Is self-worth related to affective social competence with positive

emotions in children diagnosed with Oppositional Defiant Disorder?

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ABSTRACT

Self-worth is a global self-evaluation of one's value as a person (Harter & Whitsell, 2003). Self-worth in children may be influenced by affective social competence (ASC), which involves abilities to effectively express, identify, and manage emotions when interacting with others (Halberstadt, Denham, & Dunsmore, 2001). Children diagnosed with Oppositional Defiant Disorder (ODD) are likely to have poorer social competence (Burns et al., 2009). ODD is a commonly diagnosed, disruptive behavior disorder in children that involves symptoms of excessive argumentativeness, defiance, and anger (Loney & Lima, 2003; Pfiffner, McBurnett, Rathouz, & Judice, 2005). Children with ODD often report a lower sense of self-worth than non-diagnosed peers. Because experiencing positive emotions may be linked with emotional buffering from stressors and may bolster positive characteristics in individuals (Fredrickson, 2003), I studied components of ASC in regard to positive emotions in children with ODD. With 86 parent-child dyads, children's ability to recognize, encourage, and express emotions was studied alongside parents' reports of children's emotion regulation in relation to children's reports of perceived self-worth. Components of ASC were expected to be positively associated with children's perceptions of self-worth. However, results did not support these expectations. Discussion focuses on methods and future research.

Dedication

I want to dedicate this thesis to my family, whose unconditional love and support have helped shape me to be the person I am today; to every individual over the years who has lent a helping hand and an inspiring word to push me along; and to my friends, who have always given me a great excuse to enjoy good food, regardless of how much work I should be doing instead.

I also want to dedicate this thesis to Ryan Clark and Morgan Harrington; two incredible individuals who touched my life and are missed dearly.

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Introduction and Background

Oppositional Defiant Disorder (ODD) is a commonly diagnosed disruptive behavior

disorder in children that often involves conduct problems inside and outside of the home

(Pfiffner, McBurnett, Rathouz, & Judice, 2005). In recent years, lifetime prevalence rates for

ODD have been observed around 8.5% in children aged 6 years to 17 years, with ODD rates

generally being highest in children between the ages of 5 and 10 years and then declining

(Kessler et al., 2005; Maughan, Rowe, Messer, Goodman, & Meltzer., 2004). Rather than

occasional outbursts resulting from intermittent frustration or negative events, persistent acts of

aggression that disrupt interactions with peers and family members are common problems for

children with ODD. According to the DSM-IV (1994), Oppositional Defiant Disorder involves

eight behavioral characteristics, including excessive argumentativeness and aggression. In

addition, children diagnosed with ODD often display excessive stubbornness, resistance to

directions, and an unwillingness to compromise or negotiate (DSM-IV-TR, American Psychiatric

Association Staff, APA 2000). This behavioral condition can lead to difficulties in children's

abilities to communicate using emotion-based messages, establish and maintain friendships with

peers, and succeed in domains that require extensive cooperation with others (Salmon, Dadds,

Allen, & Hawes, 2009).

Positive psychology is a recent psychological perspective that considers how positive

characteristics (i.e., life satisfaction and self-concept) may relate to positive subjective

experiences (i.e., personal happiness and maintaining relationships) (Peterson, 2006). This

perspective complements previous literature across forms of psychological study, by observing

many of the same associations between phenomena from a different vantage point. Approaches in positive psychology have shown support for improved physiological (Fredrickson & Levenson, 1998), affective (Diener, Oishi, & Lucas, 2003), and social (Biswas-Diener & Diener, 2001) outcomes for individuals, by focusing on the characteristics that bolster one's current status rather than the deficits holding one back from obtaining an ideal goal. This approach may also be beneficial when considering clinical concerns, such as in addressing and treating ODD. It may be possible to use a positive psychology approach to focus on how the resources individuals currently possess may lead to beneficial outcomes alongside approaches to treat current deficits in areas such as social competence that may be hindering the individual.

In previous research, the study of ODD has generally focused on negative outcomes in social, academic, and adaptive domains (Burke, Loeber, & Birmaher, 2002). In the current study I will attempt to consider the outcomes of interest using a positive psychology perspective. By focusing on positive characteristics and subjective experiences, a different viewpoint is offered on this topic that may contribute further to understanding the benefits of emotional skills in children diagnosed with ODD. Thus, in this study I consider relations between self-worth and socio-emotional skills in regard to positive emotions in children diagnosed with ODD.

In the following sections I first review previous literature on the development of self-worth in typically-developing children. Next, I describe research on socio-emotional skills in typically-developing children. Then, I review the characteristic presentation of ODD, and discuss how children diagnosed with ODD may experience differences in the development of self-worth and socio-emotional skills compared to typically-developing peers. I then discuss the approaches and goals of the perspective of positive psychology. I conclude by presenting a study

that addressed relations between self-worth and socio-emotional competence in children

diagnosed with oppositional defiant disorder from a positive psychology perspective.

Self-Worth

Early in life, (i.e., around nine months of age), children show the beginnings of a sense of

self in that they can both visually recognize themselves distinguish their reflections from others'

(Damon & Hart, 1982). This early development of self-recognition requires the infant to

understand and distinguish physical features and behaviors. Gradually, children develop the

ability to visually recognize the self around 15 months of age and construct a perception of the

self as a stable object in toddlerhood (Damon & Hart, 1982). As youth progress through early

childhood, they begin to develop a sense of self that is initially restricted to physical, tangible

features, and steadily becomes more abstract with age (Damon & Hart, 1982). These early

developments in self-perception and self-understanding gradually develop into increasingly

complex, domain-specific (e.g., physical, academic, etc.) self-perceptions toward the end of early

childhood (kindergarten and first grade; Damon & Hart, 1982; Eccles Wigfield, Harold, &

Blumfield, 1993; Measelle, Ablow, Cowan, & Cowan, 1998). As children develop their self-

perceptions become increasingly complex and abstract, with domain-specific concepts reflecting

their global self-views (Festinger, 1954; Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002;

Pelham & Swann, 1989). *Self-concept* is defined as one's perception of him/herself in different

domains, such as social, academic, and affective domains, and is thus a multidimensional

construct (Bracken, 1992; Bracken, Bunch, Keith, & Keith, 2000; Harter, 1999; Marsh, Craven,

& Debus, 1991; Shavelson, Hubner, & Stanton, 1976). In this study I focus on *self-worth*, which

is defined as how much one values oneself as a person (Harter & Whitesell, 2003). Self-worth is

believed to be influenced through both self-perceptions and beliefs regarding others' perceptions

toward the individual (Harter, Waters, & Whitesell, 1998). As individuals mature, perceptions of domain-specific self-concept and global self-worth are believed to become increasingly complex and differentiated, as a result of new experiences and relationships (Harter, 1983).

Demographic differences in self-worth. Effects of age, gender, and race or majority/minority status have been considered as sources of variance in self-worth. Initial expectations regarding these demographic factors have not been found to consistently account for significant variation in self-worth. Rather, demographic variables may be distal influences whereas more proximal influences seem to account for greater variation in self-worth (Crain, 1996). For example, evidence suggests there is not a solely age-based "storm and stress" period as children enter adolescence that significantly influences perceptions of self-worth (Hattie, 1992). However, changes that may accompany age or be related to pubertal development may have an influence on perceptions of self-worth. Youth who encounter weight gain along with puberty or enter puberty well before or after peers generally have lower perceptions of global self-worth (O'Dea & Abraham, 1999). Additionally, individuals' transitions into new roles and settings are associated with lowering of perceived self-worth (Crockett, Petersen, Graber, & Schulenberg, 1989; Wigfield, Eccles, MacIver, Reuman, & Midgley, 1991). An example would be children's transitions into middle school, which may be associated with lower self-worth in the first year that gradually recovers over the years until youth then transition again into high school. Changes in social comparison and feedback over time may also influence differences in self-worth that may additionally be linked to age differences (Salley, Vannatta, & Gerhardt, 2010).

Gender differences in self-worth have been thought to favor boys. However, meta-analyses show mixed results in early and middle childhood (boys > girls: Kling, Hyde, Showers

& Buswell, 1999; no difference: Major, Barr, Zubek & Babey, 1999). Gender differences in self-worth favoring boys are greatest in adolescence but still small to moderate in effect size. This effect decreases after adolescence and remains consistent and small throughout adulthood (Kling, Hyde, Showers, & Buswell, 1999). For this study, the measure of self-worth yielded t-scores that controlled for age and sex, so further consideration in analyses was unnecessary.

Similarly, despite initial hypotheses that self-worth would be hindered by minority status, racial and ethnic differences in self-worth have not been consistently supported (Crain & Bracken, 1994; Porter & Washington, 1979). Indeed, meta-analytic studies show small advantages for African-American compared with European-American children beginning in early adolescence that increase through adolescence and into adulthood (Gray-Little & Hafdahl, 2000; Twenge & Crocker, 2002). These differences are greater for female than male samples (Twenge & Crocker, 2002). American Indian, Asian-American, and Hispanic children and adolescents report lower self-worth compared with both African-American and European-American children and adolescents (Twenge & Crocker, 2002). Thus, self-worth does not seem consistently to be hindered by minority status. This may indicate stronger influences from other individual characteristics. For example, across African-American, Asian-American, European-American, Latino and biracial adolescents, stronger ethnic identity is associated with better self-worth (Bracey, Bámaca, & Umaña-Taylor, 2004). Personal skills, such as children's motivation and success in engaging with the environment, may be more critical in how they perceive themselves than group affiliation based on salient physical characteristics (Markus & Wurf, 1987). This further highlights the importance of examining associations of affective social competence with self-worth. Nonetheless, for the current study, I planned to test race differences in self-worth by comparing group-level differences between participants of differing racial

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groups, and then to covary race if necessary. However, the current sample did not include enough racial diversity to make this feasible.

Self-worth and outcomes for youth. Because self-worth is a global self-evaluation, it may be important in shaping how children consider themselves in many different areas, such as academic, affective, and social domains, as well as in the context of specific relationships and situations (Harter, Waters, & Whitesell, 1998). Self-worth is also believed to involve a motivational component that drives individuals to succeed and bolsters their domain-specific self-conceptions (Crocker & Wolfe, 2001; Marsh, 1990).

Empirical studies consistently demonstrate associations between self-worth and socio-emotional outcomes in middle childhood and early adolescence (Covington, 1984; Lyubomirsky, Sousa, & Dickerhoof, 2006; Sanchez & Crocker, 2005). Children with lower self-worth show poorer emotion management and regulation in social situations (Politino & Smith, 1989). Children who have difficulty maintaining relationships with peers also report lower self-worth (de Bruyn & van den Boom, 2005; Connolly, 1989). Higher perceptions of self-worth are associated with more efficient use of emotion regulation toward goals in social and academic domains (Koenig, Howard, Offer, & Cremerius, 1984). Furthermore, those with lower perceptions of self-worth are sensitive to self-focused emotional difficulties (i.e., guilt and shame) than those with higher perceptions (Brown & Dutton, 1995).

Alternatively, children who have difficulty in managing and expressing emotions may have lowered perceptions of self-worth. Difficulties in social interactions and emotion regulation may lower general self-worth, and children who feel low self-worth may then consider themselves to be less competent and valued across domains (Marsh, 1990; Measelle, Ablow, Cowan, & Cowan, 1998). Internalizing and externalizing symptoms, which both involve

difficulties with emotion-based skills, are negatively associated with children's self-worth

(McGrath, 2002). In sum, there is good reason to expect an association between self-worth and

other aspects of socio-emotional development, such as social and emotional skills. I turn to this

next.

Affective Social Competence

Social competence in children is believed to involve children's interactions with social

cues or stimuli in their surrounding environment, their ability to process the information from

these social cues, and their skill in selecting and successfully executing an appropriate response

of either approval or disdain based on social norms (Dodge, Pettit, McClaskey, & Brown, 1986;

Pelham & Swann, 1989). In brief, social competence involves effectiveness in interacting with

others, and has been evaluated by considering status among peers, social skills, and functional

outcome goals (Rose-Krasner, 1997). Children who have difficulty in correctly recognizing cues

or who fail to execute a contextually-appropriate response to the stimuli are expected to be at

greater risk for maladaptive outcomes (Dodge et al., 1986). However, children who are able to

adapt to familiar and novel social situations and exhibit skill in social competence are believed to

be better able to achieve social goals through cooperation and relationship maintenance (Parker

& Asher, 1993). Emotions are considered an important aspect of communication between the

individual and components of the environment (Barrett & Campos, 1987) and as such play a key

role in social competence. A variety of researchers have focused on three types of emotion-

related skills as central in children's development of social competence: sending emotional

messages (expressing emotions), receiving others' emotional signals (understanding emotions)

and managing the experience of emotion (emotion regulation) (Cicchetti, Ganiban, & Barnett,

1991; Cole, Michel, & Teti, 2008; Crick & Dodge, 1994; Dodge & Coie, 1987; Eisenberg &

Fabes, 1992; Saarni, 1999). This triad of skills has been called *affective social competence* (ASC; Halberstadt, Denham, & Dunsmore, 2001). ASC is defined as effective communication of one's emotions and affect alongside awareness, acceptance, and management of one's emotions (Halberstadt, Denham, & Dunsmore, 2001).

