables that could potentially buffer against its' effects. For many years cognitive behavioural therapies have dominated the therapeutic landscape with their efforts to promote rational thinking which would, theoretically, lead the individual towards emotional stability and mental well-being (Twomey et al., 2010). There exists a small amount of evidence, described above, suggesting USA is a factor in mental well-being, and a somewhat larger body of evidence for the beneficial effects of self-compassion (Barnard & Curry, 2011). Proponents of self-compassion maintain that USA is just a first step towards mental health, a crucial factor, but is limited in it's effect because it is a passive, cognitive process which lacks the emotional motivating component of self-compassion (Neff, 2011; Neff & Lamb, 2009). Dryden (2011), however, points out that this may be so but it is an empirical question yet to be investigated. In an effort to add to what is known about USA and self-compassion, the current study specifically targets anxiety levels - which are seen as a good indicator of psychological well-being - and aims to investigate the relationship between anxiety, USA and self-compassion, testing for the strength of the association between USA and anxiety and also self-compassion and anxiety. Differences between the

genders are also tested to investigate whether males and females would differ in levels of anxiety, as has been seen in the literature (Bandelow & Michaelis, 2015). The main hypothesis and the main focus of the study seeks to establish whether self-compassion is a stronger predictor of anxiety than USA – in other words, are people who are compassionate towards themselves less anxious than those who accept themselves without conditions. If this proves to be the case it could provide evidence for the justification of further study into the benefits of self-compassion in the treatment of anxiety.

The following four hypotheses are proposed:

Hypothesis 1. There will be a correlation between USA and anxiety

Hypothesis 2. There will be a correlation between self-compassion and anxiety.

Hypothesis 3. Females will score higher in anxiety scores than males.

Hypothesis 4. Self-compassion scores will predict anxiety scores when controlling for USA, age and gender.

Methods

Participants

Participants were recruited by means of a non-probability, convenience sampling method. Acquaintances were contacted on WhatsApp, by email, and on LinkedIn where a "Google Forms" survey was posted. An invitation to complete the survey that was attached was given (See Appendix A, B & C). Participation was restricted to over 18s only and no other restriction applied. No incentive, financial or otherwise was offered. Self-report data was collected from 105 participants and entered into SPSS. Two of the participants were eliminated due to duplication and a further two were eliminated due to missing data, leaving 101 in total. Total scores for the three variables, anxiety, USA and self-acceptance, were calculated and descriptive statistics were performed. These statistics revealed a non-normal distribution of the anxiety scores. An examination of the histogram revealed a positively skewed distribution and inspection of the Q-Q plot revealed seven outliers, two of which were classed as extreme. On close inspection of these outliers and in line with the guidelines provided by authorities in this area it was decided the best course of action to achieve the most realistic statistics possible from the data, was to remove all seven outliers (Field, 2013). Of the remaining 94 participants 33% (n = 31) were male and 67% (n = 63) were female. The mean age was 47.9, (SD = 13.29), and the range was from 22 - 75.

Design

The current study used a quantitative, cross-sectional design to examine the relationship between variables. As such the design did not involve manipulation of any variable. Demographic data on age and gender, levels of anxiety, USA and self-compassion were collected and entered into SPSS for analysis. Correlations were calculated between the continuous variables. A t-test was performed to search for a difference between males and females on anxiety scores to see if the present study showed a similar trend to previous

studies (Bandelow & Michaelis, 2015). In addition, a hierarchical regression analysis was performed to determine if self-compassion would predict anxiety levels when controlling for age, gender and USA.

Measures

Following a request for age and gender the participants were presented with three questionnaires: The Beck Anxiety Inventory, (BAI) was presented first, followed by the Unconditional Self Acceptance Questionnaire – R (USAQ), and then the Self Compassion Scale – Short Form (SCS-SF). The BAI was designed to measure levels of anxiety experienced in the past month (See Appendix A). It contains a list of 21 symptoms of anxiety (e.g., Scared, Hands trembling). Participants were asked to indicate how much they had been bothered by each symptom over the past month, from "Not at all"(scoring 0) to "Severely" (scoring 3), a 4 point Likert scale. This scale has shown high internal consistency, convergent and discriminant validity and 1-week test-retest reliability. A score of 0-21 is considered low anxiety. A score of 22-35 is considered moderate anxiety. A score of 36 and above is considered potentially concerning levels of anxiety (Beck, Epstein, Brown & Steer, 1988). Cronbach's alpha in the present study was .85.

