Addictive Behaviors 38 (2013) 2014–2017

Contents lists available at SciVerse ScienceDirect

Addictive Behaviors

Short Communication

I don't know how I feel, therefore I act: Alexithymia, urgency, and alcohol problems

Hanako Shishido *, Raluca M. Gaher, Jeffrey S. Simons

The University of South Dakota, United States

HIGHLIGHTS

- We tested associations between alexithymia, urgency, and alcohol outcomes.
- Negative urgency mediated the association between alexithymia and alcohol problems.
- Positive urgency mediated the relationship between alexithymia and consumption.
- The alexithymia by positive urgency interaction significantly predicted problems.
- Deficits in cognitive representation of emotions increase emotional dysregulation.

ARTICLE INFO

Keywords:
Alexithymia
Urgency
Emotion regulation
Alcohol consumption
Alcohol-related problems

ABSTRACT

This study examined the relationships between alexithymia, impulsivity, and alcohol use and related problems. The sample consisted of 429 undergraduate students who reported drinking alcohol at least once in the past 3 months. Negative urgency mediated the relationship between alexithymia and alcohol-related problems, whereas positive urgency mediated the relationship between alexithymia and alcohol consumption. In addition, positive urgency moderated the relationship between alexithymia and alcohol-related problems, increasing the strength of this association. These results indicate distinct relationships between alexithymia and negative urgency and positive urgency in predicting alcohol consumption and related problems. The findings of this research contribute to the body of the literature on alexithymia, self-regulation, and etiology of alcohol misuse and related consequences. Furthermore, the findings of the current study provide support for the importance of emotion identification and expression skills training in substance abuse treatment.

1. Introduction

This study examined the nature of the relationship between alexithymia and impulsivity, and how they contribute to increased alcohol use and alcohol-related problems. Alexithymia is a multifaceted personality construct that is characterized by difficulty identifying and describing feelings, externally oriented thinking, and lack of imagination (Taylor, 2000). Alexithymia is associated with a range of disorders, many of which are associated with poor impulse control (Kauhanen, Julknen, & Salonen, 1992; Lumley & Roby, 1995; Parker, Wood, Bond, & Shaughnessy, 2005; Thorberg, Young, Sullivan, & Lyvers, 2009; Troisi, Pasini, Saracco, & Spalletta, 1997).

The development of emotional awareness and skills to express feelings are strongly linked to cognitive development because humans use language to identify and express their feelings. According to Taylor, Bagby, and Parker (1997), all individuals have emotions (i.e., neurophysiological arousal), but how we *feel* the emotions differ based on our subjective cognitive understanding and experiences. Without adequate words to describe various neurophysiological stimuli, we cannot *feel* (identify and describe) them accurately and precisely, and thus we have difficulties regulating our behaviors that follow the emotions (Lane & Schwartz, 1987; Taylor et al., 1997).

The emotional awareness theory presented by Lane and Schwartz (1987) has provided some explanations for the development of alexithymia (Taylor, 2000; Taylor et al., 1997). According to this theory, individuals with alexithymia are considered to be on the first two levels of emotional awareness (i.e., sensorimotor reflexive and sensorimotor enactive) as their abilities to cognitively identify various feelings precisely by recognizing specific physiological signs of emotions are not yet fully developed (Taylor et al., 1997).

Perhaps, lack of cognitive representations for neurophysiological stimuli may make individuals with alexithymia distressed in social situations, and thus they may use alcohol to alleviate their discomfort (Kauhanen et al., 1992; Thorberg et al., 2009; Uzun, 2003). According to the dual process models of impulsivity, impulsive individuals tend to rely on reflexive affective processes, rather than on reflective cognitive processes, to lead their behaviors (Lieberman, 2007; Metcalfe & Mischel, 1999).

* Corresponding author at: Department of Psychology, The University of South Dakota, 414 E. Clark Street, Vermillion, SD 57069, United States. Tel.: +1 605 677 5353; fax: +1 605 677 3195.
E-mail address: Hanako.Shishido@coyotes.usd.edu (H. Shishido).

0306-4603/$ – see front matter © 2012 Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.addbeh.2012.12.014

Among several constructs of impulsivity, negative urgency and positive urgency are specific types of impulsivity that increase the risks of alcohol misuse and alcohol-related problems (Cyders, Flory, Rainer, & Smith, 2009; Cyders & Smith, 2008; Verdejo-García, Bechara, Recknor, & Pérez-García, 2007). Negative urgency is a tendency to act recklessly in response to negative affect, and positive urgency is a tendency to act rashly in response to positive emotion (Cyders & Smith, 2008).

As both impulsivity and alexithymia research emphasize the necessity of using reflective and sophisticated cognitive processes in order to better regulate emotions and behaviors (Carlson, 2007; Cyders & Smith, 2008; Lane & Schwartz, 1987; Lieberman, 2007), it is plausible that these constructs relate to each other when predicting increased alcohol use and problems. In addition, alexithymia (Bagby, Taylor, & Parker, 1994; De Gucht, Fischler, & Heiser, 2004) and urgency have both been related to neuroticism (Carver, 2005; Whiteside & Lynam, 2001), a personality trait marked by emotional instability (John & Gross, 2007). Thus, it is plausible that alexithymia and impulsivity are related under a higher order structure, namely neuroticism, and thus they robustly predict behaviors associated with emotion dysregulation, including alcohol use and problems.