Demographic differences in social competence. As with self-worth, effects of age and gender have been considered as sources of variance in social competence. Research suggests that social competence is more important for adjustment for older adolescents (e.g., 13-16 years of age) than for preadolescents (e.g., 10-12 years of age) (Burhmester, 1990). Gender differences in social competence have also been found, both in regard to level of social competence (favoring girls, e.g., better emotion regulation and lower aggression; Crick & Dodge, 1994; Garner, Dunsmore, & Southam-Gerrow, 2008) and to associations of particular skills with social competence. Parker and Asher (1993) found that boys' friendships relied less on intimate exchange and emotion validation than did those of girls. Furthermore, girls who display greater skills managing emotional experiences and recognizing emotional messages are more likely to have reciprocal friends, whereas boys who display greater skill in managing emotional experiences have lower peer status (Dunsmore, Garner, Casey, & Bhullar, 2008). These findings demonstrate the importance of accounting for age and sex effects in associations of social competence with self-worth. I note again, however, that use of t-scores for self-worth makes consideration of age and sex effects moot.

Outcomes of social competence. Social competence is associated with other positive socio-emotional outcomes. For example, children who display effective social skills are more successful in making lasting and positive relationships with peers and are accepted more easily by peers (Parker & Asher, 1993). Children who are deemed popular by their peers (well-

renowned and not disliked) are more likely to use more prosocial behaviors, be sociable, and be less aggressive toward others (Newcomb, Bukowski, & Pattee, 1993). Associations with specific aspects of affective social competence are discussed below.

Emotional expression. Emotion displays are believed to have interpersonal implications that reveal the current internal state of the sender as well as the sender's intentions (Knutson, 1996). Regarding children's ability to express emotional needs and messages to peers, accuracy in sending emotion messages has been found to relate with perceptions of trustworthiness in peers and children's ability to navigate complex social interactions (Boone & Buck, 2003; Buck, 1984; Dawes, McTavish, & Shaklee, 1977; Kurzban, 2001). As emotion messages are a form of communication that are directed toward social goals, success in relaying messages is dependent not only on the accuracy of the message but also on the appropriateness of the valence and intensity displayed (Buck, Baron, Goodman, & Shapiro, 1980; Halberstadt, Denham, & Dunsmore, 2001; Saarni, 1999). Typically, expression of positive affect is more likely to be responded to with approval, whereas expression of negative affect is more likely to be responded to with disapproval (Sommers, 1984). These responses are context-dependent and receive favor or disfavor according to social norms and expectations in the child's community (Greenberg et al., 1993). Children's normative emotional responses may be more likely to be encouraged and promote their sense of self-worth, as well as facilitate additional opportunities for healthy social interaction and social skill development.

Emotion recognition. Children's ability to properly receive emotion messages has also been positively related to peer ratings of popularity and academic success (Boyatzis & Satyaprasad, 1994; Denham, McKinley, Couchoud, & Holt, 1990). Understanding emotions and the social expectations they are associated with has been tied to children's successes across

emotional and social domains. Children displaying greater emotion intelligence have been found

to engage in socially encouraged behavior, such as empathy (Ciarrochi, Chan, & Caputi, 2000)

and to use more prosocial behavior when interacting with peers (Rubin, 1999). These children

also have fewer social conflicts when interacting with others (Eisenberg et al., 1995; Jordan &

Troth, 2004). Greater efficacy regarding emotion knowledge may be beneficial in understanding

emotional contexts and messages, as well as interacting in socially-acceptable ways, therefore

bolstering youths' emotion relaying and interpretation skills.

Emotion regulation. Children's ability to regulate emotional experiences and their

sensitivity to emotion-inducing events are also believed to be important for their affective and

social development. Emotion regulation is thought to be a dynamic process that may occur

deliberately or unintentionally and may involve changes in the magnitude, duration, and latency

of emotional experiences and associated physiological responses (Thompson, 1990). Emotion

regulation applies toward positive and negative emotions and may involve either increasing or

decreasing the experience of particular emotions, depending on the situation's context (Gross,

2006). Children who have difficulty regulating their emotional experiences show greater

impulsivity and anger use (Eisenberg et al., 2001). Indeed, individuals who experience decreases

in emotion regulation show increases in arguing, aggression, and irritability (i.e., Davidson,

Putnam, & Larson, 2000; Silver & Yodofsky, 1987). Conversely, success in regulating emotions

is positively associated with popularity (Schultz et al., 2004) and the ability to establish and

maintain relationships (Lopes et al., 2004). Children with better self-regulation skills may be

more accommodating to peers and may be less likely to engage in relationship-destructive

activities, which could be beneficial in social domains (Rustbult, Verette, Whitney, Slovik, &

Lipkus, 1991).

Emotion lability. The ability to regulate emotions may be related to valence focus or

lability, which represents one's sensitivity to affective environmental cues (Pietromonaco &

Barrett, 2009). Children who have a higher sensitivity or valence focus to interactions with

others and the environment are more likely to experience intense emotional and physiological

responses to different situations (Barrett, 1998; Pietromonaco & Barrett, 2009). Children with a

higher valence focus respond emotionally to a greater number of cues, using either positive or

negative emotions (Barrett, 2006). Youth who respond with greater sensitivity to emotional cues

are more likely to be overwhelmed with emotions and respond with antisocial behavior, such as

aggression (van Goozen et al., 1998). Emotion lability is often associated with difficulties in

interpersonal interaction and performance in school for children. Eisenberg and colleagues

(1995) found that children who were reported as displaying more emotion lability were more

likely to be reported as being less skilled in coping with stressful events and more likely to

engage in more antisocial behaviors in the school setting. Silk, Steinberg, and Morris (2003)

found that youth who reported experiencing more intense emotional episodes and greater

emotion lability were also more likely to report depressive symptoms and problem behaviors

involving lying, arguing, theft, and truancy. Emotion lability may be particularly associated with

children's social competence, as children who exhibit emotion lability are more likely to

misperceive the emotional messages of others (Dodge, 1986) and respond to emotional situations

in contextually-inappropriate manners, such as aggression (Bierman, 2004; Dodge, 2003; Hanish

et al., 2004).

Social competence and self-worth. Children who report more positive self valuations

have been found to have greater social acceptance and status among peers and display more

positive self-esteem (Verschueren, Marcoen, & Schoefs, 1996). However, poor social-emotional

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skills may hamper perceptions of self-worth (Pelham & Swann, 1989). Children seek social

relationships as a means of attaining their ideal self, and poor social competence may hinder their

achievements of that ideal self (Ladd, 1990; Markus & Wurf, 1987). For individuals who

struggle with successfully communicating with others, such attempts may become frustrating

over time. They may develop the belief that their emotions are undervalued by others, which

may lead to lower self-worth (Crocker & Knight, 2005; Crocker & Park, 2004). Children

experiencing these difficulties may attempt to then limit their exposure to social situations, to

avoid future failed attempts at interactions. Youth who have difficulty in obtaining or

maintaining friendships may also experience drawbacks in school adjustment over time (Ladd,

1990) and a poorer sense of social self-worth and belonging has been associated with lower

motivation and achievement in the classroom (Osterman, 2000). These outcomes may be more

likely for individuals who have poorer social competence, such as children who have not had

ample opportunities to model appropriate emotional displays, have not received significant

reinforcement for appropriate emotion communication, or who exhibit obstructive antisocial

behaviors. These may all be seen in children with Oppositional Defiant Disorder (ODD).

Oppositional Defiant Disorder

ODD is diagnosed for individuals under the age of 18 years who exhibit at least four of

the following symptoms consistently: lose temper; argue with adults; defy rules; annoy others;

blame others for own mistakes; are easily annoyed; are angry and resentful; are spiteful

(American Psychiatric Association, 2000). Both overt (i.e., arguing and physical aggression) and

covert (i.e., relational manipulation and deception) expressions of disruptive behavior are

commonly exhibited; generally these behaviors are triggered through direct confrontation with

other individuals (Crick, Bigbee, & Howes, 1996; Frick et al., 1993; Loney & Lina, 2003; Quay,

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1965; Waschbusch et al., 2002). There remains a lack of consensus on the incidence rates of

ODD in youth, with previous literature considering disruptive behaviors in school-age samples

having found incidence rates of ODD to be as high 30% (August, Realmuto, MacDonald,

Nugent, & Crosby, 1996).

   Demographic differences in ODD. Symptoms characteristic of ODD often appear

gradually, with an increasing number likely to become prevalent with age (Kelley, Loeber,

Keenan, & DeLamatre, 1997; Loeber, Keenan, & Zhang, 1997). ODD may also manifest

differently according to gender. Studies have generally shown ODD to be more prevalent in

boys than girls, with male-to-female prevalence rates of ODD found to be 1.5:1 to 10:1 across

studies (Rey, 1993). ODD is also highly likely to be comorbid with other externalizing

symptoms such as ADHD and anxiety disorders and is often found to co-occur with or precede

the development of more severe Conduct Disorders (Ollendick, Jarrett, Grills-Taquechel, Hovey,

& Wolff, 2008). Boys are often perceived as using more overt disruptive behaviors such as

bullying and property destruction, whereas girls are often perceived as using more covert

disruptive behaviors such as lying and relational manipulation (Björkqvist, Lagerspetz, &

Kaukiainen, 1992; Waschbusch, et al., 2002). Furthermore, boys are found to consistently

engage in more aggressive, antisocial behavior than girls, leading more boys to be diagnosed

with ODD, in particular for symptoms that involve physical harm (Wolff & Ollendick, 2010).

However, reports of gender differences in comorbidity are incomplete; some reports indicate that

boys are more likely to exhibit comorbidity with ADHD whereas others suggest that girls are

more likely to have higher rates of comorbidity with depression and anxiety (Maughan et al.,

2004).

Socio-emotional outcomes associated with ODD. Whereas typically-developing children often begin developing skills in emotion regulation, labeling, and communication by the age of three or four years, children who eventually exhibit oppositional behaviors are generally slower to develop social skills and are less likely to wholly master these skills (Dodge, 1993; Izard & Harris, 1995; Salmon, Dadds, Allen, & Hawes, 2009; Wong & Cornell, 1999). Children with ODD symptoms may rely on a restricted range of emotional responses with which they are familiar, such as aggressive responses (Richard & Dodge, 1982). For example, they express fewer facial expressions of emotions compared to asymptomatic peers and are more likely to display surprise and hostility to positive feedback (Casey, 1996).

Children diagnosed with ODD are also more likely to exhibit deficits in emotion knowledge (Burke, Loeber, & Birmaher, 2002). Children with ODD symptoms have poorer understanding of societal rules and expectations, and may not be able to adhere well to expected norms (Smetana, 1990). These youth are more likely to rely heavily on negative interpretations of emotional cues and experiences which do not conform to societal expectations, leading to perceptions by peers of having lower social skills (Hymel, Bowker, & Woody, 1993). These difficulties could hinder youths' attempts in social domains (i.e., forming and maintaining relationships, interpreting emotion messages and choosing contextually-appropriate emotion cues to relay), which could result in lower self-worth.

Concerns of self-worth for children with ODD. For children with clinical conditions, such as children with ODD, difficulties with self-worth may occur primarily or secondarily. Primary problems arise when a diminished sense of self-worth precedes difficulties in other domains and thus lack of self-worth may lead to problems exacerbating ODD (i.e., lack of motivation to pursue successful social interaction). Secondary problems arise when difficulties

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associated with a clinical condition limits self-worth (i.e., social difficulties tied to aggression

use resultantly lower self-worth; Prout & Prout, 1996). Low self-worth is associated with

developmental pathways leading to clinical conditions, such as ODD, with improvements in self-

perceptions likewise being tied to more efficient improvements in addressing ODD symptoms

(American Psychiatric Association, 1994). Children with ODD are generally recognized for

misinterpreting situations as being more aggressive and antagonistic than is true (Crick & Dodge.

1996), and this problem may be exacerbated by (or may exacerbate) difficulties with low self-

worth (Burnt & Burgy, 1996).

Children who can effectively interpret and relay a wide range of emotion messages may

be more likely to have more positive, pleasant interactions with peers and better maintain

relationships, as well as achieve additional social goals. Furthermore, youth who can effectively

manage emotions throughout contexts may also be better able to adjust toward different social

goals as they arise, and may be more apt to respond to social feedback from others. These

outcomes could contribute to higher self-worth for children, as they view themselves as more

competent and valued when engaging with others and in managing their emotional experiences.

Whereas clinical approaches in addressing children's ODD symptoms have often relied heavily

on addressing children's deficits in particular social and emotional deficits (i.e., overreliance on

aggression and social stress-related misperceptions of negative emotions and situations; Burke,

Loeber, & Birmaher, 2002; Frick et al., 2003), there may be additional benefits of considering

personal strengths and positive characteristics in handling ODD symptoms.

