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Research paper

Emotion dysregulation and anxiety in late adulthood

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ABSTRACT

Recent research has highlighted the important role of emotion dysregulation in the occurrence and maintenance of anxiety symptoms. The purpose of the present study was to investigate the relationship between anxiety symptoms and older adults' ability to regulate emotional experiences. A total of 167 community dwelling older adults completed self-report measures of affect and were asked to report how often they use specific emotion regulation strategies. Consistent with previous theories older adults experiencing increasing levels of anxiety reported greater difficulties in regulating emotional responses. Present results provide support for previous findings demonstrating that experiencing anxiety symptoms affects the ability to regulate emotional experiences. Current findings are likely to be informative in terms of understanding emotion dysregulation in older adults at risk of experiencing clinical symptoms of anxiety.

1. Introduction

Anxiety is a common problem among older adults and currently is one of the most prevalent psychiatric disorders in late life (Regier et al., 1988). Despite relatively high prevalence rates, the knowledge base about anxiety in late life is relatively small compared to knowledge about the experience and presentation of depression in older adults (Kogan, Edelstein, & McKee, 2000). For example, previous research shows that we know a lot more about depression in late life despite evidence suggesting that anxiety disorders may in fact be more common compared to depression (Bryant, Jackson, & Ames, 2008; Wolitzky-Taylor, Castriotta, Lenze, Stanley, & Craske, 2010).

Studies examining the impact of anxiety in late life have consistently found that anxiety contributes to declining physical health, decreased life satisfaction, and worse health-related quality of life in older adults, regardless of presence of cognitive impairment (Fuentes & Cox, 2000; Gibbons, Teri, & Logsdon, 2002; Schulz & Martire, 2004; Wetherell et al., 2004). Several studies have also shown that older adults who experience anxiety symptoms are more likely to experience deficits in several areas of cognitive function compared to those experiencing low levels of anxiety (Kizilbash, Vanderploeg, & Curtiss, 2002).

An increasing amount of evidence has recently emphasized the importance of flexible use of emotion regulation strategies for healthy adjustment and resilience (Bonanno, Papa, Lalande, Westphal, & Coifman, 2004) and in particular the role of emotion dysregulation in the experience of anxiety symptoms (Barlow, Allen, & Choate, 2004; Gross & Muñoz, 1995). For example, several authors conceptualize anxiety disorders as a dysfunction of emotion regulation (Kring & Bachorowski, 1999). Given that emotion dysregulation is considered a central component of anxiety symptomatology, improving our understanding of older adults' experience of emotion regulation within the context of anxiety symptoms is important.

Emotion regulation ability in late life is not a new concept within aging research. In fact, a large number of previous studies demonstrate an upward developmental trajectory with increasing age in the regulation of affective responses (Carstensen, Fung, & Charles, 2003), consistent with recent life span theories of emotion (Carstensen, Isaacowitz, & Charles, 1999; Labouvie-Vief, 2003), according to which older adults' efforts in regulating emotion are tied to maximizing positive and minimizing negative affect (Carstensen & Mikels, 2005; Mather & Knight, 2005). For example, prior studies have demonstrated that older adults are more motivated to regulate the experience and expression of emotions (Blanchard-Fields, Jahnke, & Camp, 1995; Gross et al., 1997; Kunzmann, Kupperbusch, & Levenson, 2005) and are highly skilled in the use of effective emotion regulation strategies (Carstensen et al., 2003), despite age-related losses that often accompany old age such as declining physical health, and rising mortality of friends and relatives (Brandtstädter & Greve, 1994; Filipp, 1996).

In line with current theories emphasizing the important role of emotion regulation in psychological health (Gross & Muñoz, 1995), evidence demonstrates that frequent use of certain strategies, such as expressive suppression and rumination and less frequent use of others such as reappraisal and self-disclosure, are associated with both anxiety and depressive symptomatology

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(Campbell-Sills, Barlow, Brown, & Hofmann, 2006; Gross & John, 2003). Individual differences in use of emotion regulation strategies can play an important role in the occurrence and maintenance of anxiety symptoms (John & Gross, 2004). Recent research has shown that difficulties in emotion regulation, may be explicitly linked to intervention strategies, and can play an important role in anxiety symptomatology. For example, individuals who endorse anxiety symptoms are more likely to report greater negative emotional impulse strength, negative expressivity, and reactivity to emotional responses (Mennin, Heimberg, Turk, & Fresco, 2005). Anxiety has also been linked to difficulties in understanding emotional responses (Mennin et al., 2005; Salters-Pedneault, Roemer, Tull, Rucker, & Mennin, 2006), engaging in goals when distressed (Salters-Pedneault et al., 2006), and impaired ability in repairing negative mood compared to controls or individuals experiencing low levels of anxiety.