The current study tested whether positive urgency and negative urgency mediate associations between alexithymia and alcohol use and problems. These hypotheses are based on research findings showing that deficits in cognitive processing of emotion-related information underlie both alexithymia and impulsivity (Lane & Schwartz, 1987; Lieberman, 2007; Metcalfe & Mischel, 1999; Taylor et al., 1997). Hence, urgency was hypothesized to mediate the associations between alexithymia and alcohol use and problems. Alternatively, alexithymia and urgency could have synergistic effects whereby the lack of cognitive representation of emotional experiences combined with the tendency to act rashly when emotionally aroused may be increasing the risks of increased alcohol use and consequences. Thus, we tested interactions between alexithymia and urgency predicting alcohol use and problems, increasing the strength of the associations (i.e., potential conditional indirect effects).

2. Method

2.1. Participants

The sample included 429 undergraduate students between the ages of 18 and 25 ($M = 19.92$, $SD = 1.45$) who reported drinking at least once in the past 90 days. The sample was 31% male and 69% female. Approximately 2% of the sample identified their ethnicity as Hispanic or Latino. The sample was predominantly White (95.1%) and 1.4% were Black or African American, 0.9% were Asian, 0.7% were Native American or Alaskan Native, and 1.4% were Multiracial.

2.2. Measures

2.2.1. Alexithymia

Alexithymia was assessed by 20-item Toronto Alexithymia Scale (TAS-20; Bagby, Parker, & Taylor, 1994). The total score was used in this study. Internal consistency in the current sample was $\alpha = .85$.

2.2.2. Negative urgency and positive urgency

Negative urgency and positive urgency were measured by the revised UPPS-P Impulsive Behavior Scale (UPPS-P; Lynam, Smith, Whiteside, & Cyders, 2006). Reliability coefficients for the current sample was $\alpha = .88$ for negative urgency and $\alpha = .93$ for positive urgency.

2.2.3. The modified daily drinking questionnaire (DDQ-M)

Alcohol consumption in the past 3 months was measured by the DDQ-M (Dimeff, Baer, Kivlahan, & Marlatt, 1999). Total drinks per week were calculated for each participant.

2.2.4. The young adult alcohol consequences questionnaire (YAACQ)

Alcohol-related problems were measured by the YAACQ (Read, Kahler, Strong, & Colder, 2006). The total score was used for the analyses of this study, $\alpha = .95$.

2.3. Procedure

Participants were recruited through an online research participation program at a state university, and course credits were given for their participation. All questionnaires were completed online. Participants provided informed consent for participation, and their responses were kept anonymous. All procedures were approved by the university IRB.

3. Results

3.1. Descriptive statistics and bivariate correlations

Descriptive statistics and the correlation matrix are presented in Table 1. Alexithymia exhibited moderate positive associations with both negative urgency and positive urgency. Alexithymia was moderately associated with alcohol-related problems but was not associated with alcohol consumption. Both positive urgency and negative urgency were associated with alcohol use and problems as expected.

3.2. Path analysis

The initial path model was tested by using Mplus (Muthén & Muthén, 2010). The interaction terms between alexithymia and positive urgency as well as between alexithymia and negative urgency predicting consumption and alcohol problems, and the corresponding main effect for alexithymia were included. We covaried the interaction terms with the respective residuals of the mediator (Preacher, Rucker, & Hayes, 2007). Only the alexithymia by positive urgency predicting alcohol problems was significant. Hence, we re-estimated the model just retaining the interaction between alexithymia and positive urgency and alexithymia main effect predicting problems. The final model fit the data well with χ^2 (5, $N = 429$) = 7.81, $p = .167$, CFI = .996, RMSEA = .036, and SRMR = .018 (See Fig. 1).

The indirect effects were calculated using bias corrected bootstrapped confidence intervals. The results indicated a significant indirect effect from alexithymia to alcohol consumption via positive urgency ($\beta = .08$, $p = .006$), and an indirect effect from alexithymia to problems via negative urgency ($\beta = .10$, $p = .001$). In addition, there was a significant indirect effect from alexithymia to positive urgency to consumption to problems ($\beta = .04$, $p = .007$).

The significant alexithymia by positive urgency interaction predicting problems resulted in a conditional indirect effect whereby at high levels of alexithymia (i.e., 1 *SD* above the mean), there was a significant indirect effect from alexithymia to alcohol problems via positive urgency ($b = .06$, 95% CI [0.02, 0.11]). At the mean and low (i.e., 1 *SD* below the mean) levels of alexithymia, the indirect pathway from alexithymia to positive urgency to problems was not significant ($b = .03$, 95% CI [−0.01, 0.07], and $b = -.01$, 95% CI [−0.06, 0.04], respectively).

Men reported consuming more alcohol than women ($\beta = .48$, $p < .001$), but did not differ in alcohol-related problems ($\beta = -.12$, $p = .217$). Men reported higher levels of positive urgency ($\beta = .48$, $p < .001$) but not negative urgency ($\beta = -.03$, $p = .749$).

4. Discussion

This study investigated associations between alexithymia, impulsivity, alcohol use, and alcohol-related problems among college students. Overall, the hypotheses were supported. Distinct paths from alexithymia to alcohol variables through negative urgency and positive urgency emerged. Findings are discussed below.