Positive Psychology

A newer psychological perspective, positive psychology, emphasizes building positive

traits and characteristics with the goal of finding ways to improve aspects of individuals' lives in

areas such as subjective well-being (Diener, 2009). This approach could prove beneficial in improving outcomes for children diagnosed with ODD. In contrast to the focus of traditional approaches on relieving individuals from malady, positive psychology attempts to further bolster aspects of individuals' lives above levels of non-maladaptive functioning to higher, growth-promoting levels (Diener, 2009; Seligman, Steen, Park, & Peterson, 2005). Children's positive traits would then be focused on, looking toward their potential for positive subjective experiences for themselves and those around them (Peterson, 2006). Rather than solely focus on how children with ODD lack social skills and social competence, this approach considers how the skills they do have can build their potential to develop additional skills and positive characteristics.

This approach does not disregard or devalue unpleasant thoughts and emotions. Instead, these experiences are approached by considering the contexts in which they may ultimately benefit the individual. It is as beneficial for children to be able to efficiently and accurately communicate sadness, fear, and anger in a contextually-appropriate situation, as it is for them to communicate happiness in the appropriate context. Lacking the ability to experience and properly interpret negative emotions can be maladaptive, as one might not respond correctly to the threats and losses typically associated with negative emotions (Lyubomirsky, King, & Diener, 2005). Furthermore, Pennebaker and Seagal (1999) found that individuals who were able to narrate recent events using a moderate amount of negative emotion terms alongside positive emotion terms showed the most optimal outcomes in mental and physical health, compared to those who relied too heavily on either positive or negative emotions. Positive psychology also does not imply that all other fields of psychology are negatively-focused, but does recognize that there have been more observations from a deficit or neutral approach than

from a positive approach and attempts to offer a greater balance alongside those approaches (Gable & Haidt, 2005).

Implications of positive psychology Regarding ODD and self-worth. One positive psychology theory that may provide unique insight into the adaptive functioning of children with ODD is the broaden-and-build theory of positive emotions (Fredrickson, 2004). According to this theory, positive emotions such as joy and love have the capacity to broaden one's "momentary thought-action repertoire" in an immediate situation and build personal resources for future events (Fredrickson, 2004). In other words, positive events and emotions are beneficial in that they can help allow for more skills to be accessible in the moment, while also allowing for the developmental broadening of other useful actions for later events. For example, play between children may lead to increases in creativity and the adaptation of social etiquette in the moment. The skills developed during such pleasant interactions may also prove useful in future circumstances, as children can use creativity to fuel ideas for different activities and explore different social engagements with peers.

Positive emotions may also lessen some detrimental impacts of negative events, such as physiological and psychological stress (Fredrickson & Levenson, 1998). For example, those who experience positive emotions following a stressful event are more likely to recover faster and to a greater extent toward baseline levels of stress than those who do not experience positive emotions or are still exposed to negative emotions (Fredrickson, 2000; Fredrickson & Levenson, 1998). Because the experience of ODD is characterized by conflict with authority figures, including parents (Pfiffner, McBurnett, Rathouz, & Judice, 2005), and therefore by heightened negative emotions and stressful interactions, positive psychology theories such as broaden-and-build may have important implications for finding ways to better treat children diagnosed with

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ODD, to improve their self-evaluations and performance in social and affective domains, and to find additional means of avoiding aggressive conflicts and cope with stressful events. Children who engage in more communication of positive emotions—both sending and receiving—may elicit more communication of positive emotions from others and experience more positive emotional states, therefore broadening their range of emotional experiences and building their skill and comfort in detecting emotional experiences. The use of positive emotions such as interest and happiness may also be beneficial in children's development, by leading to increased engagement in activities such as information processing and social interaction (Izard, 1991). Youths' up-regulation of positive emotions may also be useful in coping with personal stress (Tugade & Fredrickson, 2007) and forming stronger interpersonal bonds and goals with others (Isen, 1987; Oatley & Jenkins, 1996).

Although children diagnosed with ODD are expected to use fewer opportunities to communicate positive emotions than typically developing peers, those who do use relatively more opportunities to communicate positive emotions would be expected to have relatively more positive outcomes. Furthermore, children with ODD who effectively incorporate positive emotions into their routine interactions with others may be buffered from detrimental effects of chronic, negative emotion experiences, because they may be better able to shift focus toward more contextually-appropriate positive emotions. These outcomes would also be expected for typically developing children who are able to effectively engage in the use and communication of positive emotions. Just as children whose emotional displays are often dismissed can receive buffering benefits from parental emotion coaching, children who can understand and properly direct positive emotions during frustrating events may be better able to handle difficult situations and recover from them more quickly (Austenfeld & Standton, 2004; Brown, Westbrook, &

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Challagalla, 2005; Lunkenheimer, Shields, & Cortina, 2007). Thus, skill in sending, receiving, and experiencing positive emotions may be instrumental in promoting adaptive behaviors and ultimately self-worth for children diagnosed with ODD.

The Current Study

In this study, families seeking treatment for their child with ODD participated as part of their initial assessment sessions for a larger treatment outcome study. To measure children's sending of positive emotions, children were observed during an emotion talk task involving the parent and the child, in which previous events were discussed that involved either emotionally positive, negative, or neutral events. To measure children's receiving of positive emotions, children also performed a computerized task in which facial cues of happiness, sadness, anger, or fear are randomly displayed and children are asked to identify the emotion expressed. Parents completed a questionnaire on their children's abilities to regulate positive emotions. Children completed a questionnaire assessing their self-worth.

Hypotheses

Positive characteristics in affective social competence may be related to better outcomes in children's self-worth.

- Because children's ability to send emotions is a component of affective social competence, I hypothesized that children who referred more often to positive emotions and used more opportunities to encourage their parent's references to positive emotions would be more likely to indicate higher self-worth.

- As an index of receiving emotions, I hypothesized that children who more accurately and more quickly identified expressions of happiness on the DANVA2 would be more likely to indicate higher self-worth.

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- Children's management of their emotional experiences is also a component of affective social competence and I hypothesized that children whose parents reported them as having greater positive emotion regulation would be more likely to have higher self-worth.

Method

Participants

Eighty-six mother-child dyads (55 boys, 31 girls) participated. Power analysis with this sample size of 86 dyads using the G*Power program (Faul, Erdfelder, Lang, & Buchner, 2010) showed sufficient power to find a medium effect size for 6 independent variables, $\beta = .73$. Participants were primary caregivers and children seeking assessment of children's ODD symptoms as part of a treatment outcome study. The targeted sample was children between the ages of 8 and 14 years who exhibited characteristics of Oppositional Defiant Disorder. Upon entry in the study, children were further evaluated by clinical professionals to determine if ODD was primarily exhibited. If ODD was not deemed to be prevalent or if another condition (i.e., Conduct Disorder; a more severe disruptive behavior disorder (DSM-IV-TR, American Psychiatric Association Staff, APA 2000)) was more prevalent, children were referred out of the study and offered other appropriate forms of treatment. A primary caregiver participated alongside the child. Only mothers participated in the emotion talk task (described below) in this sample. However, both caregivers were asked to complete the questionnaires described below, when possible. Participating dyads were targeted from communities in southwestern Virginia.

Demographics. The mean age of the children was 9.66 years (SD = 1.76 years). The mean age of the mothers was 38.66 years (SD = 6.73). A vast majority of mothers had completed high school (98.67%) and 31 mothers had at least graduated from college or trade

school (36%). Sixty-one of the participating children were of European-American decent (70.93%), eight were of African-American descent (9.3%), two were of Asian-American decent (2.33%), and three was of Hispanic descent (3.49%). The remaining twelve children were not identified for ethnicity (13.95%). A significant portion of the participating families involved family structures where both parents were married and together (48.84%), whereas in nine of the families there had been a divorce (10.47%), eight families were led by a single-parent mother (9.3%), six families involved a mother and stepfather (6.98%), and one family involved parent who were unmarried but resided together (1.16%). Most families had one or two additional siblings (Mean = 1.73, SD = 1.18). The average family income was $60,006 (SD = 40,486).

Materials

$\quad$ **Diagnostic Analysis of Nonverbal Accuracy 2** (DANVA2; Nowicki & Duke, 1994). The Diagnostic Analysis of Nonverbal Accuracy measure is an instrument designed to measure individual differences in the ability to receive emotions (Nowicki & Duke, 1994). The DANVA2 is a computerized task in which 24 photographs of boys and girls showing facial expressions exhibiting happiness, sadness, anger, or fear (six total expressions for each emotion) are displayed in random order. Half of the expressions for each emotion depict a low intensity of expression. The remaining expressions depict a high intensity of expression for the emotion. Six of these photos involve happiness cues. Previous literature has shown this measure to be valid with participants aged 3 to 80 years of age. Internal consistency is good, with Cronbach's alpha = .88, and 4-week test-retest reliability is .84 (Nowicki & Duke, 1994). Children's response time and accuracy in identifying the displayed emotion were recorded by the DANVA2 computer program. Children's responses were recorded as correct (1) or incorrect (0), allowing for a minimum score of 0 and a maximum score of 6 for accuracy in identifying positive

emotions. Average response time to the happy facial expressions was also examined. Children's false identification of happiness for expressions of anger, sadness, and fear were also noted. These instances of false identification are referred to as happiness bias. Happiness bias could have occurred with any of the other three emotions depicted. The denominator of the happiness bias score is the number of times children incorrectly identified facial expressions that were depicting anger, sadness, or fear. The numerator is the number of times that incorrect response was happiness. This allowed for a minimum score of 0 and a maximum score of 1 for misperceiving other emotions as happiness.

Beck Youth Inventories *(2nd Edition) for Children and Adolescents* (BYI; Beck, Beck, & Jolly, 2001). This questionnaire focuses on children's beliefs and behaviors. The subscale of interest was the *Beck Self-Concept Inventory for Youth* (BSCI-Y; 20 items, sample item "People think I'm good at things.") Although this scale is titled as being a measure of self-concept, the items included appear to involve more global self-perceptions. For this reason, it was determined that it was an appropriate measure of self-worth, as previously defined. Self-worth on this subscale is measured as a long-term trait, rather than as a short-term state. Children respond on a 4-point Likert-type scale, with the choice options 0 (Never), 1 (Sometimes), 2 (Often), and 3 (Always). The BSCI-Y was scored using continuous measures, rather than setting categorization for non-clinical, sub-clinical, and clinical scores. Past research with the BSCI-Y shows acceptable internal consistency, with Cronbach's alpha consistently being above 0.80 (Bose-Deakins & Floyd, 2004). A recent study by Thastum, Ravn, Sommer, and Trillingsgaard (2009) found Cronbach's alpha in the BSCI-Y to be 0.89 for girls and 0.87 for boys, using a total sample of 104 children. Thastum and colleagues' (2009) exploratory factor analysis in this study

showed that all 20 of the items in the BSCI-Y loaded above 0.31. The responses for this scale were t-scored to account for expected age and sex differences in responses.

        Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1997). The Emotion Regulation Checklist is a 24-item scale includes two subscales, emotion regulation (9 items) and lability/negativity (14 items). It is noted that one item does not load highly onto either of the original subscales. The ERC has been used in previous literature in conjunction with additional measures to address questions involving children's emotional experiences (Suveg, Payne, Thomassin, & Jacob, 2010) and the relations between children's emotional processes and externalizing behaviors (Batum & Yagmurlu, 2007; Martin, Boekamp, McConville, & Wheeler, 2010). Parents rate how often their child shows the behavior described in the item on a 4-point Likert-type scale, with the choice options 1 (Never), 2 (Sometimes), 3 (Often), and 4 (Almost always). Previous literature has shown acceptable internal consistency for the overall ERC (alpha = .83; Shields & Cicchetti, 1997).

        For this study, two new subscales were considered. These subscales were intended to assess parents' perceptions of (a) the child's ability to regulate positive emotions (4 items, sample item "Is overly exuberant when attempting to engage others in play") and (b) the child's warmth toward others (3-items, sample item "Responds positively to neutral or friendly overtures by peers"). The intended minimum alpha levels for internal consistency of these subscales was = 0.80. For fathers, these subscales indicated alphas of $\alpha = .15$ and $\alpha = .65$, respectively. For mothers, these subscales indicated alphas of $\alpha = .36$ and $\alpha = .59$, respectively. Therefore the original subscales of the measure were included instead. Reliabilities for these scales were reasonable. For fathers, reliability for the emotion regulation subscale was $\alpha = .72$

and for the emotion lability subscale was α = .78. For mothers, reliability for the emotion

regulation subscale was α = .56 and for the emotion lability subscale was α = .79.

       Parent-Child Emotion Talk Task. The primary caregiver and child engaged in a video-

recorded conversation about family memories. This interview was coded at a separate date by a

team of coders. Three questions were used to elicit emotion-based events from both the child

and his/her parent. The questions involved: a card designated to elicit positive responses,

"describe something fun you did last week with the other;" a card designed to elicit negative

responses, "describe a time in the last week when you were with the other person and got upset,

mad, sad, or scared;" and a neutrally-designed card was used that was not intended to draw a

particularly positive or negative response, "describe something you did last Sunday." The

positive emotion, negative emotion, and emotion neutral questions were supplied on stock cards

that were available throughout the interview. These questions could be addressed in any order

the dyad chose, and both the primary caregiver and the child were instructed to attempt to answer

each question and to feel free to discuss the other person's response just as they usually would at

home. The emotion talk task lasted approximately nine minutes. Participating dyads were

instructed to have each participant answer all three cards as best as possible, with any remaining

time used to go back to the card(s) of the dyad's choosing. For this study, only responses for the

positive emotion card were analyzed.

       Both mother and child discourse were coded; however, for this study, only child behavior

was analyzed. For each question, participants could make one of four types of responses:

Spontaneous = events that are elicited without assistance from the partner; Prompted = events

that are elicited with assistance from the partner; Avoided = card was recognized but no event is

elicited; Omitted = card was not recognized and no event is elicited. Furthermore, the answering

participant's reference to his or her own emotion was noted for positive and/or negative emotion: 0 = none, 1 = consistent/mild emotion, 2 = multiple/strong emotion. In addition, encouragement of emotions (by the responding partner) will be rated: 0 = no encouragement, 1 = recognition of event, 2 = recognition of the emotion, 3 = emotion coaching. Thus, coding yielded two variables of interest for the purposes of this study: (a) children's reference to positive emotion and (b) children's encouragement of their parent's positive emotion. At least 25% of all videotapes were coded for reliability by independent coders and reliability was maintained at ICC > 0.80 throughout the study. The coding scheme for the emotion talk task is depicted in Appendix A.

Procedure

As the parent and child entered the study session, they were taken to separate areas to complete different tasks and questionnaires. During this time, parents often completed the ERC and children completed the DANVA2, BSCI-Y, and BASC-2. Mother and child were then reunited and placed in an isolated room to complete the emotion talk task. There were instances in which parents were systematically asked to take questionnaires home to be completed and returned during the following sessions. This also occurred when time constraints prevented parents from completing all of the desired measures during the current session.

<div align="center">

Results

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Preliminary Analyses

The mean scores of each variable were noted for significant patterns. In general, children used very few instances to reference their own positive emotions when recalling events (average .28 references to positive emotions during task). Children were more likely to encourage facts and confirm emotions of mothers' events, but not every child took the opportunity to do so (average .63 instances of encouragement during task). Parents' reports on children's emotion

regulation and emotion lability were both above average. Fathers' average reports of children's

emotion regulation and lability were 2.83 and 2.37, respectively. Again, this is on a scale with

items ranging from 1 to 4. Mothers' average reports of children's emotion regulation and lability

were 2.92 and 2.44, respectively. With each parent, children were perceived as having greater

emotion regulation than emotion lability, and average responses were similar between fathers

and mothers. However, reports on the ERC were considerably different than previous mean-

level reports involving parents of typically-developing and clinically-at risk children. Emotion

regulation reports were lower than in previous samples (e.g., Gratz et al., 2009 and Graziano,

Reavis, Keane, & Calkins, 2007) and emotion lability reports were higher than in previous

samples (Shields & Cichetti, 1998). Children's average performance on the DANVA-2 was

fairly strong. Children tended to correctly identify expressions of happiness (mean = .79) and

did not often mistake other emotions for happiness (mean = .09). The time spent in responding

to emotion was approximately two seconds on average (mean = 2,368.88 milliseconds).

Children's reports of self-worth were averaged to be 47.41 with t-scoring, which is fairly close to

the calculated average of 50 for the population.

Variable distributions were examined to determine if a normal distribution was exhibited

by the sample. Initial frequency counts for children's responses to the fun card in the emotion

talk task were very low. Additionally, of the 86 dyads participating, 18 children and 19 parents

avoided or omitted responding to the fun card. This prevented any further information on

emotion references or responses from being collected. Thus, both raw and prorated responses to

all the cards in the emotion talk task were collected. Prorated responses divided children's

overall references to positive emotion and encouragement of positive emotion by the number of

events responded to during the entire emotion talk task. Both raw and prorated responses are

depicted in Table 1. Children's prorated scores for references to positive emotions were transformed, using base 10 logarithmic transformation, to lower the skewness and kurtosis. The transformed scores are also included in Table 1.

Two other variables showed excessive skewness and were transformed to normalize the distribution. The response time for detecting happiness cues was shown to have high skewness and kurtosis, which is a phenomenon previously encountered in reaction time scores (Ratcliff & Murdock, 1976). This was corrected by base 10 logarithmic transformation. Children's scoring of correct happiness responses also showed high skewness and kurtosis. This value was transformed using natural log transformation.   Because self-worth was t-scored, it was not transformed even though its distribution was skewed. Please see Table 1 for descriptive data for all study variables.

T-tests were used to determine if sex-based differences were present in the emotion talk task, parents' reports on the ERC, and children's performances on the DANVA-2. There was a significant sex difference in children's prorated scores for references to positive emotions ($t(83)$ = 4.17, p = .04). Girls used more references to positive emotion than boys. Correlations showed that older children referred to positive emotions less often than younger children ($r=-.23$, $p<.05$) and were reported by their mothers as having poorer emotion regulation ($r=-.27$, $p<.05$). I also note that t-scoring adjusts for age and sex effects and therefore age and sex were not controlled in analyses predicting self-worth. As mentioned earlier, there were not enough minority-race participants in the sample to attempt to account for race/ethnicity differences in analyses.

Hypothesis Testing

It was hypothesized that children who more accurately and quickly identify expressions of happiness, more often express and encourage positive emotions, and are reported as having

better emotion regulation will report higher self-worth. Correlations were calculated to establish bivariate associations between these aspects of affective social competence and self-worth.

Regression analyses were then used to determine the amount of variation accounted for in children's reports of self-worth by each component of affective social competence. The component of sending emotion messages consisted of children's references to positive emotions and encouragement of positive emotions. The component of receiving emotion messages consisted of accuracy scores and response times on the DANVA2. The component of emotion regulation consisted of ERC reports of emotion regulation and emotion lability by both mothers and fathers. Thus, two separate regressions were conducted, one including only mothers' ERC reports along with the sending and receiving variables ($N = 57$) and one including only fathers' ERC reports along with the sending and receiving variables ($N = 39$).

Correlations. Please see Table 2. Children who more often encouraged mothers' positive emotion displays were rated by fathers as having poor emotion regulation. Additionally, fathers' reports of emotion lability were likely to be similar to mothers' corresponding reports but were negatively associated with fathers' reports of emotion regulation. Children who showed happiness bias on the DANVA2 were reported by mothers to show more emotion lability and by fathers to show less emotion regulation.

Regressions. Regressions were used to test expected associations between components of affective social competence and children's reports of self-worth. Variables accounting for each component were simultaneously analyzed with outcomes of self-worth. Models included children's references to positive emotions and encouragement of positive emotions, parents' reports of child emotion regulation and emotion lability, and children's accuracy and speed in

detecting happiness cues. Models were run separately for fathers' and mothers' reports on the

ERC.

For the model including all components of ASC with fathers' reports on the ERC, the

model was not significant, $F(7,31) = .732$, $p = .646$, $R^2 = .14$. See Table 3. For the model

including all ASC components with mothers' reports on the ERC, the model was also not

significant, $F(7,49) = .93$, $p = .492$, $R^2 = .12$. See Table 4.

Discussion

Study Goals

This study aimed to consider associations between components of affective social

competence and perceptions of self-worth in youth diagnosed with Oppositional Defiant

Disorder. Specifically, I hypothesized that youth who used more expression of positive

emotions, more quickly and accurately identified positive emotions, and were rated as more

effectively regulating positive emotions would be more likely to report having higher perceptions

of self-worth. I also hypothesized that if a particular component of ASC would be more strongly

associated with reports of self-worth, it would be children's ability to express positive emotions.

Study Outcomes

The results were not supportive of the hypotheses. None of the variables of interest were

significantly correlated with reports of self-worth and the regression models did not significantly

predict self-worth. A number of explanations for the lack of expected results were considered.

Hypotheses may not have been supported simply because they were incorrect, hence not capable

of being supported. It is possible that for children with disruptive behavior disorders, such as

those with ODD, the use of positive emotions and ability to properly identify positive emotions

is not adequate to overcome detrimental overreliance on aggression that is characteristic of these

disorders. It may also be possible that the hypotheses would not have been supported in a

sample of typically-developing children, despite being drawn from the literature. In the next

section, however, I consider some of the study limitations that may have affected results.

Limitations of the Current Study

Measures. A number of possible limitations were considered regarding this study.

Although the outcome of interest in this study was children's global perceptions of self-worth,

the scale used was designed with more domain-specific self-concept in mind. The items in this

self-concept scale were considered to be very broad and thought to be better suited for self-

worth, so they were used for such. However that may not have been an appropriate approach for

this study. Furthermore, the behaviors of interest during this study, particularly those in the

emotion talk task and DANVA2, are very specific, fluctuating micro-behaviors, that may not be

well-associated with the broader, more stable construct of self-worth. In fact, measures of

domain specific social and emotional self-concepts may have been appropriate to supplement

with considerations of self-worth. While information was collected from parents and children in

this study, additional sources of information may have also been particularly beneficial. Data

collection from close friends and teachers may have further corroborated children's reports on

self-worth, or possibly provided another perspective for children's emotion regulation abilities,

particularly in the classroom.

Sample. The sample recruited into this study may present some limitations as well.

While children with ODD are typically expected to report considerable differences in self-worth

than non-diagnosed children, the standardized scores of children's reports do not indicate a

significant group-level difference from the mean. This may indicate that the sample was not as

representative of a typical ODD sample. Furthermore, there was no non-clinical comparison

group within this study. This makes determining how other children may respond on similar tasks more difficult. In particular, this particular emotion talk task has not been thoroughly used with typically developing children who may be more representative of the national population. Thus, it is difficult to determine if children with ODD were not particularly interested or capable of responding to the prompts or if other children may respond similarly in regards to frequency and magnitude of emotion references and encouragement. Furthermore, this sample involved families who were specifically seeking treatment for their children's ODD symptoms. This may indicate that families were in more dire straits to resolve children's behavioral difficulties, and that these children may have had more severe difficulty managing experiences and relationships in the home and school than other children exhibiting less severe ODD symptoms.

Context. The settings and tasks involved with this study may also pose limitations. The emotion talk task is a very structured interaction in which families are placed in a room, generally remaining sedentary, and facing each other (at times awkwardly) on either the same couch or neighboring furniture in the lab room. They then discuss events prompted on the provided cards while being knowingly recorded. This is certainly not how many families would be expected to interact at home and in other settings. Although care was taken to make this activity as comfortable as possible, there are limitations on how natural and comfortable a lab setting may be for families. In addition, this task was limited to mother and child participation in this sample. Children's interactions with fathers, as well as other important social figures such as peers was not addressed. Children may interact much differently between parents, friends, and other community members. In addition, the DANVA2 task, which involved static presentations of facial emotive cues, is not indicative of how children are typically exposed to emotion messages. The lack of context, facial movement, and verbal emotion cues may be a

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limitation in measuring how children accurately identify happiness in more dynamic interactions, which could be more closely associated to their self-perceptions of value, particularly in social and emotional domains.

Theory. Although there are concerns with particular facets of this study, including the design, procedure, and recruited sample, it is possible that the theory and hypotheses presented for this study are not acceptable and not capable of being supported. Though the theories of affective social competence (Halberstadt et al., 2001) and the broaden-and-build theory (Fredrickson, 2004) do appear to be well-substantiated, particularly for non-clinical samples, it is possible that the combination of these approaches or their consideration regarding children with disruptive behavior disorders extends beyond their applicability. It is also plausible that this study was approached in a way that did not adequately address the concepts of the theories or the stated hypotheses. The combination of previously mentioned limitations may have altered the constructs truly being considered, to the extent that they would not expect to have the same associations with outcomes such as self-worth. However, the constructs considered may also have been valid, but do not genuinely associate with self-worth either.

Strengths of the Current Study

Despite these limitations, this project involved a number of strengths that were beneficial in approaching the study. Beginning with recruiting practices, the Child Study Center, which handled recruiting and direct contact with families, made every reasonable effort to obtain a large and diverse sample. Families from all racial, socioeconomic (including family income and parents' education levels), and family structure backgrounds were sought for the study, which provided free treatment for their children exhibiting qualifying symptoms. A related strength is the focus on a clinical sample, which contributes to information regarding emotion-based social

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skills and self-worth for children and young adolescents, in general, and youth with ODD, specifically.

Furthermore, this project incorporated a number of different measures and sources of data, which is procedurally beneficial. This study involved child self-reports of self-worth, child behavioral performance for emotion recognition, naturalistic observations of child behaviors regarding emotions, and parents' reports of child emotion regulation skills. The variety of sources and approaches to data collection are helpful in limiting possible biases from a more limited number of sources or considerations. In particular, the procedural design and coding scheme of the emotion talk task was as naturalistic as possible and allowed for family individuality of response. Although the same emotion-eliciting cues were used for each family, family members chose their own responses to the cues and there was variability in how and whether children chose to respond and how engaged they were with their parents. This ecologically valid approach may be beneficial in further understanding associations between reports of children's social skills and competences, as perceived by the self and others, and children's behavioral trends when exposed to emotional contexts.

Implications

The results of this study do not lend support to considering alterations or additions to current clinical approaches in addressing socio-emotional behaviors in children with ODD. However, there is still reason to continue exploring the potential associations between components of affective social competence and children's outcomes in social and affective domains, to determine if bolstering children's skills in these areas can help buffer against negative outcomes associated with ODD symptoms and possibly help them build additional skills that could help them work beyond such symptoms. Approaches based on positive

psychology methodology require more work if they are to be used as complementary tools for clinicians to employ in treatment. For example, with children with ODD, a different positive psychology approach might consider whether the reluctance to obey authority and argumentativeness characteristic of ODD form strengths in some areas of life, perhaps by reinforcing skills in coping with threats or persistence in pursuing one's goals, that might be capitalized on to overcome the deficits also associated with those symptoms. Considering different positive skills and characteristics in clinical populations is likely to advance understanding of promising approaches for intervention and prevention.

Future Directions

In future work it may be advantageous to consider positive and negative emotions simultaneously. For children diagnosed with ODD, it is likely beneficial to not only understand and be able to manage positive emotions in context-appropriate situations, but to also manage and effectively utilize negative emotions. Whereas positive emotions may help to conform to social expectations and recover from stressful events, understanding one's own and others' negative emotion experiences, and how to not be overwhelmed by such experiences, may help to avoid less optimal socio-emotional outcomes. By considering children's competences across the entire spectrum of emotions, additional information might be considered from a positive psychology perspective, and might be more applicable to clinical and non-clinical child populations.

Further incorporating a systems approach in studying children's skills in affective social competence may also be beneficial. Understanding how receptive parents are toward children's emotions may further reveal factors associated with children's ASC and outcomes in areas such as self-worth. Children who are raised in households where contentious arguments and conflicts

are more prevalent than supportive family interactions, or who are not allowed an outlet to express and share negative emotions and experiences, even when contextually-appropriate, may have fewer opportunities to learn how to best manage emotion experiences and work toward a more secure sense of self.

Other systems to consider are schools and peers. Understanding children's perceptions of school and their abilities to succeed in the classroom, their relationships with teachers and peers, and the sense of belonging that they perceive in school and peer settings may influence self-worth through development of methods for interacting for others and motivation to engage with those in their environment.

Though the concurrent associations between ASC and self-worth were not significant in this sample, longitudinal associations should still be considered. Children's initial affective social competence skills may be related to children's improvement regarding ODD symptoms over time despite lack of concurrent associations. One overarching goal of the primary project from which this study is derived is to test treatment efficacy for children with ODD and help them to better understand and manage their emotional experiences and engage in healthier social interactions. To this end, it may be beneficial to study whether children who display greater affective social competence at baseline also experience relatively greater improvement in socio-emotional characteristics and behaviors, while again searching to see if a particular characteristic or skill is more strongly associated with optimal outcomes.

Furthermore, one area of interest that may be worth considering is the distinction between reactively-aggressive and proactively-aggressive children. In general, children diagnosed with ODD exhibit reactive aggressive patterns (and children with other emotional difficulties, such as more severe Conduct Disorder, typically display proactive aggressive patterns, Loeber et al.,

2000; Vitaro et al., 1998). However, there may be some children who display ODD symptoms yet do not suffer from social competence difficulties. It would be worth studying how these children may behave and perceive themselves differently, explore their motivations for behavior further, and compare their response to ODD treatment to more reactively aggressive children. Different patterns of ASC skills and self-worth may be related to different responses to treatments designed to reduce reliance on aggressive behavior patterns. For children with ODD already similar to typically-developing children at communicating, understanding, and regulating emotions, it may be better to shift focus from improving skills and work toward socially normative prosocial and moral behaviors.

Although these current approaches are currently directed toward clinical samples, such as children diagnosed with ODD, I believe that they could be similarly beneficial when applied to typically-developing samples as well. Focusing on strengths in socio-emotional skills may not only prove beneficial for those facing particular behavioral or emotional issues, but could also be a useful means of bolstering others' daily routines and well-being as well. By broadening their current skill sets regarding positive emotions, youth may have more opportunities to build resources and apply them to new situations that require adaptation or more in-depth skill (Fredrickson, 2004). As mentioned above, longitudinal work will be necessary to understand developmental pathways of ASC and self-worth.

Conclusion

Self-worth in children is an important global self-perception that likely influences children's more specific self-concepts on different domains (i.e., physical, social, academic, emotional). Self-worth may be influenced by children's affective social competence skills (Halberstadt, Denham, & Dunsmore, 2001), which involve children recognizing and properly

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interpreting emotion cues in a situation, regulating their emotion experience in concordance with the situation, and effectively relaying situation-appropriate emotions during the situation. ODD is an externalizing disorder that involves a number of mild, yet aggressive behavior patterns in childhood (DSM-IV-TR, American Psychiatric Association Staff, APA 2000). Children with ODD may have greater difficulty developing ASC skills, due to an overreliance on aggressive behaviors and anger use across situations. However, positive psychology perspectives, including the broaden and build perspective that positive emotion and skill use can ultimately build a broader repertoire of social skills, may provide additional approaches for addressing social interactions and skill use in children with ODD (Fredrickson, 2004). I was interested in considering the associations between components of ASC in regards to positive emotions and self-worth for children with ODD. This study recruited children diagnosed with ODD whose families were seeking intervention for their symptoms. It was expected that components of ASC, centered on positive emotions, would be associated with greater perceptions of self-worth.

Results of the current study do not support expected associations between components of affective social competence in regards to positive emotions and sense of self-worth in youth with oppositional defiant disorder. Given the correlational nature of the research design, longitudinal work will be needed to determine whether components of ASC are also unrelated to any change in the sense of self-worth over the course of treatment. Despite the absence of support for hypotheses, the use of a positive psychology approach in this study makes a novel contribution to the field. Positive psychology approaches may still be fruitful to use in future research examining trajectories of affective social competence in clinical and non-clinical populations. By focusing on children's characteristics as strengths, complementary approaches may be found that help children build skills to overcome detrimental symptoms, like those associated with

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ODD. Being increasingly mindful of environmental factors and other factors influencing

children's developmental pathways may also help to shape intervention approaches and find

additional means of building positive characteristics and reduce detrimental symptoms in

children.

References

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders: DSM-IV*. Washington, DC: American Psychiatric Association.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders: DSM-IV-TR*. Washington, DC: American Psychiatric Association.

Archer, J., Coyne, S. M. (2005). An integrated review of indirect, relational, and social aggression. *Personality and Social Psychology Review, 9*, 212-230. doi: 10.1207/s15327957pspr0903_2.

August, G. J., Realmuto, G. M., MacDonald, A. W., Nugent, S. M., Crosby, R. (1996). Prevalence of ADHD and comorbid disorders among elementary school children screened for disruptive behavior. *Journal of Abnormal Child Psychology, 24*, 571-595. doi: 10.1007/BF01670101.

Austenfeld, J. L., & Stanton, A. L. (2004). Coping through emotional approach: A new look at emotion, coping, and health-related outcomes. *Journal of Personality, 72*, 1335-1364. doi: 10.1111/j.1467-6494.2004.00299.x.

Barrett, L. F. (1998). Discrete emotions or dimensions? The role of valence focus and arousal focus. *Cognition and Emotion, 12*, 579-599. doi: 10.1080/026999398379574.

Barrett, L. F. (2006). Valence as a basic building block of emotional life. *Journal of Research in Personality, 40*, 35-55. doi: 10.1016/j.jrp.2005.08.006.

Barrett, K. C., & Campos, J. J. (1987). Perspectives on emotional development: II. A functionalist approach to emotions. In J. Osofsky (Ed.), *Handbook of infant development* (2nd ed.; pp. 555-578). New York: Wiley.

Batum, P., & Yagmurlu, B. (2007). What counts in externalizing behaviors? The contributions of emotion and behavior regulation. *Current Psychology, 25*(4), 272-294. doi: 2007-06257-004.

Beck, J., Beck, A., Beck & Jolly, J. Beck Youth Inventories of Emotional & Social Impairment manual, Psychological Corporation, San Antonio, TX (2001).

Berndt, T. J., & Burgy, L. (1996). Social self-concept. In B. A. Bruce (Ed.), *Handbook of self-concept: Developmental, social, and clinical considerations*, (pp. 171-209). Oxford, England: John Wiley & Sons.

Bierman, K. L. (2004). *Peer rejection: Developmental processes and intervention strategies*. New York: Guilford Press.

Björkqvist, K., Lagerspetz, K. M. J., & Kaukiainen, A. (1992). Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. *Aggressive Behavior, 18*, 117-127. doi: 10.1002/1098-2337(1992)18:2<117::AID-AB2480180205>3.0.CO;2-3.

Boone, R. T., Buck, R. (2003). Emotional expressivity and trustworthiness: The role of nonverbal behavior in the evolution of cooperation. *Journal of Nonverbal Behavior, 27*, 163-182. doi: 10.1023/A:1025341931128.

Bose-Deakins, J. E., & Floyd, R. G. (2004). A review of the Beck Youth Inventories of emotional and social impairment. *Journal of School Psychology, 42*, 333-340. doi: 10.1016/j.jsp.2004.06.002.

Boyatzis, C. J., & Satyaprasad, C. (1994). Children's facial and gestural decoding and encoding: Relations between skills and with popularity. *Journal of Nonverbal Behavior, 18*, 37-55. doi: 10.1007/BF02169078.

Bracey, J., Bamaca, M., & Umaña-Taylor, A. (2004). Examining ethinic identity and selfesteem among biracial and monoracial adolescents. *Journal of Youth and Adolescence, 33*, 121-132. doi: 10.1023/B:JOYO.0000013424.93635.68.

Bracken, B. (1992). Multidimensional Self Concept Scale. Austin, TX: PRO-ED.

Bracken, B. A., Bunch, S., Keith, T. Z., & Keith, P. B. (2000). Child and adolescent multidimensional self-concept: A five-instrument factor analysis. *Psychology in the schools, 37*, 483-493. doi: 10.1002/1520-6807(200011)37:6<483::AID-PITS1>3.0.CO;2-R.

Brown, J. D., & Dutton, K. A. (1995). The thrill of victory, the complexity of defeat: Self-esteem and people's emotional reactions to success and failure. *Journal of Personality and Social Psychology, 68*, 712-722. doi: 10.1037/0022-3514.68.4.712.

Brown, S. P., Westbrook, R. A., & Challagalla, G. (2005). Good cope, bad cope: adaptive and maladaptive coping strategies following a critical negative work event. *Journal of Applied Psychology, 90*, 792-798. doi: 10.1037/0021-9010.90.4.792.

de Bruyn, E. H., van den Boom, D. C. (2005). Interpersonal behavior, peer popularity, and self-esteem in early adolescence. *Social Development, 14*, 555-573. doi: 10.1111/j.1467-9507.2005.00317.x.

Buck, R. (1984). *The communication of emotion.* New York: Guilford Press.

Buck, R., Baron, R. M., Goodman, N., & Shapiro, B. (1980). Unitization of spontaneous nonverbal behavior in the study of emotion communication. *Journal of Personality and Social Psychology, 39*, 522-529. doi: 10.1037/0022-3514.39.3.522.

41

Buckley, M., & Saarni, C. (2009). Emotion regulation: Implications for positive youth development. In R. Gilman, E. S. Huebner & M. J. Furlong (Eds.), *Handbook of positive psychology in schools* (pp. 107-118). New York: Routledge.

Buhrmester, D. (1990). Intimacy of friendship, interpersonal competence, and adjustment during preadolescence and adolescence. *Child Development, 61*, 1101-1111. doi: 10.2307/1130878.

Burke, J. D., Loeber, R., & Birmaher, B. (2002). Oppositional defiant disorder and conduct disorder: A review of the past 10 years, part II. *Journal of American Academy of Child & Adolescent Psychiatry, 41* , 1275-1293. doi: 10.1097/00004583-200211000-00009.

Burns, G. L., Desmul, C., Walsh, J. A., Silpakit, C., & Ussahawanitchakit, P. (2009). A multitrait (ADHD-IN, ADHD-HI, ODD toward adults, academic and social competence) by multisource (mothers and fathers) evaluation of the invariance and convergent/discriminant validity of the child and adolescent disruptive behavior inventory with Thai adolescents. *Psychological Assessment, 21*, 635-641. doi: 10.1037/a0016953.

Casey, R. J. (1996). Emotional competence in children with externalizing and internalizing disorders. In: M. Lewis, & M. W. Sullivan (Eds.), *Emotional development in atypical children* (pp. 161-183). Mahwah, NJ: Lawrence Erlbaum Associates.

Ciarrochi, J. V., Chan, A. Y. C., & Caputi, P. (2000). A critical evaluation of the emotional intelligence construct. *Personality and Individual Differences, 28*, 539-561. doi: 10.1016/S0191-8869(99)00119-1.

Cicchetti, D., Ganiban, J., & Barnett, D. (1991). Contributions from the study of high-risk populations to understanding the development of emotion regulation. In J. Garber & K.

A. Dodge (Eds.), *The development of emotion regulation and dysregulation* (pp. 15-48). New York: Cambridge University Press.

Cole, P. M., Michel, M. K., & Teti, L. O. D. (2008). The development of emotion regulation and dysregulation: A clinical perspective. *Monographs of the Society for Research in Child Development, 59*, 73-102. doi: 10.2307/1166139.

Connolly, J. (1989). Social self-efficacy in adolescence: Relations with self-concept, social adjustment, and mental health. *Canadian Journal of Behavioral Science, 21*, 258-269. doi: 10.1037/h0079809.

