The relationship between subjective social class and aggression: A serial mediation model

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A B S T R A C T

Although the relationship between the phenomena of social class and aggression is well known, very few studies have been conducted to investigate its underlying mechanisms. This study examines the relationship between subjective social class (SSC) and aggression, proposing a serial mediation model for the relationship. A total of 305 valid participants, ranging in age from 17 to 26, completed questionnaires assessing SSC, perceived social support, sense of control, negative affect, and aggression. Serial mediation analysis revealed a pathway whereby lower SSC was associated with less perceived social support, which was associated with decreased sense of control and increased negative affect, which were then associated with more aggression. Our results shed light on the associations between the above-mentioned variables in the SSC–aggression relationship. We also suggest possible prevention and intervention programs for reducing aggression among individuals with low SSC and suggest courses for future inquiry.

1. Introduction

Aggression is a major contemporary social problem and may be seen as a destructive means of modern conflict. It is also a complex phenomenon, typically said to be made up by biological, environmental, psychological, and social factors (Anderson & Bushman, 2002). Social class is considered a powerful social factor, and low social class has been associated with increased levels of aggression, for example, low-income (McFarlin, Fals-Stewart, Major, & Justice, 2001) and low-education groups (Barefoot et al., 1991) were found to be relatively more aggressive than high-income and high-education groups. People's subjective perceptions of their social class can also predict aggression. One study found that participants perceiving their social class as relatively lower behaved more aggressively relative to those who perceived theirs as relatively higher (Greitemeyer & Sagioglou, 2016). Despite the existing evidence, further empirical work is needed to explore the underlying mechanisms of the relationship between social class and aggression. The current study thus investigated whether perceived social support, sense of control, and negative affect mediate this relationship.

Social class, which in academia is often used interchangeably with socioeconomic status (Côté, 2011), is a multifaceted construct comprising an individual's material resources as well as his or her perceived rank within the social hierarchy (Kraus, Piff, & Keltner, 2009). Researchers often assess the construct as objective social class (OSC) or

subjective social class (SSC); typical measures of the former include income, education, and profession (Goodman et al., 2001), while the latter emphasizes individuals' perceived rank relative to others in society (Kraus et al., 2009). SSC can be seen as a comparative perception of, for example, material and social resources, i.e., individuals' sense of what they have or possess relative to others. Several studies have demonstrated that SSC is positively and moderately correlated with OSC (Adler, Epel, Castellazzo, & Ickovics, 2000; Johnson & Krueger, 2006), and that it is a relatively better predictor of psychological outcome than OSC (Adler et al., 2000; Kraus et al., 2009). In the present study, we thus assess social class subjectively and mainly focus on mechanisms pertaining to the relation between SSC and aggression.

According to the cognitive neoassociation model (CNA model; Berkowitz, 1990), aversive events that lead to negative affect can lead to aggression. Given their limited resources and lower social rank, lower class individuals are more likely to experience threats (Nelson, 2009), to be characterized by chronic levels of cynical mistrust and hostility (Gallo & Matthews, 2003), and to feel more socially rejected (Johnson, Richeson, & Finkel, 2011) than higher class individuals. Therefore, they are at risk of suffering chronically from exposure to aversive events, which, in turn, may foster negative affect and hence increase the risk of behaving aggressively. The CNA model thus plausibly explains class differences in aggression. However, the question remains how aversive events influence or bring about the subsequent

experiences of negative affect. In the present study, we investigate the potential roles of perceived social support and sense of control in this process.

Social support, thought to mitigate the effects of stressful life events on mental health (Cohen & Wills, 1985), may to some extent depend on social class. Previous studies have demonstrated that male students from lower income countries report a lack of social support (Peltzer, Pengpid, & James, 2016), and that social class positively predicts social support (Wangberg et al., 2008). Hence, relatively lower class individuals are more likely to perceive lower levels of social support.

This absence of social support, however, is often furthermore associated with a decreased sense of control (Ell, Mantell, Hamovitch, & Nishimoto, 1989; Ruthig, Haynes, Stupnisky, & Perry, 2009). Sense of control is a concept that refers to peoples' beliefs about the extent to which they are able to shape their own social outcomes (Lachman & Weaver, 1998). It is further seen as a fundamental social need of humans (Williams, 2007), and a perceived lack of control is associated with increased experiences of negative affect. Studies have shown that people, when they perceive a lack of control, feel upset or unhappy (Baumeister, 2005), and that lower levels of control correlate with higher levels of anxiety (Ong, Bergeman, & Bisconti, 2005).