Levels of USA were measured using the USAQ-R, a 7 point Likert-type scale consisting of 20 statements which are intended to represent various aspects of USA philosophy and practice as taken from Rational Emotive Behavioural Therapy literature on the topic (Chamberlaine & Haaga, 2001b). Respondents are asked to rate their answer from a low of "Almost always untrue" (scoring 1) to a high of "Almost always true" (scoring 7), depending on how true the statement is of them. Eleven items were reverse-scored as they were worded such that lower scores represented higher USA, (e.g., "To feel like a worthwhile person, I must be loved by the people who are important to me"). The other nine statements were worded so that higher scores reflected higher levels of USA (e.g., "I

believe I am a worthwhile person simply because I am a human being"). The range of possible scores was from a low of 20 to a high of 140. Higher scores are deemed to indicate higher levels of USA. Internal consistency of the scale has been reported as high (Chamberlaine & Haaga, 2001b; David et al., 2013) (See Appendix C). Cronbach's alpha in the present study was .84.

Self-compassion was measured using the 12 statement SCS-SF which comprises a list of statements, that participants are asked to rate in relation to themselves on a five point Likert Scale from "Almost never" (scoring1), to "Almost always" (scoring 5). The short form of the scale was developed from a more comprehensive scale involving 26 statements which was shown to have almost perfect correlation with the short scale when examining total scores (Raes, Pommier, Neff & Van Gucht, 2011). Statements were designed to measure; kindness and understanding towards oneself; common humanity, awareness of the fact that we share many of our difficulties with others; and mindfulness, designed to measure the degree to which we over-identify with difficult feelings, during times of difficulty or suffering (Neff 2003). Six items were reverse scored as higher scores represent lower levels of self-compassion and vice-versa. Total scores could range from a low of 12 to a high of 60 (See Appendix B). Higher scores are deemed to indicate higher levels of self-compassion. Acceptable validity and reliability has been reported with a Cronbach's alpha of .92 (Neff, 2003). Cronbach's alpha in the present study was .87.

Procedure

Ethical approval was granted by the Ethics Board of the National College of Ireland (NCI). The "Google Forms" survey was circulated to acquaintances on WhatsApp, LinkedIn and by email. All data was collected anonymously. Participants were directed to read an information sheet, followed by a consent form, following which they could click on a box to convey their consent if they wished to proceed (See Appendix D & E). Participants

were then asked to give their age and gender before proceeding to the questionnaires that followed. The questionnaires were presented with the BAI, SCS-SF and USAQ-R in that order with instructions provided at the top of each (See Appendix A, B & C). Finally the participants were asked to "Submit" and all data were recorded. A Debrief sheet was displayed listing several helpline numbers in case they felt the need to discuss anything of concern to them (See Appendix F). Participants were invited to pass on the survey to anyone they thought might want to participate. Data was collected between December 2019 and January 2020 and the survey was taken down when a sufficient number of participants had completed it. The data was transferred from an Excel file that had been created on Google Forms, to SPSS for statistical analysis.

Results

Descriptive Statistics

Descriptive statistics including means, standard deviations (SD), confidence intervals (CI), standard errors (SE) and ranges, are detailed in Table 1 below. The sample size (N = 94) consisted of 31 males and 63 females. Age ranged from 22 to 75 (M = 47.94, SD = 13.29). The mean score for anxiety was 8.8 (SD = 6.45), which is considered low (Beck et al., 1988). The mean score for self-compassion was 37.93 (SD = 8.97), which is considered medium. The mean score for USA was 89.94 (SD = 16.9), which is also considered medium. The sample size (N = 94) was deemed sufficient to qualify for the statistical tests to be conducted (See Table 1). Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity and homoscedasticity. An examination of the histogram revealed a slightly positively skewed distribution in the criterion variable, anxiety, indicating that data for anxiety was somewhat non-normally distributed. Examination of both trended and de-trended Q-Q plots revealed reasonable linearity suggesting a desirable degree of normal distribution deemed sufficient to be permissible (Field, 2013). Examination of the Scatterplot revealed a mostly rectangular distribution and no outliers were present in the data as indicated by SPSS. Non-violation of linearity or homoscedasticity was confirmed for all other variables.

