



## Gender-based differential item function for the difficulties in emotion regulation scale<sup>☆</sup>



Lisa M. Anderson<sup>a,\*</sup>, Erin E. Reilly<sup>a</sup>, Sasha Gorrell<sup>a</sup>, Katherine Schaumberg<sup>a,b</sup>, Drew A. Anderson<sup>a</sup>

<sup>a</sup> Department of Psychology, University at Albany, State University of New York, 1400 Washington Avenue, Social Sciences 399, Albany, NY 12222, USA

<sup>b</sup> Department of Psychology, Drexel University, 3141 Chestnut Street, Stratton Hall 119, Philadelphia, PA, 19104, USA

### ARTICLE INFO

#### Article history:

Received 22 August 2015

Received in revised form 13 November 2015

Accepted 10 December 2015

Available online 29 December 2015

#### Keywords:

Emotion regulation

Differential item functioning

Gender

Difficulties in emotion regulation scale

### ABSTRACT

Emotion dysregulation is a mechanism central to the development and maintenance of various psychological disorders. Notably, men and women may differ in their experience of emotion regulation; for instance, women generally report more frequent use of problematic emotion regulation strategies. While considering the possibility that true gender differences in emotion regulation exist, it is also important to ensure that measures assessing the process of emotion regulation are not biased toward one group over the other. The current study examined differential item functioning (DIF) in a commonly used, 36-item measure of emotion dysregulation – the Difficulties in Emotion Regulation Scale (DERS). Participants ( $N = 679$ , 48.3% women) completed the DERS. Results demonstrated statistically-significant DIF in several of the items; two items met more stringent criteria for clinically-significant DIF. Findings suggest that further evaluation of emotion regulation measures may yield insight regarding the assessment of gender differences for emotion regulation and related constructs.

© 2015 Elsevier Ltd. All rights reserved.

### 1. Introduction

Emotion regulation has been highlighted as a factor integral to the etiology and maintenance of psychopathology (see Aldao, Nolen-Hoeksema, & Schweizer, 2010 for recent meta-analysis). In addition, results from empirical work suggest that the way in which an individual relates to their emotional experience, rather than the presence of strong emotion alone, is important in accounting for psychological symptoms (e.g., Sauer-Zavala et al., 2012).

Research examining the role of emotion regulation in psychological disorders, including mood disorders, eating pathology, and anxiety disorders, suggests that gender differences exist in the use of specific emotion regulation strategies (Lafrance Robinson, Kosmerly, Mansfield-Green, & Lafrance, 2014), the number of emotion regulation strategies employed (Aldao et al., 2010; Nolen-Hoeksema & Aldao, 2011), and the relation between emotion regulation and psychopathology (Nolen-Hoeksema, 2012). Past examinations of emotion regulation and related constructs (i.e., emotional awareness, sensitivity, or clarity) across gender have demonstrated that women tend to report greater emotion- and emotion-regulation-related difficulties as compared to men. For instance, in a recent study examining the associations between

gender, emotion regulation, and eating pathology in college students, women reported greater difficulties with emotional clarity, ability to engage in goal-directed behavior, and the ability to use adaptive strategies to regulate emotion states (Lafrance Robinson et al., 2014). In addition, men and women appear to endorse differences in emotion regulation strategies, including distinctions in frequency of use as well as in the number of strategies used (see Nolen-Hoeksema, 2012 for review). In particular, women have reported using emotion regulation strategies more frequently than men (e.g., Nolen-Hoeksema & Aldao, 2011) – a difference that has been noted across various emotion regulation strategies (Nolen-Hoeksema, 2012). Altogether, evidence suggests that men and women report different emotion regulation strategies and related processes.

Despite initial work establishing unique patterns of emotion regulation across genders, a recent review concluded that the field is still “likely missing vital information on how men regulate their emotions” (Nolen-Hoeksema, 2012; p. 161). In particular, research is needed to better identify male-specific variation in the presentation and function of specific emotion regulation strategies and deficits. It is also important to determine whether observed discrepancies in emotion-related constructs indicate true differences in emotional experiences and regulation skills, or whether discrepancies can be explained by other factors (i.e., tendency to report/label emotional experiences). In particular, women’s increased tendency to report and describe more emotional experiences than men likely impacts self-report assessments of emotional constructs that often yield gender-based differences in performance (e.g., Feldman Barrett, Lane, Sechrest, & Schwartz, 2000).

<sup>☆</sup> The authors have no funders or conflicts of interest to declare.

\* Corresponding author.

E-mail addresses: [lmanderson@albany.edu](mailto:lmanderson@albany.edu) (L.M. Anderson), [eereilly@albany.edu](mailto:eereilly@albany.edu) (E.E. Reilly), [sdmochowski@albany.edu](mailto:sdmochowski@albany.edu) (S. Gorrell), [kes374@drexel.edu](mailto:kes374@drexel.edu) (K. Schaumberg), [daanderson@albany.edu](mailto:daanderson@albany.edu) (D.A. Anderson).

Reports of gender-specific differences in emotion regulation may reflect true distinctions in emotional processes between men and women; however, these same effects may simply be an artifact of gender differences in the linguistics used to describe emotional experiences and processes. One large-scale study examined emotional experiences among 1217 adults and evaluated gender differences in responses on the Levels of Emotional Awareness Scale (LEAS; Lane, Quinlan, Schwartz, Walker, & Zeitlin, 1990), a validated measure of the articulation of emotional experience (Feldman Barrett et al., 2000). When asked to articulate their own and others' emotional experience/s, women demonstrated greater emotional awareness and used more complex and nuanced emotion language in their descriptions, as compared to men. Noting these gender-specific differences in the ability to label and describe emotional states, it seems necessary to consider the validity of measures that are commonly used to assess differences in emotion-related constructs, including emotion regulation.

The majority of current knowledge and measurement of emotion regulation has evolved from reports based predominantly on women's experiences of emotional processes [e.g., emotion dysregulation associated with borderline personality disorder (BPD); Linehan, 1993]. Meanwhile, empirical study of how men regulate their emotions remains in its infancy (Nolen-Hoeksema, 2012). The Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004) represents a widely-used self-report assessment that was designed to assess a higher-order emotion regulation factor. Specifically, this measure consists of six specific subscales: non-acceptance of emotion responses, limited access to emotion regulation strategies, difficulties in goal-directed behaviors and/or actions, impulse control difficulties, a lack of emotional awareness, and lack of emotional clarity.

As should be done for any established assessment tool, research efforts have examined the psychometric properties of the DERS within and across various samples. To date, the exact factor structure has been inconsistently supported in some recent research (e.g. Bardeen, Fergus, & Orcutt, 2012; Kökönyei, Urbán, Reinhardt, Józán, & Demetrovics, 2014); however, the measure has been consistently used to examine emotion regulation strategies in community (e.g., Kashdan, Zvolensky, & McLeish, 2008), college (e.g., Gratz & Roemer, 2004) and clinical (e.g., Haynos, Roberto, Martinez, Attia, & Fruzzetti, 2014) samples. Evaluated using a mixed-gender, college-aged sample, the measure's items were developed using input from multiple experts in the emotion regulation literature; therefore, the subscales and items represent existing knowledge on emotion regulation at the time the measurement was developed.

Noting the timing of the DERS development, item selection may have reflected the status of Linehan's BPD research – a predominant line of work related to emotion dysregulation, but based on a primarily female population (Linehan, 1993). Although the DERS was initially validated within a mixed-gender sample (Gratz & Roemer, 2004), the influence of gender on item response was not directly tested within the investigation, nor was the factor structure of the measure examined across gender groups. It is possible that gaining a more explicit understanding of the potential influence of gender on item response may either confirm the measure's strong psychometric status or highlight areas in need of adjustment that might further strengthen psychometric properties in the measure. Therefore, additional examination of this assessment tool is warranted.