Covington, M. V. (1984). The self-worth theory of achievement motivation: Findings and implications. *The Elementary School Journal, 85*, 4-20. doi: 10.1086/461388.

Covington, M. V. (2000). Goal theory, motivation, and school achievement: An integrated review. *Annual Review of Psychology, 51*, 171-200.

Crain, R. M. (1996). The influence of age, race, and gender on child and adolescent multidimensional self-concept. In B. A. Bracken (Ed.), *Handbook of self-concept: Developmental, social, and clinical considerations* (pp. 395-420). New York: John Wiley & Sons, Inc.

Crain, R. M., & Bracken, B. A. (1994). Age, race, and gender differences in child and adolescent self concept: Evidence from a behavioral-acquisition, context-dependent model. *School of Psychology Review, 23,* 496-511.

Crick, N. R., Bigbee, M. A., & Howes, C. (1996). Gender differences in children's normative beliefs about aggression: How do I hurt thee? Let me count the ways. *Child Development, 67*, 1003-1014. doi: 10.2307/1131876.

Crick, N. R., & Dodge, K. (1994). A review and reformulation of social-information-processing mechanisms in children's social adjustment. Psychological Bulletin, 115, 74-101. doi: 10.1037/0033-2909.115.1.74.

Crick, N. R., & Dodge, K. A. (1996). Social information-processing mechanisms in reactive and proactive aggression. *Child Development, 67*, 993-1002. doi: 10.2307/1131875.

Crocker, J., & Knight, K. M. (2005). Contingencies of self-worth. *Current Directions in Psychological Science, 14,* 200-203. doi: 10.1111/j.0963-7214.2005.00364.x.

Crocker, J., & Park, L. E. (2004). The costly pursuit of self-esteem. *Psychological Bulletin, 130,* 392-414.

Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review, 108*, 593-623. doi: 10.1037/0033-2909.130.3.392.

Crockett, L. J., Petersen, A. C., Graber, J. A., Schulenberg, J. E., & Ebata, A. (1989). School transitions and adjustment during early adolescence. *Journal of Early Adolescence, 9*, 181-210. doi: 10.1177/0272431689093002.

Damon, W., & Hart, D. (1982). The development of self-understanding from infancy through adolescence. *Child Development, 53*, 841-864. doi: 10.2307/1129122.

Davidson, R. J., Putnam, K. M., & Larson, C. L. (2000). Dysfunction in the neural circuitry of emotion regulation—A possible prelude to violence. *Science, 289*, 591-594. doi: 10.1126/science.289.5479.591.

Dawes, R. M., McTavish, J., & Shaklee, H. (1977). Behavior, communication, and assumptions about other people's behavior in commons dilemma situation. *Journal of Personality and Social Psychology, 35*, 1-11. doi: 10.1037/0022-3514.35.1.1.

Denham, S. A., McKinley, M., Couchoud, E. A., & Holt, R. (1990). Emotional and behavioral

    predictors of preschool peer ratings. *Child Development, 61*, 1145-1152. doi:

    10.2307/1130882.

Diener, E. (2009). Positive psychology: Past, present, and future. In S. J. Lopez & C. R. Snyder

    (Eds.), *Oxford Handbook of Positive Psychology* (2nd ed.; pp. 7-11). Oxford: Oxford

    University Press.

Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being:

    Emotional and cognitive evaluations of life. *Annual Review of Psychology, 54*, 402-425.

    doi: 10.1146/annurev.psych.54.101601.145056.

Dodge, K. A. (1986). Social competence in children. *Monographs of the Society for Research in

    Child Development, 51*, 1-85. doi: 10.2307/1165906.

Dodge, K. A. (1993). Social-cognitive mechanisms in the development of conduct disorder and

    depression. *Annual Review of Psychology, 44*, 559-584. doi:

    10.1146/annurev.ps.44.020193.003015.

Dodge, K. A. (2003). Do social information-processing patterns mediate aggressive behavior?

    In B. B. Lahey, T. E. Moffitt, & A. Caspi (Eds.), *Causes of conduct disorder and juvenile

    delinquency* (pp. 254-274). New York: Guilford Press.

Dodge, K., & Coie, J. D. (1987). Social-information-processing factors in reactive and proactive

    aggression in children's peer groups. *Journal of Personality and Social Psychology, 53*,

    1146-1158. doi: 10.1037/0022-3514.53.6.1146.

Dodge, K. A., Pettit, G. S., McClaskey, C. L., & Brown, M. M. (1986). Social competence in

    children. With commentary by John M. Gottman. *Monographs of the Society for

    Research in Child Development,51*(2, Serial No. 213). doi: 10.2307/1165906.

Dunsmore, J. C., Garner, P. W., Casey, E. C., & Bhullar, N. (2008). Gender-specific linkages of affective social competence with peer relations in preschool children. *Early Education and Development, 19*, 211-237.

Eccles, J., Wigfield, A., Harold, R. D., & Blumfeld, P. (1993). Age and gender differences in children's self- and task perceptions during elementary school. *Child Development, 64*, 830-847. doi: 10.2307/1131221.

Eisenberg, N., Cumberland, A., Spinrad, T. L., Fabes, A., Shepard, S. A., Reiser, M., Murphy, C., Losoya, S. H., & Guthrie, I. K. (2001). The relations of regulation and emotionality to children's externalizing and internalizing problem behavior. *Child Development, 72*, 1112-1134. doi: 10.1111/1467-8624.00337.

Eisenberg N., & Fabes, R. A. (1992). Emotion, self-regulation, and social competence. In M. Glark (Ed.), *Review of Personality and Social Psychology, Vol. 14. Emotion and social behavior* (pp. 119-150). Newbury Park, CA; Sage.

Eisenberg, N., Fabes, R. A., Murphy, B., Maszk, P., Smith, M., & Karbon, M. (1995). The role of emotionality and regulation in children's social functioning: A longitudinal study. *Child Development, 66*, 1360-1384. doi: 10.2307/1131652.

Fabes, R. A., Martin, C. L., & Hanish, L. D. (2009). Children's behaviors and interactions with peers. In K. H. Rubin, W. M. Bukowski & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 45-62). New York: The Guilford Press.

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2010). G*Power 3, from http://www.psycho.uni-duesseldorf.de/abteilungen/aap/gpower3/.

Festinger, L. (1954). Motivations leading to social behavior. In M. R. Jones (Ed.), *Nebraska symposium on motivation* (pp. 191-219). Lincoln, NE: University of Nebraska Press.

Fredrickson, B. L. (2000). Cultivating positive emotions to optimize health and well-being. *Prevention & Treatment, 3*, 577-606. doi: 10.1037/1522-3736.3.1.31a.

Fredrickson, B. L. (2003). The value of positive emotions. *American Scientist, 91*, 330-335.

Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *Philosophical Transactions: Biological Sciences, 359*, 1367-1377.

Fredrickson, B. L., & Levenson, R. W. (1998). Positive emotions speed recovery from the cardiovascular sequelae of negative emotions. *Cognition & Emotion, 12*, 191-220. doi: 10.1080/026999398379718.

Frick, P. J., Lahey, B. B., Loeber, R., Tannenbaum, L., Van Horn, Y., Christ, M. A. G., Hart, E. A., & Hanson, K. (1993). Oppositional defiant disorder and conduct disorder: a meta-analytic review of factor analyses and cross-validation in a clinic sample. *Clinical Psychology Review, 13,* 319-340. doi: 10.1016/0272-7358(93)90016-F.

Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development, 63*, 103-115. doi: 10.2307/1130905.

Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology, 9*, 103-110. doi: 10.1037/1089-2680.9.2.103.

Garner, P., Dunsmore, J., & Southam-Gerrow, M. (2008). Mother-child conversations about emotions: Linkages to child aggression and prosocial behavior. *Social Development, 17*, 259-277. doi: 10.1111/j.1467-9507.2007.00424.x.

Golbeck, S. (1998). Peer collaboration and children's representation of the horizontal surface of liquid. *Journal of Applied Developmental Psychology, 19*, 571-592. doi: 10.1016/S0193-3973(99)80056-2.

van Goozen, S. H. M., Matthys, W., Cohen-Kettenis, P. T., Gispen-de Wied, C., Wiegant, V. M., & van Engeland, H. (1998). Salivary cortisol and cardiovascular activity during stress in Oppositional-Defiant Disorder boys and normal controls. *Society of Biological Psychiatry,43,* 531-539. doi: 10.1016/S0006-3223(97)00253-9.

Gratz, K. L., Tull, M. T., Reynolds, E. K., Bagge, C. L., Latzman, R. D., Daughters, S. B., & Lejuez, C. W. (2009). Extending extant models of the pathogenesis of borderline personality disorder to childhood borderline personality symptoms: The roles of affective dysfunction, disinhibition, and self- and emotion-regulation deficits. *Development and Psychopathology, 21*, 1263-1291.

Gray-Little, B., & Hafdahl, A. R. (2000). Factors influencing racial comparisons of self-esteem: A quantitative review. *Psychological Bulletin, 126*, 26-54. doi: 10.1037/0033-2909.126.1.26.

Graziano, P. A., Reavis, R. D., Keane, S. P., & Calkins, S. D. (2007). The role of emotion regulation and children's early academic success. *Journal of School Psychology, 45*, 3-19. doi: 10.1016/j.jsp.2006.09.002.

Greenberg, J., Pyszczynski, T., Solomon, S., Pinel, E., Simon, L., Jordan, K. (1993). Effects of self esteem on vulnerability-denying defensive distortions: further evidence of an anxiety buffering function of self-esteem. *Journal of Experimental Social Psychology,* 29, 229–51. doi: 10.1006/jesp.1993.1010.

Gross, J. J., & Thompson, R. A. (2006). Emotion regulation: Conceptual foundations. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 3-24). New York: Guilford Press.

Halberstadt, A. G., Denham, S. A., & Dunsmore, J. C. (2001). Affective social competence. *Social Development, 10*, 79-119. doi: 10.1111/1467-9507.00150.

Hanish, L. D., Eisenberg, N., Fabes, R. A., Spinrad, T. L., Ryan, P., & Schmidt, S. (2004). The expression and regulation of negative emotions: Risk factors for young children's peer victimization. *Development and Psychopathology, 16,* 335-353.

Harter, S. (1983). Developmental perspectives on the self-system. In P. H. Mussen & E. M. Hetherington (Eds.), *Handbook of child psychology: Vol. 4. Socialization, personality and social development* (pp.275-385). New York: Wiley.

Harter, S. (1999). *The construction of the self.* New York: The Guilford Press.

Harter, S., Waters, P., & Whitesell, N. R. (1998). Relational self-worth: Differences in perceived worth as a person across interpersonal contexts among adolescents. *Child Development, 69*, 756-766. doi: 10.2307/1132202.

Harter, S., & Whitesell, N. R. (2003). Beyond the debate: Why some adolescents report stable self-worth over time and situation, whereas others report changes in self-worth. *Journal of Personality, 71*, 1027-1058. doi: 10.1111/1467-6494.7106006.

Hattie, J. B. (1992). Self-concept. Hillsdale, NJ: Erlbaum.

Hymel, S., Bowker, A., & Woody, E. (1993). Aggressive versus withdrawn unpopular children: Variations in peer and self-perceptions in multiple domains. *Child Development, 64*, 879-896. doi: 10.2307/1131224.

Isen, A. M. (1987). Positive affect, cognitive processes, and social behavior. *Advances in Experimental Social Psychology, 20*, 203-253. doi: 10.1016/S0065-2601(08)60415-3.

Izard, C. E. (1991). The psychology of emotions. New York: Plenum.

Izard, C., & Harris, P. (1995). Emotional development and developmental psychopathology. *Developmental psychopathology, 1*, 467–503.

Jacobs, J. E., Lanza, S., Osgood, D. W., Eccles, J. S., & Wigfield, A. (2002). Changes in

    children's self-competence and values: Gender and domain differences across grades one

    through twelve. *Child Development, 73,* 509-527. doi: 10.1111/1467-8624.00421.

Jordan, P. J., & Troth, A. C. (2004). Managing emotions during team problem solving:

    Emotional intelligence and conflict resolution. *Human Performance, 17*, 195-218. doi:

    10.1207/s15327043hup1702_4.

Kelley, B., Loeber, R., Keenan, K., & DeLamatre, M. (1997). Developmental pathways in boys.

    Washington, DC: Office of Juvenile Justice and Delinquency Prevention, US Department

    of Justice.

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., Walters, E. E. (2005).

    Lifetime prevalence and age of onset distributions of DSM-IV disorders in the national

    comorbidity survey replication. *Archives of General Psychiatry, 62*, 593-602. doi:

    10.1001/archpsyc.62.6.593.

Kling, K. C., Hyde, J. S., Showers, C. K., & Buswell, B. N. (1999). Gender differences in self-

    esteem: A meta-analysis. *Psychological Bulletin, 125*, 470-500. Doi: 10.1037/0033-

    2909.125.4.470.

Knutson, B. (1996). Facial expressions of emotion influence interpersonal trait inferences.

    Journal of Nonverbal Behavior, 20, 165-182. doi: 10.1007/BF02281954.

Koenig, L., Howard, K. I., Offer, D., & Cremerius, M. (1984). Psychopathology and adolescent

    self-image. *New Directions for Mental Health Services, 22,* 57-71. doi:

    10.1002/yd.23319842207.