Table 1

Descriptive statistics for continuous variables

	N	Mean	CI 95%	SE	SD	Range
Age	94	47.94	45.21-50.66	1.37	13.29	22/75
Anxiety	94	8.80	7.48-10.12	.66	6.45	0/25

S-C	94	37.93	36.09-39.76	.93	8.97	16/59
USA	94	89.94	86.47-93.4	1.74	16.90	55/129

Note: S-C = Self-Compassion, USA = Unconditional Self-Acceptance, N = Number of Participants, SD = Standard Deviation, SE = Standard Error of the mean, CI = Confidence Intervals

Inferential Statistics

An independent samples t-test was carried out to compare anxiety scores between males and females. A Levenes test for equality of variances was performed, the result was non-significant and equality of variances assumed. There was a difference between the scores (t (92) = .771, p = .442) for males (M = 9.16, SD = 6.70) and females (M = 8.06, SD = 5.94), but the magnitude of the difference in the means (mean difference = 1.10, CI: -1.72 – 3.19) was small, (Cohen's d = .174). This result was non-significant.

The relationship between anxiety scores and USA scores was investigated using a Pearson product-moment correlation coefficient. There was a significant, but small negative correlation between the two variables, r (94) = -.24, p = .02. This indicates that higher anxiety scores were somewhat associated with lower USA scores (See Table 2).

The relationship between anxiety scores and self-compassion scores was also investigated using a Pearson product-moment correlation coefficient. There was a significant medium negative correlation between the two, r (94) = -.39, p < .001. This indicates that higher anxiety scores were moderately associated with lower self-compassion scores.

The relationship between USA scores and self-compassion scores was also investigated using a Pearson product-moment correlation. There was a strong positive correlation between the two variables, (r (94) = .69, p < .001), indicating a strong association between the two (See Table 2).

Table 2

Correlations between variables.

Variables	1	2	3
1. Anxiety	1		
2. Unconditional Self-Acceptance	-.24**	1	
3. Self-Compassion	-.39***	.69***	1

Note. Statistical significance: ****p* < .001. ***p* < *.05*

A hierarchical multiple regression was performed to investigate the ability of self-compassion scores to predict anxiety scores, after controlling for the influence of age, gender and USA scores. Inter-correlations among predictor variables (age, gender, USA and self-compassion) are presented in Table 3. The correlation between USA and self-compassion was – as previously mentioned – relatively high (r = .69). However, no inter-correlation was sufficiently high to indicate that multicollinearity might be a problem, and collinearity statistics of Tolerance and VIF were within cut-off points for determining the presence of multicollinearity (Tabatchnick & Fidell, 2013; Pallant, 2016). Both USA and self-compassion scores were significantly correlated with anxiety, the criterion variable.

Table 3

Correlations between predictor variables and criterion variable and inter-correlations for predictor variables (N = 94)

Variables	1	2	3	4
1. Anxiety	1			
2. Age	-.15	1		
3. USA	-.24*	-.03	1	
4. Self-compassion	-.39**	-.06	.69**	1

Note. Statistical significance: **p* < .05. ***p* <. 01 ****p* < .001

In Step1of the hierarchical multiple regression, demographic variables age and gender along with USA, were entered as predictor variables with anxiety as the criterion variable. The model was not statistically significant, (F (3, 90) = 2.23; p = .091), explaining just 6.9% of the variance in anxiety scores. In Step two, after self-compassion scores were added to the model, the total variance explained by the model as a whole was 16.5%, (F (1,89) = 10.25; p = .002), a significant result. The introduction of self-compassion scores explained an additional 9.6% of the variance in anxiety scores, after controlling for age, gender and USA, (R^2 Change = .096). In the final model self-compassion was a negative predictor of anxiety scores when controlling for USA, age and gender (β = -.43, p < .01) (See Table 4).

Table 4.

Hierarchical multiple regression model predicting anxiety scores

	R	R^2	R^2 Change	β	B	SE
Step 1	.263	.069	.069			
Age				-.07	-.03	.05
Gender				-.08	-1.1	1.41
USA				-.22	-.09	.04
Step 2	.406	.165**	.096**			
Gender				-.10	-1.3	1.35
Age				-.04	-.02	.05
USA				-.07	-.03	.05
Self-compassion				-.43**	-.31	.10

Note. R^2 = R-squared; β = standardized beta value; B = unstandardized beta value; SE = Standard Error; Statistical significance; **p < .01

Discussion

The current study sought to investigate the possibility of an association between both USA and anxiety, and self-compassion and anxiety. It also sought to investigate whether self-compassion alone could predict anxiety scores while controlling for USA, age and gender. Results found evidence of both associations and the predictive ability of self-compassion was confirmed.

