Gender differences in the association between alexithymia and emotional eating in obese individuals

Junilla K. Larsen\textsuperscript{a,b,*}, Tatjana van Strien\textsuperscript{a,b}, Rob Eisinga\textsuperscript{c}, Rutger C.M.E. Engels\textsuperscript{d}

\textsuperscript{a}Department of Clinical Psychology, Radboud University Nijmegen, 6500 HE Nijmegen, The Netherlands
\textsuperscript{b}Institute for Gender Studies, Radboud University Nijmegen, 6500 HE Nijmegen, The Netherlands
\textsuperscript{c}Department of Methodology and Statistics, Radboud University Nijmegen, 6500 HE Nijmegen, The Netherlands
\textsuperscript{d}Behavioral Science Institute, Radboud University Nijmegen, 6500 HE Nijmegen, The Netherlands

Received 8 March 2005; received in revised form 7 June 2005; accepted 14 July 2005

Abstract

Objective: Women have been reported to use more emotion-regulation strategies than do men and to have more abilities to regulate their emotions in a different way. The aim of the present study was to examine gender differences in the relationships of alexithymia, negative mood, and the combination of alexithymia and negative mood with emotional eating in obese persons.

Methods: Four hundred thirteen obese individuals [343 females and 70 males, aged 18–60 years, mean=43.6 years, body mass index (BMI)=38.4±6.6 kg/m\textsuperscript{2}] completed self-report questionnaires, including the Symptom Checklist-90 (SCL-90) questionnaire, the Dutch Eating Behavior Questionnaire (DEBQ), and the Toronto Alexithymia Scale (TAS).

Results: Hierarchical regression analysis showed a significant interaction between gender and alexithymia. More difficulty in identifying or describing feelings was specifically associated with more emotional eating in men.

Conclusion: These findings suggest that alexithymia is more strongly involved in emotional eating of obese men than women. This offers indications for designing gender-specific treatments for emotional eating among obese persons.

Keywords: Alexithymia; Emotional eating; Gender differences; Depression; Obesity

Introduction

The normal response to emotional arousal is loss of appetite, followed by a decrease of food intake, as emotional arousal inhibits gastric hunger contractions \cite{1} and leads to the liberation of sugar from the liver into the bloodstream \cite{2}. Some individuals, however, respond to emotional arousal by enlarging their food intake. This so-called emotional eating is, according to psychosomatic theory, more frequent in obese individuals and is the result of learning experiences early in life in which food was used as a way of coping with psychological problems \cite{3}. Due to these early learning experiences, some individuals may have developed a poor interoceptive awareness: difficulties in recognizing and accurately identifying emotions and visceral sensations related to hunger and satiety \cite{4}. Interoceptive awareness is highly associated with alexithymia, which is a multifaceted construct encompassing difficulty identifying subjective emotional feelings and distinguishing between feelings and the bodily sensations of emotional arousal, difficulty describing feelings to other people, an impoverished fantasy life, and a stimulus-bound, externally oriented, cognitive style, as originally defined by Nemiah et al. \cite{5}.

While interview and questionnaire studies have consistently found support for the concept of emotional eating in obese individuals \cite{6,7}, no support for this concept was obtained in early experimental studies \cite{8–10}, possibly as...
a result of the emotional manipulation with labelled, controllable emotional states [11]. Experimental studies in which the source of the elicited negative emotions was diffuse and uncontrollable have found that the obese overeat in comparison with the nonobese [12,13]. This overeating after diffuse and uncontrollable emotions suggests a role for alexithymia in emotional eating.

A previous study has found a relationship between interoceptive awareness and emotional eating among females [14]. In addition, difficulty in identifying feelings has shown to be associated with emotional eating among obese females with binge eating disorder, but not among those without binge eating disorder [15]. So far, no studies have examined the relationship between alexithymia and emotional eating in men.