Altogether, research suggests that men and women report differential levels of emotional constructs and use of emotion regulation skills (Nolen-Hoeksema, 2012). Therefore, it is important to consider the possibility that existing measurement of emotion regulation includes gender bias. Differential item functioning (DIF) analyses represent one method to detect potential measurement bias. When a measurement contains DIF, a specific group (e.g., gender, race) has an increased or decreased likelihood of endorsing items on that measurement, even when the groups are held equivalent in levels of the latent trait or ability (Clauser & Mazor, 1998). For example, if an item

on the DERS exhibited gender-based DIF, it means that a man and a woman with an equal level of emotion regulation difficulties have differential probability of responding to an item in a certain way. When a measure contains DIF, it can cause problems, both for the validity of the measurement and in the interpretation of results that employ the measurement (Clauser & Mazor, 1998). Recent attention has been given to potential gender-related DIF in measurement relevant to emotional experiences, such as the Anxiety Sensitivity Index (Van Dam, Earleywine, & Forsyth, 2009), the Center for Epidemiological Studies, Depression Scale (Cole, Kawachi, Maller, & Berkman, 2000; Covic, Pallant, Conaghan, & Tennant, 2007), the Thalbourne Manic-Depressiveness Scale (Lange, Thalbourne, Houran, & Lester, 2002) and the BPD criteria (Sharp et al., 2014). Additionally, other work has examined gender-based DIF in other psychological measurement, including the Brief Fear of Negative Evaluation Scale (Harpole et al., 2014), and the Multidimensional Personality Questionnaire Stress Reaction Scale (Smith & Reise, 1998).

Due to recent evidence documenting salient gender differences in emotion regulation (Nolen-Hoeksema, 2012), and other work documenting gender-based DIF in measurement of emotion (e.g., Van Dam et al., 2009), we examined whether measurement of emotion regulation is free of gender bias and is therefore valid across both men and women. The current study sought to evaluate gender-related DIF in the DERS (Gratz & Roemer, 2004) using a sample of college undergraduates.

It is possible that gender differences on emotion regulation measures may be indicative of reporting or measurement bias rather than true gender-specific differences for the overarching emotion regulation construct and related constructs. Several recent studies have failed to exactly replicate the original DERS factor structure (e.g., Kökönyei et al., 2014); it is possible that measurement bias may contribute to the inconsistently-supported factor structure. Because gender differences have been reported for measurement of similar constructs (e.g., emotional clarity; Lafrance Robinson et al., 2014) it seems likely that responses for the DERS multidimensional measure of emotion regulation may also vary across genders. Due to the limited work that has evaluated whether such gender differences were due to measurement bias or true differences in underlying abilities or constructs measured, the current study was partially exploratory in nature. However, noting that recent studies have failed to fully replicate the overall DERS scale structure, we hypothesized that gender-based DIF would be present among the DERS items. In particular, we expected that items that target emotional clarity or awareness would be the most likely candidates for DIF among this multidimensional measure of emotion regulation.

## 2. Material and methods

### 2.1. Participants

Because prior work has recommended minimum sample sizes of 200–250 per group when conducting statistical analyses that examine DIF (Clauser & Mazor, 1998), data were pooled from several studies that assessed emotion regulation constructs in undergraduate men and women at a large university in the northeastern United States between 2010 and 2014. Altogether, 679 individuals (48.3% women) completed the DERS measure. Self-reported ethnicity/racial background in the current sample was reflective of the university's ethnic composition, including 11.1% Asian American, 27.7% Black, 47.3% White, 5.4% Latino/a American, 13.6% who selected "Other", and 1.9% who chose not to respond. Each study recruited undergraduate students using the university's research subject pool; all participants received course credit for their participation in their respective study. For all studies, participants attended an in-lab appointment where they consented to participation and then completed a battery of online questionnaires, including the DERS.

Download English Version:

<https://daneshyari.com/en/article/889792>

Download Persian Version:

<https://daneshyari.com/article/889792>

[Daneshyari.com](https://daneshyari.com)