A t-test that was performed to search for a difference in anxiety scores between the genders detected just a small difference. Unlike many previous studies the difference was not significant (Bandelow et al., 2015). The reason for this lack of a greater difference is unclear, although the relatively small sample of 31 males and 63 females, in comparison with other studies may have been a factor.

As noted in the results the mean anxiety score for all participants was low (M = 8.80). Several factors contributed to this outcome. Firstly seven outliers had been removed from the data set all of which were high scores and the removal of which caused the mean to fall. Secondly, because a score of zero was close to the mean and was not considered an outlier, all zero scores were included. Thirdly the average age of the participants in relation to the general population was high (M = 48), leaving open the possibility that age was an influence on lowering the mean score (Kessler, et al. 2005).

The small negative correlation (r = -.24) found between USA and anxiety is in line with the literature on this topic (Chamberlaine & Haaga, 2001; McInnes, 2006; Popov, 2019). This would suggest the possibility that people who accept themselves as they are, no matter what happens, may be less likely to experience unhealthy levels of anxiety in their lives. However, as the relationship is only being shown to be correlational as opposed to causal, equally possible is the situation where people who are less anxious to begin with, are more accepting of themselves. This raises the possibility that *trait* anxiety – the underlying level

of anxious arousal in an individual – may be influencing their USA score. If this were the case then an individual who is low in *trait* anxiety - of a calm disposition – may be more self-acceptant because that is a more desirable emotional state to experience than it's opposite. The BAI used in this study focuses mainly on measures of *state* anxiety. For example, statements such as " Heart pounding/racing", "Feeling of choking", "Difficulty in breathing" could be said to to measure *state* anxiety as opposed to *trait* anxiety. Cox, Cohen, Direnfeld and Swinson (1996) contend that many of the items on the BAI resemble or are the same as symptoms of panic attacks as listed in the DSM – IV. They found answers on the BAI to be so similar to answers on the Panic Attack Questionnaire that they concluded the BAI measures panic attacks, which is an extreme form of anxiety, rather than anxiety in general. This would suggest a study involving a both *trait* and *state* measures of anxiety, such as the State/Trait Anxiety Inventory (STAI) (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) could be more informative than a study looking at anxiety in general. As a cross-sectional study, however, causation could not be claimed. Experimental research in the area is scarce and could be improved upon with a longitudinal study testing the benefits of a program focused on USA for individuals with above average levels of anxiety.

The medium negative correlation found between anxiety and self-compassion ($r = -.39$) is also in line with research in this area which has looked at the relationship between self-compassion and well-being (Neff et al., 2007), as well as its' relationship with psychopathology (McBeth & Gumley, 2012). The question regarding causation then also arises: Are people less anxious because the compassion they show towards themselves ameliorates feelings of anxiety, or because they feel less anxious – or at least less anxious than their high *trait* anxiety fellows? In other words, if people like the way they feel emotionally (to an extent because they are low in anxiety) are they more likely to show compassion toward themselves? The results provide justification for empirical enquiry into

the possibility that an increase in a person's self-compassion could lead to a decrease in their anxiety levels.

The strong positive correlation between USA and self-compassion (r = .69) would suggest the two constructs have similarities but are not the same. Neff and Lamb, (2011, p. 865) maintain that while "...self acceptance may theoretically entail passivity towards personal shortcomings, self-compassion involves the desire to alleviate one's suffering, and is therefore a very powerful motivating force for growth and change". An example of the possible passivity of USA in contrast with the active nature of self-compassion can be seen in a comparison of questions from both questionnaires. For example the mainly passive statement from the USAQ-R " I feel I am a valuable person even when other people disapprove of me" contrasts with the similar but more active statement on the SCS-SF " When I'm going through a very hard time I give myself the care and tenderness that I need" (See Appendix B & C). Self-compassion has also been seen to predict self-acceptance, suggesting that an element of self-acceptance is inherent in self-compassion itself (Zhang, Chen, & Tomova, 2019). Welford, (2010) argues that anxiety that arises naturally during times of difficulty is alleviated by the individuals ability to self-soothe. If this system is not working properly or accessibly the individual may struggle because they do not posess the necessary emotional system to experience cognitive explanations and skills as calming and reassuring. Anxiety regulation, it is argued, is enhanced by improving the affiliative affect regulating system so it can be recruited to regulate the threat system when it is activated.

