

Children's Levels of Contingent Self-Esteem and Social and Emotional Outcomes

Jonathan S. B. Moore

Hertfordshire Educational Psychology Service, Apsley Two, Brindley Way, Hemel Hempstead, Herts, HP3 9BF. E-mail: jonathan.moore@hertfordshire.gov.uk

Marjorie Smith

Thomas Coram Research Unit, UCL Institute of Education, London, WC1H 0AA.

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Contingent self-esteem (CSE) describes the degree to which self-esteem is dependent on meeting day-to-day appraisals from oneself and others. This will vary between individuals, ranging from lower to higher CSE. A lower CSE is related to a range of adaptive social and emotional outcomes in adolescents and young adults. This study explores children's CSE and how this associates with behavioural outcomes. 280 children between the ages of 9-11 years completed a composite questionnaire on aspects of their self-esteem and behaviour. Children's class teachers completed behavioural outcome questionnaires for a random sample of 100 of these children. Based on teachers' and children's scores, high levels of global self-esteem were associated with lower CSE and fewer behavioural difficulties. CSE domains of social feedback and physical appearance retained significant associations with behavioural outcomes after controlling for global self-esteem. This may relate to the degree that children depend on the perceived evaluations of others.

Keywords: contingent self-esteem; social and emotional outcomes; preadolescence; reflected appraisals; growth mindset

Introduction

Self-esteem (SE) was first conceptualised as an important aspect of social and emotional wellbeing (James, 1890), reflecting individuals' emotional beliefs about themselves and their worth. It can be understood as the discrepancy between how an individual perceives him or herself (self-concept) with how they would like to be (ideal self) in areas that are important to them (Coopersmith, 1967; Moran, 2001).

Within the last ten years alone hundreds of thousands of articles have referred to SE within education (based on a Google Scholar search). One likely reason for this is that it offers a seductive quality of positively and negatively associating with a wide range of future adaptive and undesirable outcomes respectively (see literature review).

An additional curiosity of SE is how it derives from and interacts with a complex web of factors. For instance, SE overlaps with constructs such as self-concept, resiliency, hardy personality, locus of control (Dumont and Provost, 1999; Garrosa, Rainho, Moreno-Jiménez, and Monteiro, 2010; Brown, 2014; Judge, Erez, Bono and Thoresen, 2002). SE can also be defined and measured in different ways.

Two distinguishing constructs are an individual's overall self-evaluation (global SE) with that of their self-evaluation in different contexts (domain specific SE). Examples of measured domains include scholastic competence, athletic competence, peer likeability, physical appearance and behavioural conduct (Harter, 1999). It may be that global SE represents a more affective appraisal of worth whilst domain specific SE represents a cognitive appraisal of worth. (Rosenberg, Schooler, Schoenbach and Rosenberg, 1995). As an example, compared to boys, girls are generally more likely to report lower SE in specific domains than their global SE (Kling, Hyde, Showers and Buswell, 1999; Gentile, Grabe, Dolan-Pascoe, Twenge, Wells and Maitino, 2009).

SE can also be distinguished between an individual's own perceived performance (a competency model) with that of the perceived evaluations of others (a reflected appraisals model). It may be that over the course of successive life events an individual's SE becomes more internalised, reflecting a shift away from a reflected appraisals model toward a competency model of SE.

The current research is interested in SE as a more internalised regulatory mechanism that is less prone to fluctuations. Related concepts of SE include how stable

SE is over time, how SE is an unconscious evaluation of the self (implicit SE) and in relation to the current research, how dependent an individual is on meeting day-to-day appraisals from oneself and others (contingent SE).

The decision to focus on this area of SE, and particularly contingent SE, is that children are routinely subjected to feedback and appraisals from parents as well as from their peers and teachers in a classroom setting. As they develop their identity and compared to adults, children may be more dependent on the social interactions of significant others (Harter, Waters and Whitesell, 1998; Yabiku, Axinn, & Thornton, 1999), and their SE may be in a greater state of flux, (Harter, 1999). Contingent SE was also selected over SE stability and implicit SE for the ease of data collection as a single self-report measure.

Literature Review

Self-Esteem and Adaptive Outcomes

Looking across 55 countries SE has modest positive correlations with outcomes such as income, fewer human rights issues and social equality (Diener, Diener and Diener, 1995). Low SE has also been associated with a number of negative outcomes such as delinquency, impulsivity, risky behaviour and suicidal ideation in both adults and children (e.g. Donnellan, Trzesniewski, Robins, Moffitt, and Caspi, 2005; Auerbach and Gardiner, 2012; Wild, Flisher and Lombard, 2004). SE does not however correlate well with some notable outcomes. For example, academic attainment and drug abuse have weak to no associations with SE (e.g. Davies and Brember, 1999; Singh and Mustapha, 1994).

Irrespective of the strength of associations, no causality can be inferred from SE correlative studies. There is however some evidence that interventions that promote SE will lead to positive behavioural outcomes. This is when interventions focus on children or young people with known difficulties that research has previously shown SE to correlate to (Haney and Durlak, 1998; Emler 2001). Success rates are higher when the intervention focuses on specific domains of SE (O'Mara, Marsh, Craven and Debus, 2006).

This does not however imply that SE has a direct causal role in promoting adaptive outcomes. For example improvements may be due to interventions providing training and resources on changing behaviour, rather than changes to SE per se (e.g. Cummings et al., 2012). This highlights the need for a more informed theoretical understanding of the factors and concepts that contribute to the heterogeneous nature of SE. Looking for contradictions in SE research is a good place to start.

Self-Esteem and Ego-Defensive Behaviours

Research has found mixed associations with SE levels and outcomes relating to ego-defensive behaviours (such as anger, aggression, verbal defensiveness and narcissism). For example, within a sample of 316 Finnish individuals aged 14-15, high SE levels were associated to bullying behaviours when controlled by measures relating to defensive egotism, contradicting the simplistic view that high SE is related to adaptive outcomes (Salmivalli, Kaukiainen, Kaistaniemi, and Lagerspetz, 1999).

One explanation to the findings is that maintaining a high SE serves as an emotional buffer to protect individuals from negative experiences such as threats of rejection and failure (Orth, Robins and Meier, 2009). Although this may provide individuals with a coping mechanism to hold onto their positive characteristics, this

mechanism does not necessarily have to be normatively valued. This raises the question of whether there are concepts of SE that can better reflect the degree to which individuals will depend on these coping mechanisms.

Contingent Self-Esteem

Contingent Self-Esteem (CSE) refers to the degree to which self-esteem depends on meeting day-to-day appraisals from oneself and others. Compared to individuals with a lower CSE, those with a higher CSE will feel a greater need to meet specific or general appraisals in their everyday experiences to feel good about themselves (Sargent, Crocker and Luhtanen 2006).

To date CSE remains a relatively unexplored concept of SE with much of the research conducted on readily accessible populations to researchers, namely young people of university undergraduate age.

When correlated with traditional SE in undergraduate students, a modest negative correlation, ranging from $-.26$ to $-.36$ has been reported (Wouters et al. 2013). It may be that individuals who have evaluated a series of appraisals negatively will be more proactive in seeking evidence that counters their negative status quo (i.e. have a higher CSE). The modest association also highlights the statistical probability of individuals having a high CSE associated with high SE and vice-versa.

Research has shown a high CSE to be associated with social and emotional difficulties that include depression, anxiety and eating problems and ego-defensive behaviours (Baumeister, Campbell, Krueger and Vohs, 2003; Kernis, Lakey and Heppner 2008; Niiya, Crocker and Bartmess, 2004; Burwell and Shirk, 2006; Bos,

Huijding, Muris, Vogel and Biesheuvel, 2010).

The statistical probability of some individuals having both a high SE and CSE may account for some of the findings from SE and CSE research into ego-defensive behaviours. It may be that an over-reliance on meeting certain appraisals (a high CSE) will lead to being impervious to other's views, as a mechanism to defend a high SE (Sedikides and Gregg, 2008).