Kurzban, R. (2001). The social psychophysics of cooperation: Nonverbal communication in a public goods game. *Journal of Nonverbal Behavior, 25,* 241-259. doi: 10.1023/A:1012563421824.

Ladd, G. W. (1990). Having friends, keeping friends, making friends, and being liked by peers in the classroom: Predictors of children's early school adjustment? *Child Development, 61*, 1081-1100. doi: 10.2307/1130877.

Loeber, R., Keenan, K., & Zhang, Q. (1997). Boys' experimentation and persistence in developmental pathways toward serious delinquency. *Journal of Child and Family Studies, 6*, 321-357. doi: 10.1023/A:1025004303603.

Loeber, R., Burke, J. D., Lahey, B. B., Winder, A., & Zera, M. (2000). Oppositional defiant and conduct disorder: A review of the past 10 years, Part I. *Journal of the American Academy of Child & Adolescent Psychiatry, 39*, 1467-1484. doi: 10.1097/00004583-200012000-00007.

Loney, B. R., & Lima, E. N. (2003). Classification and Assessment. In C. A. Essau (Ed.), *Conduct and oppositional defiant disorders: Epidemiology, risk factors, and treatment* (pp. 3-31). Mahwah: Lawrence Erlbaum Associates.

Lopes, P. N., Brackett, M. A., Nezlek, J. B., Schütz, A., Sellin, I., & Salovey, P. (2004). Emotional intelligence and social interaction. *Personality and Social Psychology Bulletin, 30,* 1018-1034. doi: 10.1177/0146167204264762.

Lunkenheimer, E. S., Shields, A. M., & Cortina, K. S. (2007). Parental emotion coaching and dismissing in family interaction. *Social Development, 16*, 233-248. doi: 10.1111/j.1467-9507.2007.00382.x.

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin, 131*, 803-855. Psychological Bulletin, Vol 131(6), Nov 2005, 803-855. doi: 10.1037/0033-2909.131.6.803.

Lyubomirsky, S., Sousa, L., & Dickerhoof, R. (2006). The costs and benefits of writing, talking, and thinking about life's triumphs and defeats. *Journal of personality and social psychology, 90*, 692-708. doi: 10.1037/0022-3514.90.4.692.

Major, B. B., Barr, L., Zubek, J., & Babey, S. H. (1999). Gender and self-esteem: A meta-analysis. In W. B. Swann J. H. Langlois, & L. A. Gilber (Eds.), *Sexism and stereotypes in modern society: The gender science of Janet Taylor Spence* (pp. 223-253). Washington, DC: American Psychological Association. doi: 10.1037/10277-009.

Markus, H., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology, 38*, 299-337. doi: 10.1146/annurev.ps.38.020187.001503.

Marsh, H. W. (1990). A multidimensional, hierarchical model of self-concept: Theoretical and empirical justification. *Educational Psychology Review, 2*, 77-172. doi: 10.1007/BF01322177.

Marsh, H. W., Barnes, J., Cairns, L., & Tildman, M. (1984). The Self-Description Questionnaire (SDQ): Age effects in the structure and level of self-concept for preadolescent children. *Journal of Educational Psychology, 75*, 940-956. doi: 10.1037/0022-0663.76.5.940.

Marsh, H. W., Craven, R. G., & Debus, R. (1991). Self-concepts of young children 5 to 8 years of age: Measurement and multidimensional structure. *Journal of Educational Psychology, 83,* 377-392. doi: 10.1037/0022-0663.83.3.377.

Marsh, H. W., Relich, J. D., & Smith, I. D. (1983). Self-concept: The construct validity of

    interpretations based upon the SDQ. *Journal of Personality and Social Psychology, 45*,

    173-187. doi: 10.1037/0022-3514.45.1.173.

Marsh, H. (1990). Causal ordering of academic self-concept and academic achievement: A

    multiwave, longitudinal panel analysis. *Journal of Educational Psychology, 82*, 646-656.

    doi: 10.1037/0022-0663.82.4.646.

Martin, S., Boekamp, J., McConville, D., & Wheeler, E. (2010). Anger and sadness perception in

    clinically referred preschoolers: Emotion processes and externalizing behavior

    symptoms. *Child Psychiatry and Human Development, 4*1, 30-46. doi: 10.1007/s10578-

    009-0153-x.

Maughan, B., Rowe, R., Messer, J., Goodman, R., & Meltzer, H. (2004). Conduct disorder and

    oppositional defiant disorder in a national sample: Developmental epidemiology.

    Journal of Child Psychology and Psychiatry, 45, 609-621. doi: 10.1111/j.1469-

    7610.2004.00250.x.

McGrath, E. P. (2002). A longitudinal study of children's depressive symptoms, self-perceptions,

    and cognitive distortions about the self. *Journal of Abnormal Psychology, 111*, 77-87.

    doi: 10.1037/0021-843X.111.1.77.

Measelle, J. R., Ablow, J. C., Cowan, P. A., & Cowan, C. P. (1998). Assessing young children's

    views of their academic, social, and emotional lives: An evaluation of the Self-

    Perception scales of the Berkeley Puppet Interview. *Child Development, 69*, 1556-1576.

    doi: 10.2307/1132132.

Newcomb, A. F., Bukowski, W. M., & Pattee, L. (1993). Children's peer relations: A meta-analytic review of popular, rejected, neglected, and controversial sociometric status. *Psychological Bulletin, 113*, 99-128. doi: 10.1037/0033-2909.113.1.99.

Nowicki, S. Jr., & Duke, M. (1994). Individual differences in the nonverbal communication of affect: The Diagnostic Analysis of Nonverbal Accuracy Scale. Special Issue: Development of nonverbal behavior: II. Social development and nonverbal behavior. *Journal of Non-verbal Behavior, 18*, 9-35. doi: 10.1007/BF02169077.

O'Dea, J. A., & Abraham, S. (1999). Association between self-concept and body weight, gender, and pubertal development among male and female adolescents. *Adolescence, 34*, 69-79.

Oatley, K., & Jenkins, J. M. (1996). *Understanding emotions.* Cambridge, MA: Blackwell.

Ollendick, T. H., Jarrett, M. A., Grills-Taquechel, A. E., Hovey, L. D., & Wolff, J. C. (2008). Comorbidity as a predictor and moderator of treatment outcome in youth with anxiety, affective attention deficit/hyperactivity disorder, and oppositional/conduct disorders. *Clinical Psychology Review, 28,* 1447-1471. doi: 10.1016/j.cpr.2008.09.003.

Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research, 70*, 323-367. doi: 10.2307/1170786.

Parker, J. G., & Asher, S. R. (1993). Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and social dissatisfaction. *Developmental Psychology, 29*, 611-621. doi: 10.1037/0012-1649.29.4.611.

Pelham, W. E., & Swann Jr., W. B. (1989). From self-conceptions to self-worth: On the sources and structure of global self-esteem. *Journal of Personality and Social Psychology, 57*, 672-680. doi: 10.1037/0022-3514.57.4.672.

Pennebaker, J. W., & Seagal, J. D. (1999). Forming a story: The health benefits of narrative. *Journal of Clinical Psychology, 55*, 1243-1254. doi: 10.1002/(SICI)1097-4679(199910)55:10<1243::AID-JCLP6>3.0.CO;2-N.

Peterson, C. (2006). *A primer in positive psychology*. Oxford: Oxford University Press.

Pfiffner, L. J., McBurnett, K., Rathouz, P. J., & Judice, S. (2005). Family correlates of oppositional and conduct disorders in children with attention deficit/hyperactivity disorder. *Journal of Abnormal Child Psychology, 33*, 551-563. doi: 10.1007/s10802-005-6737-4.

Pietromonaco, P. R., & Barrett, L. F. (2009). Valence focus and self-esteem lability: Reacting to hedonic cues in the social environment. *Emotion, 9*, 406-418.

Politino, V., & Smith, S. L. (1989). Attitude toward physical activity and self-concept of emotionally disturbed and normal children. *Adapted Physical Activity Quarterly, 6*, 371-378. doi: 10.1037/a0015691.

Porter, J. R., & Washington, R. E. (1979). Black identity and self-esteem: A review of studies of black self-concept, 1968-1978. In A. Inkeles, J. Coleman, & R. H. Turner (Eds), *Annual Review of Sociology, 5*,53-74. Palo Alto, CA: Annual Reviews.

Prout, H. T., & Prout, S. M. (1996). Global self-concept and its relationship to stressful life conditions. In B. A. Bracken (Ed.), *Handbook of Self-Concept* (pp. 259-286). New York: John Wiley & Sons.

Quay, H. C. (1965). Behavior problems in early adolescence. *Child Development, 36*, 215-220. doi: 10.2307/1126791.

Rey, J. M. (1993). Oppositional defiant disorder. *American Journal of Psychiatry, 150*, 1769-1778.

Richard, B., & Dodge, K. A. (1982). Social maladjustment and problem solving in school-aged children. *Journal of Consulting and Clinical Psychology, 50,* 226-233. doi: 10.1037/0022-006X.50.2.226.

Rose-Krasnor, L. (1997). The nature of social competence: A theoretical review. *Social Development, 6*, 111-135. doi: 10.1111/j.1467-9507.1997.tb00097.x.

Rubin, M. M. (1999). *Emotional intelligence and its role in mitigating aggression: A correlational study of the relationship between emotional intelligence and aggression in urban adolescents.* Unpublished manuscript, Immaculata College, Immaculata, PA.

Rusbult, C.E., Verette, J., Whitney, G. A., Slovik, L. F., & Lipkus, I. (1991). Accommodation processes in close relationships: Theory and preliminary empirical evidence. *Journal of Personality and Social Psychology, 60*, 53-78. doi: 10.1037/0022-3514.60.1.53.

Saarni, C. (1999). *The development of emotional competence*. New York: The Guilford Press.

Salley, C. G., Vannatta, K., & Gerhardt, C. A. (2010). Social self-perception accuracy: Variations as a function of child age and gender. *Self and Identity, 9*, 209-223. doi: 10.1080/15298860902979224.

Salmon, K., Dadds, M., Allen, J., & Hawes, D. (2009). Can emotional language skills be taught during parent training for conduct problem children? *Child Psychiatry and Human Development, 40*, 485-498. doi: 10.1007/s10578-009-0139-8.

Sanchez, D., & Crocker, J. (2005). How investment in gender ideals affects well-being: The role of external contingencies of self-worth. *Psychology of Women Quarterly, 29*, 63-77. doi: 10.1111/j.1471-6402.2005.00169.x.

Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist, 60*, 410-421. doi: 10.1037/0003-066X.60.5.410.

Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research, 46*, 407-441. doi: 10.2307/1170010.

Shields, A., & Cicchetti, D. (1997). Emotion regulation among school-age children: The development and validation of a new criterion Q-sort scale. *Developmental Psychology, 33*, 906-909. doi: 10.1037/0012-1649.33.6.906.

Shields, A., & Cicchetti, D. (1998). Reactive aggression among maltreated children: The contributions of attention and emotion dysregulation. *Journal of Clinical Child Psychology, 27*, 381-395. doi: 10.1207/s15374424jccp2704_2.

Silk, J. S., Steinberg, L., & Morris, A. S. (2003). Adolescents' emotion regulation in daily life: Links to depressive symptoms and problem behavior. *Child Development, 74*, 1869-1880.

Silver, J. M., & Yudofsky, S. C. (1987). Aggressive behavior in patients with neuropsychiatric disorders. *Psychiatric Annals, 17*, 367-370.

Smetana, J. G. (1990). Morality and conduct disorders. In M. Lewis & S. M. Miller (Eds.), *Handbook of Developmental Psychopathology* (pp. 157-179). New York: Plenum.

Sommers, S. (1984). Reported emotions and conventions of emotionality among college students. *Journal of Personality and Social Psychology, 46*, 207-215. doi: 10.1037/0022-3514.46.1.207.

Suveg, C., Payne, M., Thomassin, K., & Jacob, M. (2010). Electronic Diaries: A Feasible Method of Assessing Emotional Experiences in Youth? *Journal of Psychopathology and Behavioral Assessment, 32*, 57-67. doi: 10.1007/s10862-009-9162-0.

Thastum, M., Ravin, K., Sommer, S., & Trillingsgaard, A. (2009). Reliability, validity and normative data for the Danish Beck Youth Inventories. *Scandinavian Journal of Psychology, 50*, 47-54. doi: 10.1111/j.1467-9450.2008.00690.x.

Thompson, R. A. (1990). Emotion and self-regulation. In R. A. Thompson (Ed.), *Socioemotional development. Nebraska Symposium on Motivation* (Vol. 36, pp. 367-467). Lincoln: University of Nebraska Press.

Tugade, M. M., & Fredrickson, B. L. (2007). Regulation of positive emotions: Emotion regulation strategies that promote resilience. *Journal of Happiness Studies, 8*, 311-333. doi: 10.1007/s10902-006-9015-4.

Twenge, J. M., & Crocker, J. (2002). Race and self-esteem: Meta-analyses comparing Whites, Blacks, Hispanics, Asians, and American Indians and comment on Gray-Little and Hafdahl. *Psychological Bulletin, 128*, 371-408. doi: 10.1037/0033-2909.128.3.371.