Gender differences in emotional adjustment and emotional eating have consistently been reported, with women showing more depressive symptoms [16], being more emotionally expressive [17–19], using more emotion-regulation strategies [20], and showing more emotional eating [21] than men do. Whereas an incidental study has observed no association between alexithymia and gender [22], most large-scale studies in general population samples have found that men show more alexithymia than women do [23,24]. In addition, the relationships between alexithymia and psychological or medical problems may well be gender specific. Women have been reported to use more emotion-regulation strategies than men do and to have more abilities to regulate their emotions in a different way [20]. We hypothesize that the associations between alexithymic characteristics and emotional eating problems are stronger for men than for women. A previous study found that alexithymia was associated with the frequent use of health care among men, but not among women [25].

The aim of the present study was to examine gender differences in the relationships of alexithymia, negative mood, and the combination of alexithymia and negative mood with emotional eating in obese individuals. Support for a gender-specific emotional eating model would be clinically useful, because it offers indications for designing gender-specific treatments for emotional eating.

### Method

#### Participants

Participants were recruited in three ways: through advertisements in both local newspapers ($n=545$) and in an obesity journal of the Dutch patients’ association of obesity ($n=175$), and by intake screening in an obesity clinic ($n=84$). This was done to obtain a sufficiently large obese sample. In the advertisements, people were offered a personal eating diagnosis in return for their participation. Inclusion criteria for this study were a body mass index (BMI) $\geq 30$ kg/m$^2$ and $<60$ kg/m$^2$ and age $\geq 18$ and $<60$ years. Twenty-one respondents recruited through advertisements in local newspapers were excluded because they filled out an electronic instead of a paper version of the questionnaires, and the Symptom Checklist-90 (SCL-90) questionnaire items were not included in the electronic version. There were no differences in weight and demographic characteristics between respondents who completed the electronic questionnaires and those who completed the paper questionnaires ($P>0.10$). The final selected obese group consisted of 200 individuals recruited through advertisements in local newspapers, 144 individuals recruited by way of the obesity journal, and 69 individuals from the obesity clinic. Table 1 provides an overview of demographic and weight data of the obese men and women in the different samples.

Analyses of variance with sample and gender as subgroup factors showed that men in this study were, on average, older than women ($F=11.21, P=0.001$). No significant differences between the sexes were found for BMI and educational level ($P>0.10$). The samples differed in age ($F=5.38, P=0.005$) and BMI ($F=59.78, P<0.001$). People recruited through advertisements in local newspapers were, on average, older ($P<0.05$) and had a lower BMI ($P<0.001$) than did the people from the other two samples, and people from the obesity journal had, on average, a higher BMI than did people from the obesity clinic ($P<0.001$). There were no significant interactions between sample and gender, neither for age and BMI nor for any of

| Table 1 Demographic characteristics and BMI of female and male participants in the different samples |
|------------------------------------------|----------------|----------------|----------------|----------------|
|                                      | Local newspapers | Obesity journal | Obesity clinic |
|                                      | Women | Men | Women | Men | Women | Men | Women | Men |
| Age (years)                           | n    | M     | S.D.  | n    | M     | S.D.  | n    | M     | S.D.  |
| 160                                   | 44.7 | 9.5   | 40    | 48.2 | 7.6   |       | 135   | 42.0 | 9.2   |       |
| 160                                   | 34.7 | 4.4   | 40    | 33.9 | 2.9   |       | 135   | 42.9 | 6.0   |       |
| Educational level (%)                 | n    | %    | n    | %    | n    | %    | n    | %    | n    | %    |
| Primary                               | 19   | 12.1 | 4    | 10.0 | 14   | 10.5 | –    | 0.0  | 3    | 6.5  |
| secondary                             | 80   | 51.0 | 17   | 42.5 | 68   | 51.1 | 4    | 44.4 | 21   | 45.7 |
| tertiary                              | 58   | 36.9 | 19   | 47.5 | 51   | 38.4 | 5    | 55.6 | 22   | 47.8 |

*Educational level information was missing for nine individuals.*
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات