Global, contingent and implicit self-esteem and psychopathological symptoms in adolescents

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ABSTRACT

Previous research with adolescents has demonstrated that global self-esteem is related to various types of psychopathology including depression, anxiety and eating problems. In the last decade, other components of self-esteem have been identified, namely contingent and implicit self-esteem. Contingent and implicit self-esteem have not yet been extensively studied among adolescents. Furthermore, the unique and interactive effects of the different components of self-esteem on adolescent mental health have not yet been investigated. Therefore, the present study examined relationships between global, contingent and implicit self-esteem, on the one hand, and psychopathological symptoms, on the other, in a sample of non-clinical adolescents ($N = 264$). Participants completed a survey and a computerized implicit association test. The results demonstrated unique and interactive effects of global and contingent self-esteem on symptoms of depression, anxiety and eating problems in adolescents. Implicit self-esteem was not found to be related to psychopathological symptoms in adolescents. Theoretical and practical implications of these findings are discussed.

1. Introduction

Adolescence is a vulnerable period for the development of mental health problems. In fact, the prevalence of psychiatric disorders in adolescence is relatively high. Costello, Mustillo, Erkanli, Keeler, and Angold (2003) examined the prevalence of psychiatric disorders in young people aged 9–16 and found that the average three-month prevalence of any disorder was 13%. Also, they found that, by age 16, 31% of the girls and 42% of the boys had met the diagnostic criteria for at least one psychiatric disorder. Further, some disorders, such as social anxiety and depression, were clearly found to increase during adolescence (Costello et al., 2003). In a similar vein, a Dutch study among adolescents demonstrated a six-month prevalence rate for any mental disorder of 22% (Verhulst, Van der Ende, Ferdinand, & Kasius, 1997), with the most common disorders being anxiety, mood and disruptive behaviour disorders.

One important individual difference variable that is closely related to psychopathology is self-esteem. Self-esteem can be defined as the overall evaluation of one's worth or value as a person (Harter, 2003). Negative and unstable self-evaluations are key components of diagnostic criteria for many mental disorders

(O'Brien, Bartoletti, & Leitzel, 2006). Studies have convincingly shown that low self-esteem is related to internalising types of child and adolescent psychopathology, including anxiety (Muris, Meesters, & Fijen, 2003), depression (Harter, 1993) and eating problems (Stice, 2002). The relationship between self-esteem and externalising problems such as aggression, antisocial behaviour and delinquency is less clear and subject to debate. Some authors have argued that externalising problems are associated with high self-esteem (Baumeister, Smart, & Boden, 1996), whereas others have found these problems to be linked to low levels of self-esteem (Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005). Research on the relationship between self-esteem and substance abuse is also inconclusive, with some researchers reporting that adolescents with low self-esteem are more likely to engage in drug or alcohol abuse (Carvajal, Clair, Nash, & Evans, 1998), while others have observed no relationship between self-esteem and substance abuse (Kokkevi, Richardson, Florescu, Kuzman, & Stergar, 2007).

For a long time, research on self-esteem in adolescents has focused predominantly on global self-esteem, an explicit self-esteem measure. However, in the past decade, other important aspects of self-esteem, such as contingent and implicit self-esteem, have been identified. Contingent self-esteem is a fragile component of self-esteem and refers to the extent to which self-esteem is contingent upon outcomes and achievements (Kernis, 2002). People with high contingent self-esteem are preoccupied with their performance

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and the evaluations of others. Their levels of self-esteem fluctuate depending on their experiences of failure or success. Thus, these people continuously have to be successful in order to feel good about themselves (Crocker & Wolfe, 2001).

Research has established relationships between contingent self-esteem and a number of factors, including academic and financial problems, interpersonal style and attachment style (Crocker & Luhtanen, 2003; Park, Crocker, & Mickelson, 2004; Zeigler-Hill, 2006). Contingent self-esteem has also been found to be associated with appearance-related comparisons. In a study conducted with undergraduate students, such comparisons were found to be more distressing for females who scored higher on contingent self-esteem and lower on self-perceptions of attractiveness (Patrick, Neighbors, & Knee, 2004). Additionally, a positive relationship between contingent self-esteem and the frequency of alcohol use and alcohol-related problems has been demonstrated. College students with high levels of contingent self-esteem were found to be more likely to drink in order to gain social approval or avoid social rejection (Neighbors, Larimer, Geisner, & Knee, 2004). Further, contingent self-esteem has been linked to depression in both adults (Sargent, Crocker, & Luhtanen, 2006) and adolescents (Burwell & Shirk, 2006): Those with higher levels of contingent self-esteem have generally been found to report more depressive symptoms. To date, however, it remains unclear if contingent self-esteem is also related to other forms of psychopathology, such as anxiety and eating problems.