Implications

Research in the area of mental health frequently seeks to identify both risk and protective factors for various disorders. In the case of anxiety, it is widely believed the best form of treatment is with psychotherapy, pharmacotherapy, or a combination of both

(Bandelow et al., 2017). CBT is regarded as the psychotherapy with the greatest amount of evidence to back it up (Butler et al., 2006). However the case for the benefits of taking a "self-compassion" approach is gaining credibility (Gilbert, 2009; Neff & Germer, 2013; Gunnell, Mosewich, McEwan, Eklund & Crocker, 2017). If self-compassion can be shown to lower levels of anxiety in experimental trials, then the case could be made that low levels of self-compassion could contribute to an individual being susceptible to the deleterious effects of anxiety, and the integration of self-compassion enhancing skills into a range of current therapies would be justified. Furthermore a case could be made for integration of USA and self-compassion in the therapeutic process, given that they are seen to be highly related and it could be said that self-compassion basically requires self-acceptance. Patients presenting with anxiety could be offered CBT skills that heve been shown to be helpful, and also helped to understand and practice being compassionate toward themselves. Cultivation of a non-judgemental, compassionate attitude, drawing from both cognitive-based and compassion-focused therapeutic approaches could be the focus of future research. Gilbert, (2009), argues that compassion-focused therapies such as CFT could be used as a framework within which to deliver other interventions as they may be more efficacious when the individual has had their affiliative system activated.

Limitations and Future Research

The cross-sectional design of the current study limits its' findings to detecting the association between variables. An experimental, between groups, study comparing an intervention group with a control group, or a between groups study where participants receive an intervention and their "before and after" scores are compared, would be more informative. For example participants could be tested for self-compassion and anxiety levels, given a daily practice of a loving kindness meditation that is designed to increase self-compassion, or a course of CFT therapy treatments, and retested on both variables after

a period of time (Shahar, Szepsenwol, Zilcha, Haim, Zami, Levi & Levit, 2015; Smeets, Neff, Alberts, & Peters, 2014; Hoffman, Grossman, & Winton, 2011).

As with all studies of this design, the self-report method of gathering data is subject to social desirability bias leaving the reliability of the data open to question (Van de Mortel, 2008). The nature of collecting data online involves the participant filling out questionnaires without the researcher being present to answer any questions they may have. The presence of the researcher when the participant is completing the questionnaire would help to maximise the accuracy of reponses.

The mean age of participants was 48 years with the range from 22 to 75, putting the sample above the average age of the population in general. There was also double the number of females (N = 63) to males (N = 31). A larger sample size with a wider range of ages and a more equitable gender numbers would be preferable in future studies. The issue of gender differences in levels of self-compassion and USA was not addressed in this study. It could be informative to perform a study looking for gender differences and, if found, comparing them to differences in anxiety levels. Slightly higher levels of self-compassion in males than females have been found in previous research (Yarnell et al., 2015).

The strong correlation between USA scores and self-compassion scores (r = .69) was just below the suggested cut-off point for exclusion (Pallant, 2016). This strong correlation was expected. The strength of the association, however, would suggest the two constructs have much in common. Unconditionally accepting oneself could be seen as something of a compassionate stance, a step along the path to being kind and understanding towards oneself, rather than being self-critical (Neff & Lamb, 2009). The strength of the correlation is not enough to interfere with the statistical analysis, but it does raise the question of what the difference between the two constructs entails. Future research could investigate this

difference. Furthermore, possible moderators such as self-esteem could be included in the studies.

It is possible that some of the participants are taking anti-anxiety medication such as SSRIs or benzodiazepines. This could have the effect of lowering anxiety levels without affecting USA or self-compassion levels. A longitudinal study involving participants who are prescribed medication for anxiety could provide information as to whether the act of taking anti-anxiety medication affects USA or self-compassion levels. Before and after testing could help to explain if lower anxiety, provided the medication is working, leads to changes in USA and self-acceptance.