Despite the theoretical underpinning of CSE being associated with adaptive outcomes, there are also inconsistent findings, particularly when it is explored as a global concept. (Burwell and Shirk, 2006; Bos, Huijding, Muris, Vogel and Biesheuvel, 2010). As with the conventional concept of SE, CSE can also be explored in specific domains.

Domain Specific Contingent Self-Esteem

Specific domains of CSE, such as physical appearance CSE and academic CSE have been shown to predict a range of adaptive outcomes in American undergraduate students (Crocker, Luhtanen, Cooper and Bouvrette, 2003; Crocker and Luhtanen, 2003). One reason why a domain specific concept of CSE may offer an additional insight is that domains that would otherwise not be isolated in a global concept of CSE will cancel each other out. For instance, Zeigler-Hill, Clark and Pickard (2008) demonstrated that the CSE domains of competition and social approval were respectively negatively and positively associated with feelings of superiority (grandiose narcissism).

Domains of CSE may be broken down into two distinct categories. Stefanone, Lackaff and Rosen (2011) refer to these as public and private based contingencies.

These are broadly comparable to the reflected appraisals and competency models of SE respectively.

A reflected appraisals model may have greater explanatory value over a competency model in SE research. For example Gentile and Colleagues (2009) conducted a meta-analysis on gender differences in SE, concluding that in general a reflected appraisals model of SE was a better fit to gender differences in SE compared to a competency model. As an example, it was argued that the reflected appraisals model would correctly predict girls to have lower SE in the domain of physical appearance compared to boys because of societal pressures promoting high standards for female appearance. In contrast the competency model would no difference as there is no objective difference in attractiveness.

In relation to this research, it is postulated that CSE domains relating to the reflected appraisals model may have greater explanatory power to explain social and emotional outcomes (i.e. will depend on the degree to which individuals rely on the perceived appraisals of others to meet their SE). This is based on how CSE may develop through childhood.

The Development of Contingent Self-Esteem

Despite no research on how CSE relates to SE in preadolescent children was identified at the time of writing, predictions can be made about how CSE may develop over time from other research. SE is understood to be less internalised and more fragile in earlier development (Trzesniewski, Donnellan, and Robins, 2003). In addition, as CSE is conceptualised as a more internalised form of SE it follows that CSE will be a product of life events, with younger children being more reliant on meeting the reflected

appraisals of others to meet their SE, compared to studies looking at late adolescence onwards (Kernis, Lakey and Heppner, 2008). This links with research which indicates that self-perceptions are more malleable to changes in younger life (Harter, 1999), potentially highlighting the importance for early identification and interventions in a child's life to lower CSE in relevant domains (Crocker et al., 2003; Crocker and Wolfe, 2001). A review of what these domains may be follows.

CSE Domains of Reflected Appraisals Model

In adolescence, physical appearance and social acceptance have been shown to contribute the largest amount of variance for global SE (Arnett, 2007; Shapka and Keating, 2005). This poses the questions of if and how these two domains may relate to a reflected appraisals model of CSE.

A reflected appraisals model will explain CSE in the domain of social acceptance as the degree to which children will depend on connecting to larger social structures to feel good about themselves. Placing importance on this self-concept (i.e. having a higher CSE in this domain) has been found to relate to traits such as agreeableness, warmth, nurturance, kindness and affection (Campbell and Foster, 2007; Bosson et al., 2008). A higher CSE in this domain may also negatively relate to adaptive outcomes if there is a perceived lack of attachment to desired social structures, linking to a variety of social and emotional difficulties (Baumeister and Leary, 1995).

A reflected appraisals model would explain CSE in the domain of physical appearance as the degree to which children will depend on the perceived evaluations of others about their physical appearance to feel good about themselves. As a consequence of normative social influences, this contingency may indicate the degree of importance

that children will place on conforming to a particular ‘in’ group out of an innate need for companionship and association (Paulhus and Williams, 2002; Cialdini and Goldstein, 2004). The desire to identify with an in-group could then lead children to distinguish themselves from other groups and to the use of ego-defensive behaviours (Tajfel and Turner, 1979; Bosson et al., 2008).

The Current Research

The preceding literature review indicates that a reflected appraisals model of CSE may be associated with a range of social and emotional outcomes. Much of the research on CSE to date, however, has been conducted with non-UK populations, and involved individuals in late adolescence and young adults. The aim of this research is therefore to further understand how CSE changes with age in its association with a global construct of SE, and with social and emotional outcomes such as emotional symptoms, conduct problems, hyperactivity and peer problems. This is with a view to identifying strategies and interventions that may relate to lowering children’s CSE and thus enhancing aspects of their social and emotional wellbeing. Two main hypotheses, each with subordinate hypotheses, are proposed:

- H¹: Children’s CSE will have a weak but statistically significant negative association with SE levels.
 - H^{1a}: Greater externalisation of CSE at a younger developmental age will manifest in more modest associations with the external marker of SE levels than in comparable research with older participants.
- H²: Children’s CSE will be positively associated with behavioural difficulties.

- H^{2a}: Social feedback and physical appearance CSE will be more strongly positively associated with social and emotional outcomes than academic and activities CSE.
- H^{2b}: Unlike SE scores, CSE scores will be more strongly associated with conduct problems (anger, aggression) in comparison to other behavioural outcomes.

Method

Design

This research was school based, involving children and their class teachers in three primary schools, and employing a cross-sectional quantitative design using standardised questionnaires. These questionnaires were selected to explore the associations between children's self-reported levels of global SE, CSE and behavioural outcomes.

The research was conducted from a socially realist perspective (Greene, 2008). This allowed for a scientific enquiry into the normative aspects of SE. The research was pragmatic in its design, selecting research methods that worked best to answer the proposed research questions (Creswell, Shope, Clark and Green, 2006).

Ethical consent for the study was sought and obtained from the Research Ethics Committee within the Institute of Education, UCL.

Participants

Participants from ten classes in three schools in South-East England took part in the research. This included 149 boys and 131 girls (280 children in total), aged 9-11 years, from school years 5 and 6, and their respective class teachers. Schools in one area were approached based on the homogeneity and similarity of their catchment areas.

Information from the 2011 census obtained from the local authority website for the area indicated that catchments were predominantly white (more than 80%), incorporated a higher than national average level of education (more than 30%), with 70% or more adults who owned a house.

Measures

The Rosenberg Self-Esteem Scale (RSES) was used to assess global SE (Rosenberg, 1965). This is a widely used 10-item measure of global SE, with half the items positively worded, the other half negatively. It was developed in the USA on a population that included children of similar ages to this research. Although there are discussions about the underlying factor structure of the scale (Hyland, Boduszek, Dhingra, Shevlin and Egan, 2014), the RSES is generally well-validated as a reliable measure of global SE (e.g., Blascovich and Tomaka, 1991). In another study which compared CSE and SE, Cronbach's alpha for the RSES was .88, indicating good internal consistency (Zeigler-Hill, Besser and King, 2011). In the current study, Cronbach's alpha was .78. The RSES has also been shown to have good concurrent validity when validated against the Harter's Self-Perception profile (Hagborg, 1993). In addition to the good psychometric properties, this scale was chosen because of its brevity and suitability to this population. Normative data were available based on

British 12-13 year olds (Bagely and Mallick, 2001).

The Self-worth Contingency Questionnaire (SWCQ) was developed in the USA by Burwell and Shirk (2003), as a measure of CSE. The questionnaire assesses children's CSE in four domains: (1) social feedback, (2) academic competence, (3) activities or hobbies, and (4) physical appearance. The SWCQ consists of eight items for each domain, accounting for 32 items in total, half of which are positively worded, the other half negatively. Two sample items are 'The way I feel about myself as a person depends a lot on what people in my life think of me' (social feedback) and 'The way I feel about myself as a person depends a lot on my physical appearance' (physical appearance)

Based on an analysis of these items, an overall measure of the SWCQ may be derived from an average of the four domain-specific scores, with higher scores indicating higher CSE. The SWCQ has been shown to have good internal consistency, validity, and temporal stability, with Cronbach's alphas for domain specific scales and the full scale ranging from .81 to .90 (Burwell and Shirk, 2003, 2006; Wouters et al., 2013). A pilot study for the present research found good internal validity for the 16 positive items, though not overall (Cronbach's alpha=.88 and .27 respectively). It was therefore decided to omit all negative items from the SWCQ. This reduced the length of the questionnaire for children to 16 items (plus 4 formative items). In the current study, Cronbach's alphas ranged from .72 to .85 for subscale items, and was .89 for all items.

The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) was used as a multi-dimensional measure of children's social and emotional wellbeing (Goodman and Goodman, 2009). The SDQ was developed in the UK, and assesses children's strengths and difficulties in five domains: emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems and prosocial behaviour. The scale

provides subscale scores by summing scores for the five items in each domain, and a total difficulties score, based on summing subscale scores for the four domains other than the prosocial scale. Higher scores indicate more problematic behaviour. The SDQ has robust psychometric qualities: it has good predictive validity and internal reliability, as well as stability over time. A meta-analysis for the test-retest reliability for teachers indicates correlations of at least 0.72 for all SDQ sub-scales (Goodman and Goodman, 2011; Van Roy, Veenstra, and Clench-Aas, 2008; Stone, Otten, Engels, Vermulst and Janssens, 2010). In the current study, Chronbach's alpha for the total difficulties scale was .77 for children and .89 for teachers. The SDQ is a widely-used measure in research, both in the UK and elsewhere, which means that there is a wealth of normative data available.

Procedure

Head Teachers in participating schools were shown a proposed parent information letter. The letter outlined the purpose and details of the research, and explained that, unless parents objected, their child would be approached to participate in the study. It also explained how their child's privacy and confidentiality would be maintained.

Parents were sent the letter via the school mailing system (either an e-mail based system or via their child). Parents were given at least a week to contact the school to opt their child out of participation, if they so wished. Class teachers were approached (predominantly via e-mail) to prospectively thank them for their time and describe the rationale of the study and what it would involve from them. This would include completing a short standardised behavioural questionnaire for ten randomly selected pupils in their class.

Questionnaire completion was conducted in June 2014 and took place during a lesson period for each class. Unless parents had opted their child out, informed consent was sought from the children. The research was explained to the whole class as finding out about how children coped with day-to-day activities within the classroom. This included what they thought about themselves. Children were then asked if they were happy to complete a composite questionnaire. Children who were not participating (either children who themselves choose not to participate, or whose parents had requested that they did not participate) were asked either to read their current reading book, or if appropriate, assist the class learning support assistant with a task. Due to the conditional clause structure of the items in the SWCQ and the SDQ measure designed for ages older than some of the participating children, all items were read aloud. This allowed for a good pace in questionnaire completion time. Children responded during timed pauses of five seconds between each item. Children were advised that if they were able and wished to, they could complete items at a faster rate. For those who finished earlier than the group there was a word search game provided at the end. Children took approximately 25 minutes to complete the composite questionnaire.

Approximately one week after all questionnaires from a school were collected, class teachers were asked to complete the SDQ for teachers for ten children in their class (100 in total). Children were chosen at random using an online random integer generator.

Results

Data Analysis

Data were analysed using SPSS. To test for predicted correlations a series of t-tests was carried out. To understand the shared variance of the Rosenberg Self-Esteem Scale (RSES) with the Self-worth Contingency Questionnaire (SWCQ) and self-rated Strengths and Difficulties Questionnaire (SDQ) a series of ANOVAs, including partial correlations to control for key variables, was conducted.

Prior to conducting a series of t-tests and ANOVAs, a multiple analysis of variance (MANOVA) was performed on each of the following factors: gender, year group and school setting. This was to protect against type 1 errors. Covariance was verified by splitting the fixed factor for all RSES, SWCQ and self-rated SDQ scales, with no corresponding covariance value being greater than three times any other (Meyers, Gampst and Guarino, 2006). Due to differences in sample size and distribution of scores for teacher SDQs, this measure was not included in MANOVAs.

Descriptive Statistics and Correlations

Table 1 provides an overview of the data for each measure. Children were, on average, more likely than teachers to report greater difficulties in their behaviour.

[Insert Table 1 near here].

Controlling for Fixed Factors

Significant differences for the fixed factors tested included gender differences in

contingent self-esteem (CSE). On average, boys reported a significantly lower mean CSE score than girls ($p \leq .01$). This applied to each domain of CSE ($p \leq .05$), with Activities CSE at $p \leq .01$. On the SDQ, girls were more likely to report higher levels of Emotional Symptoms and more Prosocial behaviour than boys (both $p \leq 0.01$). Boys reported more Conduct Problems ($p \leq 0.01$). There were differences between schools in the level of Emotional Symptoms and Conduct Problems reported by children ($p \leq 0.05$). Teachers' SDQ assessments also varied by school in the levels of children's Emotional Symptoms and Prosocial behaviour reported ($p \leq 0.05$). No other significant differences were found on the outcome measures for each factor.

Findings to the Hypotheses Proposed

H¹: Children's CSE will have a weak but statistically negative association with SE levels

In line with predictions, Table 2 shows a modest negative correlation between general self-esteem (SE) and CSE. This is negative for all CSE domains except for the domain of Activities domain, and strongest for the domain of Social Feedback.

[Insert Table 2 near here]

H²: Children's CSE will be positively associated with behavioural difficulties

From children's self-reports there is a modest negative correlation between general SE and overall self-rated behavioural difficulties, and, as hypothesised, a positive correlation between the SDQ Total Difficulties score and CSE (Table 2). The direction of association was reflected in each of the domain scores making up the overall CSE score.

From the teachers' ratings, associations were much weaker overall, and generally not significantly different from zero, although they followed the same pattern in terms of directionality, with a negative association between global SE and children's behaviour and wellbeing, and a very weak positive association between children's behaviour as assessed by the SDQ, and CSE (Table 3).

[Insert Table 3 near here]

H^{2a}: Social feedback and physical appearance CSE will be more strongly positively associated with social and emotional outcomes than academic and activities CSE

The data support predictions that domains relating to a reflected appraisals model would be more strongly associated with social and emotional outcomes. From children's self-reports the CSE Academic domain is the poorest predictor of overall self-rated difficulties whereas CSE domains of Social Feedback and Physical Appearance are the strongest (Table 2). Teachers' reports did not confirm this hypothesis, as there was no discernible association with CSE (Table 3).

When exploring shared variance between SE, CSE and self-rated behavioural difficulties, SE but not CSE was a significant predictor of children's overall self-rated behavioural difficulties ($F(21)=5.83$, $p \leq .01$ for RSES; and $F(58)=1.46$, $p > .1$, for SWCQ total score). To further explore this shared variance, self-rated behavioural difficulties scales were partially correlated with CSE domains controlling for the variance of SE (Table 4). In line with the predicted explanatory power of the reflected appraisals model, the CSE domains of Social Feedback and Physical Appearance continued to be significantly correlated to two subscales of the SDQ, each correlating to Emotional

Symptoms, the CSE domain of Physical Appearance domain to Conduct Problems.

[Insert Table 4 near here].

Further partial correlational analyses between behavioural difficulties scales and CSE domains by controlling for CSE domains of Social Feedback and Physical Appearance were conducted. Comparisons of Tables 5 and 6 indicate that the CSE Activities and Academic domains share significant variance with the Physical Appearance domain, but particularly with the Social Feedback domain, as most of the previously significant associations are much reduced in strength and no longer statistically significant. The Social Feedback domain explains further variance when controlling for Physical Appearance, particularly for Emotional Symptoms.

[Insert Tables 5 and 6 near here].

H^{2b}: Unlike SE scores CSE scores will be more strongly associated with conduct problems (anger, aggression) in comparison to other behavioural outcomes

Self-reports indicate that of the four main subscales of the SDQ, conduct problems was the least strongly associated for both SE and CSE scores. However, after controlling for SE, the strength of association with the CSE domain of Physical Appearance and Conduct Problems was only second to the association with the CSE domains of Social Feedback and Emotional Symptoms (Table 4). The CSE domain of Physical Appearance also continues to explain significant variance for Conduct Problems when controlling for Social Feedback (Table 6). In contrast, the Social Feedback domain of CSE did not explain variance for Conduct Problems when controlling for Physical Appearance (Table 5).

Discussion

Key Findings

This study extends previous research on contingent self-esteem (CSE) by exploring its associations with social and emotional outcomes in children aged 9-11. Key findings are discussed in relation to the two main proposed hypotheses.

H¹: Children's CSE will have a weak but statistically negative association with SE levels

The association between children's CSE and SE is negative, as hypothesised, but is rather higher than reported in previous studies involving university undergraduates. For instance, correlations ranged from zero to -.24 in a study by Crocker and Luhtanen (2003), and -.26 to -.36 in a study by Wouters and colleagues (2013). One explanation for the findings is that the onset of puberty is a critical period for a child's socio-cognitive development, including their conceptualisation of SE. However as a literature search could not identify any studies involving adults completing the SWCQ, the measure used in the current study, the relatively high correlation may only be indicative of the SWCQ questionnaire having greater concurrent validity with measures of global self-esteem (SE) than the other CSE measures.

Bos and colleagues (2010) conducted research in the Netherlands, with participants who were older than the cohort in this study (13.9 years on average). They found a correlation between translated versions of the SWCQ and the RSES that was lower than this study but generally higher than the studies above ($r=-.33$). Again, these findings are not directly comparable as children in the current research only completed

the 16 positive items in the SWCQ. It may nevertheless indicate a decreasing association with increasing age, where CSE is generally a more external concept earlier on in development before becoming more internalised during adolescence. It might be that childhood CSE is a necessary precursor to various adolescent or adult SE domains, by developing conceptual distinctions between self-perception and other-perceptions. Future research should therefore seek to use concurrent measures of SE levels and CSE across a range of developmental stages to explore these hypotheses.

H²: Children's CSE will be positively associated with behavioural difficulties

CSE is in general positively associated with the SDQ total score. After controlling for global SE levels, only the CSE domains of social feedback and physical appearance significantly associate with children's self-rated behavioural difficulties, as assessed by the SDQ. The CSE social feedback domain is most strongly associated with emotional symptoms, whilst the physical appearance domain is most strongly associated with conduct problems. This indicates that an aspect of a child's social and emotional wellbeing can be understood in terms of the degree to which they depend on social feedback and their physical appearance, irrespective of how much they depend on meeting appraisals in their academic work or extra-curricular activities. The study therefore supports Stefanone, Lackaff and Rosen's (2011) assertion that there are two distinct categories of domain specific CSE, broadly relating to the competency and reflected appraisals domains. Additionally, CSE domains of physical appearance and social feedback are important domains relating to SE (Arnett 2007; Shapka and Keating 2005).

It is argued that a reflected appraisal model has greater explanatory power than the competency model for why the CSE domain of physical appearance correlates to

conduct problems. Children placing increased value on their physical appearance to feel good about themselves may be a barometer for the degree that they are contingent on being perceived as part of an 'in' group. This will be at the expense of distinguishing themselves from others, which may lead to ego-defensive behaviours and in turn conduct problems (Tajfel and Turner, 1979).