Despite the theoretical and clinical relevance of the construct of emotion regulation (Gross & Muñoz, 1995; Gross, 2002), surprisingly few studies have examined use and effectiveness of emotion regulation strategies within the context of experiencing anxiety in late adulthood. Moreover, most studies have included participants who obtain high scores on anxiety inventories (Amstadter, 2008), whereas no studies exist examining the relationship between psychiatric symptom distress, observed in healthy populations, and the ability to regulate emotion. For example, it is unknown whether anxiety symptoms that are mild and fail to meet criteria for a clinical diagnosis might be associated with deficits in emotion regulation. In addition, contrary to the wealth of studies investigating age-related improvements in the regulation of emotion, particularly in early and middle adulthood in normal aging (Blanchard-Fields, Stein, & Watson, 2004; Carstensen et al., 2003), there are no studies examining the influence of anxiety symptoms on older adults' ability to regulate emotional responses.

Further knowledge about the correlates of anxiety symptomatology in late life and specifically the relationship between anxiety and emotion regulation in old age is likely to be significant given the lack of knowledge base about anxiety in late life. Specification of the mechanisms that are likely to be associated or influence anxiety symptomatology has the potential to contribute to the refinement of etiological models of anxiety in late life and development of more focused prevention and intervention programs. The main aim of the present study therefore was to investigate the link between anxiety symptoms and the ability to regulate emotional responses in community dwelling older adults. A secondary objective was to examine the relative contribution of negative affect, depressive symptoms, and cognitive ability that have been shown to coexist with anxiety symptoms (Kizilbash et al., 2002). Based on previous research, the main hypothesis of the present study was that older adults reporting increased anxiety would experience difficulties in the ability to regulate emotion compared to those experiencing low levels of anxiety symptoms (Gross & Muñoz, 1995; Gross & John, 2003).

2. Method

2.1. Participants

A hundred and sixty-seven older community residents ranging in age from 60 to 94 years (65 males and 98 females), were recruited from a university panel of volunteers and were invited to participate. The majority of the participants (79.2%) were English White or European, 11.5% were Black, 2.1% Mixed, 3.1% Asian, 3.1% Chinese and 1% Other or Not Stated. All participants were screened for possible cognitive impairment with the Mini Mental State Examination (Folstein, Folstein, & McHugh, 1975), with a cut-off score of >25 (Chayer, 2002). Four participants were excluded from the study on the basis of this criterion.

2.2. Procedure

All participants completed the measures individually. After providing informed consent, the enrolled participants completed baseline testing of 2 h sessions at the laboratory. In the first part of the session, participants completed questionnaires assessing demographic and health information. In the second part they were asked to complete self-report measures and several cognitive tests.

2.3. Measures

2.3.1. Difficulties in Emotion Regulation Scale (DERS)

The Difficulties in Emotion Regulation Scale (Gratz & Roemer, 2004), assessed several facets of emotion regulation, such as "emotional awareness," "non-acceptance of emotional responses," and "limited access to emotion regulation" (i.e., "When I'm upset, I feel ashamed with myself for feeling that way" and "When I'm upset, I lose control over my behaviors"). Participants indicated how often each item applied to them on a 5-point Likert-type scale, with higher scores indicating greater difficulties in emotion regulation. Previous studies examining age differences in the DERS (Orgeta, 2009), have reported that the measure is suitable for assessing emotion dysregulation in older adults, whereas high reliability (e.g., internal consistencies ranging from .80 to .89) and acceptable construct and predictive validity have been established for the scale (Gratz & Roemer, 2004). In the current sample the measure demonstrated excellent to adequate internal consistency for both the total score (Cronbach's $\alpha = .89$) and for all of the subscales (Cronbach's $\alpha > .79$). The number of cases with missing data was small (<5%) and within previously accepted criteria for missing data in aging research (Hardy, Allore, & Studenski, 2009).

2.3.2. Hospital and Anxiety Depression Scale (HADS)

Anxiety symptoms were measured with the Hospital and Anxiety Depression Scale (HADS; Zigmond & Snaith, 1983), in line with previous research documenting that the HADS is among the most suitable measures in measuring anxiety in older adults. The HADS is a 14 item self-report questionnaire designed to assess anxiety (e.g., 'I get a sort of frightened feeling as if something awful is about to happen') and depression (e.g., 'I look forward with enjoyment to things') as two distinct dimensions in non-psychiatric populations. Recent studies have shown that scoring the HADS as two separate subscales of anxiety and depression is appropriate in non-clinical populations of older men and women (Cale et al., 2010). The HADS assesses how the person has been feeling within the past week, consisting of two seven-item subscales, each being scored on a 0–3 scale, which generates scores for generalized anxiety and depression (0–21). In the present sample, a Cronbach's α of 0.79 was observed for HADS-Anxiety.

2.3.3. Geriatric Depression Scale (GDS)

Depressive symptoms were also measured with the Geriatric Depression Scale (Yesavage et al., 1982), a widely used self-report measure of depression validated in older adults. The GDS has good convergent validity with depression measures and discriminates between older adults with and without depression (O'Hara & Yesavage, 2002). This 30-item scale consists of five factors: social withdrawal, behavioral agitation, sad mood, hopelessness, and lack of vitality (Sheikh et al., 1991). All items are presented in a yes or no format, including 10 items that are reverse scored. The GDS has been used widely in samples of older adults living independently in the community (Stiles & McGarrahan, 1991). Numerous studies have reported that the GDS has high internal consistency