Previous studies have thus demonstrated that differences in aggression appear to be contingent on experiences of negative or aggression-related affect (Greitemeyer & Sagioglou, 2016; Smith, Pettigrew, Pippin, & Bialosiewicz, 2012), and the CNA model also suggests that negative affect rather than aversive events should serve as the proximate mechanism for eliciting aggression (Berkowitz, 1990). Hence, we hypothesize that living with low SSC may decrease levels of perceived social support and subsequently sense of control, resulting in more experiences of negative affect; this, in turn, may lead to the final aggression.

Guided by the CNA model and previous results, the present study aimed to elucidate potential mechanisms underlying the relationship between SSC and aggression, proposing a serial mediation model for this relationship (see Fig. 1). We expand previous research by providing a comprehensive test of the serial process of how SSC influences aggression through negative affect. We also sought to provide several prevention and intervention methods that may help reduce aggression and maintain social stability.

2. Methods

2.1. Participants and procedure

The participants were 305 college students (248 females and 57 males) from a university in southwest China, aged 17–26 (*M* = 20.59, *SD* = 1.99). They were recruited via QQ (a famous chat tool in China), and participated voluntarily. Participants first gave written informed consent, after which they completed an anonymous questionnaire in about 10 min in a laboratory room. Subsequent to completion, students were compensated with a small gift (approximately 1.50 USD).

2.2. Measures

2.2.1. Subjective social class (SSC)

The MacArthur Scale of subjective socioeconomic status (Adler et al., 2000) was used to measure SSC. The measure consists of a drawing of a ladder with 10 rungs representing people with different levels of income, education, and occupational status. Each rung of the ladder was given a number between 1 and 10. Participants were told: "At the top of the ladder are the people who are the best off – those who

have the most money, the most education, and the most respected jobs. At the bottom the people who are the worst off – who have the least money, the least education, and the least respected jobs or no jobs". Then they were instructed to select a number representing their perception of their family's placement on this 10-point social scale, with higher numbers indicating higher perceived social class. This measure is widely used and has demonstrated adequate test-retest reliability (Operario, Adler, & Williams, 2004). We used family information instead of participants' own information as college students typically are not financially independent and their status thus based on their upbringing (Henry, 2009).

2.2.2. Perceived social support

The Chinese version of Perceived Social Support Scale (Jiang, 1999; Zimet, Dahlem, Zimet, & Farley, 1988) was used to measure participants' perceived social support. It consists 12 items designed to assess three sources of support: significant other (leaders, relatives, and colleagues), family, and friends. The examples of significant other were changed into "teachers, relatives, and classmates" which were more suitable for our sample (Yan & Zheng, 2006). Each subscale consists of four items that are answered on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). In this study, Cronbach's α for the subscales and the whole scale was 0.81, 0.82, 0.88, and 0.91.

2.2.3. Sense of control

The Chinese version of Sense of Control Scale (Lachman & Weaver, 1998; Li, 2012) was used to assess participants' sense of control. This scale includes the two subscales: personal mastery and perceived constraints. The items are rated on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). The perceived constraints scale is reverse scored. In this study, Cronbach's α for the subscales and the whole scale was 0.70, 0.79, and 0.80.

2.2.4. Negative affect

The Negative Affect Scale was selected from a subscale of the Chinese version Positive and Negative Affect Scale (Qiu, Zheng, & Wang, 2008; Watson, Clark, & Tellegen, 1988) to assess participants' negative affect. This scale consists of nine adjectives describing negative emotions (e.g., anger, nervous), which are rated on a 5-point Likert scale (1 = very slightly or not at all, 5 = extremely) based on how one has felt during the past week. In this study, Cronbach's α for the scale was 0.85.

2.2.5. Aggression

The Chinese version of Aggression Questionnaire (Bao, 2009; Buss & Perry, 1992) was used to assess participants' aggression. It consists of the four subscales: physical aggression, verbal aggression, anger, and hostility. The items are answered on a 5-point Likert scale (1 = definitely doesn't apply to me, 5 = definitely applies to me). In this study, Cronbach's α for the subscales and the whole scale was 0.77, 0.49, 0.79, 0.70, and 0.87.

2.3. Analysis strategy

According to Anderson and Gerbing's (1988) suggestion, we adopted the two-step strategy for analysis of mediation effects. First, in order to assess the extent to which each of the latent variables was represented by its indicators, the measurement model was confirmed using confirmatory factor analysis (CFA). Second, structural equation modeling (SEM) analysis was performed to measure the fit and path coefficients of the hypothesized structural model. Furthermore, bias-

Fig. 1. Hypothesized model
Note: SSC = subjective social class, PSS = perceived social support, SOC = sense of control, NA = negative affect.