Conclusion

Anxiety is an issue of grave concern in society today. Excessive anxiety can be extremely debilitating, affects millions of people, and is likely on the increase. The discovery of a correlation between self-compassion and anxiety in this study raises the possibility that people who are compassionate towards themselves suffer less anxiety than those who do not. However the correlational nature of the design means that we cannot say for sure whether this is the case or whether it is the anxiety that is lowering self-compassion in the first place. Future research would benefit from gathering longitudinal data to test for causality. Randomized controlled trials (RCT) are lacking in this area, and experimental designs involving a therapeutic interventions such as CFT for anxiety could be instrumental in developing a sound research base.

Until recently CBT has been the theory-driven, empirically based psychological therapy of choice in the treatment of disorders such as anxiety (David, Cristea & Hofmann, 2018). The evidence provided in this study that self-compassion can predict anxiety when controlling for USA contributes evidence to the theory that an emotion focused therapeutic approach could enhance a CBT approach in the treatment of anxiety. This theory, could be

tested using experimental/longitudinal RCT design. In conclusion, the study adds to the literature on anxiety by highlighting the potential of self-compassion for people whose lives are adversely affected by anxiety.

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Appendix A

Beck Anxiety Inventory (BAI)

Below is a list of common symptoms of anxiety. Please carefully read each item in the list. Indicate how much you have been bothered by that symptom during the past month, including today, by circling the number in the corresponding space in the column next to each symptom.

	Not at all	Mildly, but it didn't bother me much	Moderately – it wasn't pleasant at times	Severely – it bothered me a lot
Numbness or tingling	0	1	2	3
Feeling hot	0	1	2	3
Wobbliness in legs	0	1	2	3
Unable to relax	0	1	2	3
Fear of worst happening	0	1	2	3
Dizzy or lightheaded	0	1	2	3
Heart pounding / racing	0	1	2	3
Unsteady	0	1	2	3
Terrified or afraid	0	1	2	3
Nervous	0	1	2	3
Feeling of choking	0	1	2	3
Hands trembling	0	1	2	3
Shaky / unsteady	0	1	2	3
Fear of losing control	0	1	2	3
Difficulty in breathing	0	1	2	3
Fear of dying	0	1	2	3
Scared	0	1	2	3
Indigestion	0	1	2	3
Faint / lightheaded	0	1	2	3
Face flushed	0	1	2	3
Hot / cold sweats	0	1	2	3

APPENDIX B

SELF-COMPASSION SCALE – SHORT FORM

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

Almost never **Almost always**

1 2 3 4 5

_____1. When I fail at something important to me I become consumed by feelings of inadequacy.*

_____2. I try to be understanding and patient towards those aspects of my personality I don't like.

_____3. When something painful happens I try to take a balanced view of the situation.

_____4. When I'm feeling down, I tend to feel like most other people are probably happier than I am.*

_____5. I try to see my failings as part of the human condition.

_____6. When I'm going through a very hard time, I give myself the caring and tenderness I need.

_____7. When something upsets me I try to keep my emotions in balance.

_____8. When I fail at something that's important to me, I tend to feel alone in my failure.*

_____9. When I'm feeling down I tend to obsess and fixate on everything that's wrong.*

_____10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.

_____11. I'm disapproving and judgmental about my own flaws and inadequacies.*

_____12. I'm intolerant and impatient towards those aspects of perrsonality I don't like.*

- Items with an asterisk should be reverse scored

APPENDIX C

Unconditional Self-Acceptance Questionnaire

Directions: The following statements represent beliefs people may have. Please read each statement and then follow how often you feel each statement is untrue or true of you using the scale below:

Almost always untrue.....almost always true.