Verschueren, K., Marcoen, A., & Schoefs, V. (1996). The internal working model of the self, attachment, and competence in five-year-olds. *Child Development, 67*, 2493-2511. doi: 10.2307/1131636.

Vitaro, F., Gendreau, P. L., Tremblay, R. E., & Oligny, P. (1998). Reactive and proactive aggression differentially predict later conduct problems. *Journal of Child Psychology and Psychiatry, 39*, 377-385. doi: 10.1017/S0021963097002102.

Waschbusch, D. A., Pelham, W. E., Jennings, J. R., Greiner, A. R., Tarter, R. E., & Moss, H. B. (2002). Reactive aggression in boys with disruptive behavior disorders: Behavior, physiology, and affect. *Journal of Abnormal Child Psychology, 30*, 641-656. doi: 10.1023/A:1020867831811.

Wigfield, A., Eccles, J. S., MacIver, D., Reuman, D. A., & Midgley, C. (1991). Transitions

    during early adolescence: Changes in children's domain-specific self-perceptions and

    general self-esteem across the transition to junior high school. *Developmental*

    Psychology, 27, 552-565. doi: 10.1037/0012-1649.27.4.552.

Wolff, J. C., & Ollendick, T. H. (2006). The comorbidity of conduct problems and depression in

    childhood and adolescence. *Clinical Child and Family Psychology Review, 9*, 201-220.

    doi: 10.1007/s10567-006-0011-3.

Wolff, J. C. (2010). Conduct problems in youth: Phenomenology, classification, and

    epidemiology. In R. C. Murrihy, A. D. Kidman, & T. H. Ollendick (Eds.), *Clinical*

    handbook of assessing and treating conduct problems in youth (pp. 3-20). New York:

    Springer New York. doi: 10.1007/978-1-4419-6297-3.

Wong, W., & Cornell, D. G. (1999). Pubertal timing and self-reported delinquency among male

    adolescents. *Journal of Adolescence, 22*, 157-171. doi: 10.1006/jado.1998.0208.

Emotion Talk Task Coding Procedure and Scheme

- Watch ENTIRE tape first!
- Code for overall Quality of Interaction
- Code assigned questions

Global Rating: Quality of Interaction

After watching the entire tape, rate the overall quality of interaction between the child and parent.

- -1 = disengagement, hostility, lack of reciprocity, arguing
- 0 = engaged, reciprocity, civil conversation, conversation etiquette
- +1 = engaged AND warmth, affection, attunement

This rating should be based on overall interaction: multiple instances of a behavior in any given category. In addition, if there are multiple instances of multiple behaviors from different categories (ie. -1 and +1) average them out (ie. code as a 0).

Time

- Time of the question asked

Turn ID

- C = Child
- P = Parent
- Example: C1 = child, first question, P2 = parent, second question, etc.

Card emotion

- Simply record the agreed emotion (positive 2, positive 1, neutral, negative 1, and negative 2) for each card

Response?

- Pick one: S, P, A, or '.'
- S = Spontaneous
  - Player answers the question on their own, the other player didn't remind them of a specific event
- P = Prompted

o The other player added more information. The other person did more than just repeat the question. Give a P if the other player guided the answer towards something, for instance, if the player gave a suggestion or helped the person remember something specific that was not part of the question on the card.

o Just repeating the question or defining a word is NOT considered prompting

- A = Avoided; if A, you will stop coding and fill in the rest with '.'

  o Player says they don't want to answer the question and/or they pick an alternative

  o Player doesn't have an answer ("never slept outdoors")

  o ODD project: if player doesn't answer question, code as avoided

- '.'

  o Player forgot to answer the question don't code at all; fill in '.' all the way through.

Reference to emotion? *(This is specific to the player's response, his or hers emotion (not of a 3rd person!), related to the question on the card)*

- Were there any emotion words in the player's response to the card, any dramatizations of emotion, or any other nonverbal indicators of emotion (e.g., marked change in tone of voice, facial expression, body language)?

  ➤ '.' = player avoided the card.

  ➤ 0 = no emotion.

  ➤ 1 = consistent or mild. This will be coded if the player makes one reference to emotion (e.g., uses an emotion term, dramatizes emotion, shows nonverbal expression of emotion).

  ➤ 2 = multiple or strong. This will be coded if the player makes more than one reference to emotion or shows very strong emotional intensity (e.g., uses an emotion term + dramatizes emotion, uses an emotion term + shows nonverbal expression of emotion, shows strong verbal or nonverbal indicators of emotion).

- Notes:

  ➤ Remember to always code for both positive and negative emotions regardless of card emotion.

  ➤ Emotion terms: angry, afraid, anxious, guilty, ashamed, sad, envious, jealous, disgusted, happy, joyful, proud, relieved, love (if about "desiring or participating

in affection", as with a person or other animal) (from Lazarus, 1991); synonyms count, too (e.g., "pissed off" for "angry")

➤ Be careful: "like", "love", and "enjoy" can be used as a preference towards something and in those cases are not emotion terms (e.g., "I like/love/enjoy riding my bicycle")

➤ Generally speaking, if you can fit the word into: "I felt _____" then you can consider it an emotion word

All of the below are related to the *other player's* response: This can be about the person's emotion or the emotion of a 3rd person.

<u>Encouraging</u>

- '.' = player avoided the card
- 0 = other player shows no encouragement; for example, does not respond or is discouraging
- 1 = other player acknowledges the facts or discusses the *event*
    - ➤ this is more than just saying "okay" and moving on
    - ➤ Examples: "yeah, and we were waiting for her to try on jeans," "oh, now I remember that," "what was that game we were playing?"
    - ➤ If person is just responding "yes/no" to a question, not considered acknowledgement
- 2 = other player acknowledges the *emotion* (can be nonverbal)
    - ➤ nonverbal: mirroring of emotion; pat on back; shows awareness of the emotion
    - ➤ this should be a clear acknowledgement of the *emotion* and not of the event
    - ➤ even if the other player joins in the conversation or shows recognition of the event it doesn't mean they have acknowledged the expressed emotion per se
- 3 = coaching (validate or label emotions)
    - ➤ talking about causes and consequences
    - ➤ other player helps the responding player to verbally label the emotions in their response
    - ➤ other player seeks intimacy or teaching opportunity about the responding player's emotion

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- ➢ other player verbally empathizes with or validates the responding player's emotion
- ➢ other player helps the responding player to problem solve
- ➢ Examples: 'How did you feel when that happened?', 'Were you angry?', 'I could tell you were mad because you walked away', 'Can you think of anything that would have made it easier?', 'Yeah, I can see how you feel…'
- ➢ If parent is coaching, ie. asking questions about emotions, and child responds to questions, consider this as reference to emotion

Discouraging

- '.' = player avoided the card
- 0 = other player shows no discouragement; for example, does not respond or is encouraging
- 1 = other player argues the events/facts or dismisses the event
- ➢ this is more than just moving on rapidly
- ➢ Examples: "I did not do that," "whatever," making a rude noise, changing topic abruptly
- 2 = other player is dismissive of the *emotion*
  - ➢ Invalidate, criticize, avoid or actively distract the responding player from emotions
  - ➢ Devalue the responding player's emotions verbally or nonverbally
  - ➢ Convey the notion that the given emotion is wrong or unimportant
  - ➢ Belittle the responding player's expression or create an unsafe climate for discussing feelings.
  - ➢ Examples: 'It wasn't anything to get upset over', 'Let's just not talk about that'
  - ➢ Examples of dismissive behavior: abrupt change of topic, talking over the person, engaging in distracting behaviors, making superficial off-task comments
- 3 = other player overrides the emotion
  - ➢ other player corrects the responding player in his/her emotion. Tells the responding player that in fact it was a different emotion that he or she felt or that he or she really felt nothing.
  - ➢ Examples: 'No, you weren't upset about that, you really liked it', 'you did not even notice that at the time, you're just making it up now'
- 4 = other player shows contempt

➢ other player devalues or dismisses the responding player *as a person* because of his/her emotions

➢ examples: 'only a stupidhead would get upset over something like that', 'why are you always too sensitive?'

➢ eye rolling and other contemptuous expressions and laughter or ridicule; name calling: 'he's a brat when he's angry', 'don't be a crybaby'.

Notes:

- Higher scores trump lower ones: if you see evidence for both acknowledging of the event AND of the emotion, you should code that as *Encouraging 3*. In other words, when separate pieces of evidence support a lower and higher score, go with the higher score

- When one piece of evidence is in between two scores, go with the lower one. For instance, if you are undecided between a '2' and a '3' for encouraging emotion, go with a '2' – be conservative

- Both encouragement and discouragement are always coded – responses may show both encouragement and discouragement, one or the other, or neither

- Code encouragement/discouragement separately for positive emotions and negative emotions

- Can have encouragement/discouragement without any reference to emotion originally being brought up by the responding player

- When players share a response, you can code the same based on events but not for emotions. Code emotions separately based on how each player responded

- Dramatization of event can be seen as mirroring the expressed emotion

- When conversation is off topic, don't code

More Examples:

Encouraging 2:

Child is talking about a situation that made him sad and Mom says: "I can understand why you are sad, but ..."

In this case, Mom clearly acknowledges the child's emotion even though she quickly goes on to talk about the reason she did what she did.

Encouraging 3:

Mom talks about something that made her mad and at some point the child says: "why did it

make you mad?". This shows awareness on the part of the child to Mom's feelings. In addition, by asking "why", the child is seeking to further understand the cause of that emotion.

Discouraging 2:

Mom talks about a time she was upset and how her feelings were hurt. Although child acknowledges her feelings he proceeds to say that "you were being mean". He therefore, devalues her feelings by putting the blame on her.

Table 1

Descriptive Data for Study Variables

Variable	N	Mean	Std. Dev	Minimum	Maximum	Skewness	Kurtosis
Raw Child references to Positive Emotion	68	.28	.48	.00	2.00	1.41	.92
Raw Child Encouragement of Positive Emotions	67	.63	.60	.00	2.00	.36	-.64
Prorated Child References to Positive Emotion	85	.11	.21	.00	.67	1.65	1.53
Prorated Child Encouragement of Positive Emotions	85	.35	.32	.00	1.00	.467	-.74
Father Report Emotion Regulation	46	2.83	.42	1.75	3.75	.16	-.01
Mother Reports Emotion Regulation	76	2.92	.40	2.00	3.88	.15	-.15
Father Reports Emotion Lability	46	2.37	39	1.27	3.00	-.56	.57
Mother Reports Emotion Lability	76	2.44	.41	1.47	3.40	.14	-.26
Accurate Depictions of Facial Cues of Happiness	68	.79	.12	.00	.83	-4.49	26.14
Happiness Bias	68	.09	.07	.00	.28	.69	2.76
Time Taken Responding to Happiness Facial (in milliseconds)	69	2368.88	993.78	1088.83	5933.50	1.43	.13
Self-Worth (T-Score)	81	47.41	11.04	20	63	-1.22	3.33

Note: Both raw and prorated scores are included for the emotion talk task variables. The

prorated scores were used for further analyses.

Table 2

Correlations between Variables of Interest

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. References of Positive Emotion	--								
2. Encouragement of Positive Emotion	-.04	--							
3. Emotion Lability (Father Report)	-.10	-.01	--						
4. Emotion Lability (Mother Report)	-.20	.06	**.46****	--					
5. Emotion Regulation (Father Report)	.03	**-.30***	**-.37***	-.16	--				
6. Emotion Regulation (Mother Report)	.01	-.02	.04	-.22	.20	--			
7. Child Happiness Detection Score	-.13	.02	.04	.01	-.11	-.19	--		
8. Reaction Time to Happiness Cues	-.14	-.04	.19	.18	.14	-.07	-.04	--	
9. Happiness Bias	.13	.01	.14	**.35****	**-.37***	.06	.00	-.11	--
10. Self-Concept T-Score	-.14	-.09	.13	.20	-.20	-.09	.00	-.20	-.10

$^{*}p<.05$, $^{**}p<.01$, $^{***}p<.001$

Table 3

Predicting Children's Reports of Self-Worth – Father Reports

Model	Beta	SE of Beta	β	R^2
References to Positive Emotion	1.03	1.47	.13	.14
Encouragement of Positive Emotions	-3.44	5.85	-.12	
Emotion Lability	3.21	4.60	.13	
Emotion Regulation	-5.31	4.61	-.25	
Accuracy in Detecting Happiness	-.02	.50	-.01	
Time Responding to Happiness Cues	5.11	4.42	.22	
Happiness Bias	-1.11	30.08	-.01	

$F(7, 31) = .732, p = .646$

Table 4

Predicting Children's Reports of Self-Worth – Mother Reports

Model	Beta	SE of Beta	β	R^2
References to Positive Emotion	1.22	1.00	.18	.12
Encouragement of Positive Emotions	-1.34	4.32	-.045	
Emotion Lability	1.79	3.34	.079	
Emotion Regulation	2.81	3.33	.12	
Accuracy in Detecting Happiness	-.17	.41	-.06	
Time Responding to Happiness Cues	5.39	3.50	.22	
Happiness Bias	13.36	19.04	.70	

$F(7, 49) = .93$, $p = .492$