Another self-esteem component that has been identified in the past ten years is implicit self-esteem, which can be regarded as the result of automatic self-evaluative processes (Dijksterhuis, 2006; Greenwald & Banaji, 1995). Implicit and explicit self-esteem are generally weakly correlated, which suggests that they reflect independent processes (Hoffman, Gawronski, Geschwendner, Le, & Schmitt, 2005; Krizan & Suls, 2008). Implicit self-esteem has been found to be related to lower levels of aspiration after failure and also appears to be a good predictor of anxiety during a personal interview (Dijksterhuis, 2006). Research on the relationship between implicit self-esteem and psychopathology in adults has yielded a mixed pattern of results. For example, low and high socially anxious persons report similar high levels of implicit self-esteem (de Jong, 2002). In other studies, high levels of implicit self-esteem were associated with current depressive symptoms (De Raedt, Schacht, Franck, & De Houwer, 2006) and future depressive symptomatology (Franck, De Raedt, & De Houwer, 2007). In yet another study, people with high levels of explicit self-esteem and low levels of implicit self-esteem reported relatively high levels of defensiveness and narcissism (Dijksterhuis, 2006). With respect to the relationship between implicit self-esteem and mental health in children and adolescents, very little research has been conducted. One recent study, however, found that children with high levels of explicit self-esteem and low levels of implicit self-esteem were relatively more aggressive than others (Sandstrom & Jordan, 2008). Another recent study found no relationship between implicit self-esteem and psychological problems in children (Huijding, Bos, & Muris, in press).

Evidently, not only global but also contingent and implicit self-esteem appear to be important aspects of self-esteem that may guide people's behaviour and influence mental well-being. To date, research on contingent and implicit self-esteem in adolescents is limited. Furthermore, the unique and interactive effects of global, contingent and implicit self-esteem on adolescent mental health have not yet been investigated. With this in mind, the present study endeavoured to examine how different aspects of self-esteem in adolescents are related to symptoms of depression and anxiety as well as eating problems, disruptive behaviour and substance abuse.

2. Method

2.1. Participants

In total, 264 adolescents (112 boys and 152 girls) were recruited from a pre-vocational secondary school in the Netherlands. This is a lower level of secondary education that is attended by almost 50% of Dutch adolescents. All adolescents in the first three years of this pre-vocational secondary school were allowed to participate and there were no other inclusion criteria. Written informed consent was obtained from both adolescents and their parents. Participants were from Dutch (76%), Moroccan (4%), Surinamese (4%), Turkish (3%) or other (13%) descent. The mean age of the participants was 13.92 years (SD = .90). The boys in the sample were slightly older (M = 14.08) than the girls (M = 13.80), $F(1, 261) = 5.26$, $p < .05$.

2.2. Measures

The *Rosenberg Self-Esteem Scale* (RSES; Rosenberg, 1965) consists of 10 items that assess global feelings of self-worth. Scores range from 1 to 4, with higher scores indicative of higher global self-esteem. This scale is a widely used, reliable and valid measure of global self-esteem (Butler & Gasson, 2005). In this study, Cronbach's alpha was .85.

The *Self-Worth Contingency Questionnaire* (SWCQ; Burwell & Shirk, 2003) is a 32-item scale that measures the degree to which adolescents' self-esteem is linked to contingent feedback across four domains, namely social acceptance and approval, academic performance, activity performance (e.g., sports, music, theatre) and physical appearance. Scores range from 1 to 6, with higher scores reflecting higher contingent self-esteem. Scores are summed within each domain and then averaged across domains (Burwell & Shirk, 2006). The SWCQ has demonstrated good reliability and validity (Burwell & Shirk, 2003). In the present study, Cronbach's alpha was .78.

The *Implicit Association Test* (IAT; Greenwald & Farnham, 2000) is a computer task that measures implicit self-esteem. In this study, the IAT was adapted for the use with adolescents in accordance with the procedure described by Field and Lawson (2003). The self-esteem IAT requires children to assign words to categories of self versus other and positive versus negative using two response keys. In accordance with the standard IAT design (Greenwald, McGhee, & Schwarz, 1998), the task consists of two critical sets of trials, namely the compatible block and the incompatible block. In the compatible block, children are asked to use one key to categorize self (e.g., self, me, my) and positive words (e.g., nice, good, smart) and the other key to categorize other (e.g., other, they, them) and negative words (e.g., stupid, dumb, bad). In the incompatible block, children are instructed to use one key to categorize self and negative words and the other key to categorize other and positive words. The expectation is that participants perform better when the two concepts that share a response key are somehow associated in memory than when they are not. As such, implicit self-esteem is computed as the difference in performance between the compatible and incompatible blocks (see for details Greenwald, Nosek, & Banaji, 2003). The entire IAT procedure consisted of seven phases: (1) practice categorizing *self* and *other* words (10 trials); (2) practice categorizing *positive* and *negative* words (10 trials); (3) practice the *compatible* categorization of all words (20 trials); (4) critical *compatible* categorization of all words (40 trials); (5) practice of reversed key assignments for the *self* and *other* words (30 trials); (6) practice the *incompatible* categorization of all words (20 trials); (7) critical *incompatible* categorization of all words (40 trials). Words were categorized by pressing the "E" or