1 2 3 4 5 6 7

1. Being praised makes me feel more valuable as a person.*

2. I feel worthwhile even if I am not successful in meeting certain goals that are important to me.

3. When I receive negative feedback, I take it as an opportunity to improve my behaviour or performance.

4. I feel that some people have more value than others.*

5. Making a big mistake maybe disappointing, but it doesn't change how I feel about myself overall.

6. Sometimes I find myself thinking about whether I am a good or bad person.*

7. To feel like a worthwhile person, I must be liked by the people who are important to me.*

8. When I am deciding on goals for myself, trying to gain happiness is more important than trying to prove myself.

9. I think that being good at many things makes someone a good person overall.*

10. My sense of self-worth depends a lot on how I compare with other people.*

11. I believe that I am worthwhile simply because I am a human being.

12. When I receive negative feedback, I often find it hard to be open to what the person is saying about me.*

13. I set goals for myself that I hope will prove my worth.*

14. Being bad at certain things makes me value myself less.*

15. I think that people who are successful in what they do are especially worthwhile people.*

16 To me, praise is more important for pointing out to me what I'm good at than for making me feel valuable as a person.

17. I feel that I am a valuable person even when other people disapprove of me.

18. I avoid comparing myself to others to decide if I am worthwhile person.

19. When I have been criticized when I fail at something, I feel worse about myself as a person.*

20. I don’t think it’s a good idea to judge my worth as a person.

* Items marked with an asterisk should be reverse scored

Appendix D

Consent Form

The Study : The Relationship Between Unconditional Self-Acceptance, Self-Compassion and Anxiety

The Researcher: Paddy Slattery, National College of Ireland.
Supervisor : Dr. April Hargreaves

* I confirm that I am over 18 years of age

* I confirm that I have read and understood the information sheet provided for this study and I have had the opportunity to consider the information.

* I understand that my participation is voluntary and that I am free to withdraw any time without submitting the form without giving reason.

* I understand that if I submit my form I cannot withdraw my data as all data is anonymous and cannot be traced to its' provider once submitted. Neither the researcher nor anyone else will be informed of any name in association with any data

*Furthermore I understand that if I feel the questionnaire is affecting me adversely in any way, I will stop answering the questions and if I feel it necessary to talk to somebody I can contact the Samaritans (Tel 116123), or any other organization such as those listed in the Debrief Sheet. In the unlikely event that I feel the experience has affected my health I will arrange to see my doctor immediately. The researcher may also be contacted at the email below.

* I understand that all information will be kept confidential in accordance with the Data Protection Act (1998) and the General Data Protection Regulation Act (2018). Data will be held, used and transferred in a safe and secure manner.

* I will be provided with the results of the study which will be available from 01/06/20 if I request them and will be free to ask any questions.

* I indicate by ticking the box below that I understand my rights and agree to participate in the study.

Researchers email……x15011089@student.ncirl.ie

Appendix E

Research Information

You are being asked to take part in a research study investigating the relationship between unconditional self-acceptance, self-compassion and levels of anxiety. This research is being conducted by Paddy Slattery, an undergraduate psychology student in National College of Ireland (NCI) as a final year project for the BA (Hons) in psychology degree course.

The research findings will be submitted and presented to NCI for assessment and grading. Results may also be presented to a congress of the Psychological Society of Ireland. The project may subsequently be available to view on the NCI website and may also be submitted to an academic journal for publishing. The NCI supervisor is psychology lecturer Dr. April Hargreaves who will be happy to answer your questions about this research. You may contact her by email at ; april.hargreaves@ncirl.ie.

All data is confidential and anonymous. You may withdraw from the study at any time up to the point of submitting your data, at which point it will not be possible to identify individual responses to remove them. There are no known benefits or risks associated with this research, however if doing the survey brings up any thoughts or feelings that you would like to discuss in confidence you can contact one of the excellent mental health services, a list of which is provided in the Debrief Sheet at the end of the survey. You will be asked if you have understood this information and if you consent to your data being used in this research.

You will then be asked to give your age and gender, following which you will be asked to answer 3 short questionnaires which will take approximately 8 minutes. At the conclusion of the questionnaires you will see the Debrief sheet and you will be asked to tick a box to submit your answers.

Appendix F

Debrief Sheet

- Thank you for taking part in this study, your participation is greatly appreciated.

- The information gathered from your participation will contribute to this study's attempt to enhance our knowledge of how we treat ourselves and what we believe about ourselves contributes to our levels of anxiety.

- The information will be held anonymously and nobody will be able to identify your data.

- If you feel you have been adversely affected in any way by these questions and you wish to talk to someone about it, you can contact any of the following organizations :

- The Samaritans Tel: 116123. (www.samaritans.ie)
- Aware : support@aware.ie
- Grow : www.grow.ie
- Pieta House : 1800247247
- You can also contact the researcher by email at x15011089@student.ncirl.ie

- And finally, please pass on this survey to friends and family who you think might be amenable to taking part.