Secondly, children who are contingent on the feedback they receive from others (CSE domain of social feedback) may be signalling their desire to be understood and accepted by others. This may be communicated through heightened emotional symptoms. Furthermore, social feedback CSE is not significantly associated with conduct problems after controlling for global SE. This supports previous research indicating that self-concepts relating to social acceptance either have a weak negative or non-significant association with ego-defensive behaviours (Bosson et al., 2008).

Limitations

There were a number of limitations that could be identified as applying to this study. First, the cross-sectional design of the study did not allow the inference of causality or directionality. Second, it was a relatively small-scale study conducted in a limited number of homogenous settings. Third, it was necessary to modify some measures, or their administration to suit the age range. For instance, measures were read out and the SWCQ had negative items taken out as these proved unreliable for this age range. Fourth, although the advantage of using teacher rated SDQs was that it was an independent account of child outcomes, the sample size was kept small to reduce the burden on teachers. There is also the possibility that it was not a sensitive enough measure.

Last, whilst the findings indicate that CSE may be a heterogeneous feature of SE, global SE was also moderately associated with social and emotional outcomes as measured by the SDQ. Therefore, the importance of CSE over global SE should not be overstated. Furthermore, it remains to be confirmed that the CSE domains of physical appearance and social feedback have explanatory power above and beyond SE as a concept to interpret adaptive outcomes: it is plausible that findings from this study would have been similar if a measure of SE with comparative domains to the SWCQ had been used.

Implications for Professional Practice

SE is frequently discussed in Educational Psychology consultations that are seeking to promote a child's social and emotional wellbeing. Yet despite the interest of this construct in education, its interaction with social and emotional outcomes are complex (Emler, 2001). For example, well-meaning parents who wish to bolster SE through offering inflated praise may instead reduce their child's confidence to challenge themselves (Brummelman, Thomaes, Orobio de Castro, Overbeek and Bushman, 2014). Educational professionals such as Educational Psychologists therefore have a role to unpack what teachers and parents are referring to when discussing a child's SE, to elicit appropriate problem formulations and targeted outcomes.

Despite only examining associations, the findings from this research suggest that educational professionals have a role to highlight the positive social and emotional attributes of children having a lower CSE. That said, professionals should be aware of and challenge the potential hazard of CSE being discussed as a tangible concept that can be targeted to have a direct causal benefit on a child's social and emotional wellbeing. Instead, as with other concepts of SE, it is likely that CSE can be best understood as a

mediating variable (see Baumeister et al., 2003). In other words, the focus on aiming for a lower CSE should be on how children approach the reflected appraisals from others, rather than how they feel about meeting certain appraisals. This is similar to research which shows that more academic gains are made when feedback focuses on the effort that a child puts into an activity rather than for meeting a certain standard in the activity (Haimovitz and Dweck, 2016).

Through consultation processes Educational Psychologists may be able to use CSE as a lens to identify the salient antecedents and outcomes that relate to children's and young people's needs. Within the context of developing their social and emotional wellbeing, it may be particularly important to understand children's dependence on the reflected appraisals from others to feel good about themselves. By way of illustration, if themes are identified relating to a child's conduct and their reliance on their physical appearance, formulations could be made around interventions that will reduce the child's contingency on normative social influences. Although this may require individualised support for reframing their reflected appraisals of others, it could also include ensuring that the class teacher is consistently teaching in mixed abilities groups to reduce group comparisons (Campbell, 2014; Alexander, 2010). It may also involve working with senior members of the school to ensure that the school ethos ensures that every child feels they are a genuinely valued member of their community (Bonell, Fletcher and McCambridge, 2007).

Although there are some indications for the predictive validity of CSE measures (e.g. Wouters et al., 2013), the currently very limited scale of research in this area restricts their use in educational psychology practice. Nevertheless, CSE measures have the potential for concrete uses in education. For instance, it would be interesting to see how the degree to which one's SE is based on the perceived evaluations of others may

account for a bias to inadvertently record little improvement in a group intervention from comparing oneself with others in the same group (Tuttle et al., 2013). In time, CSE measures might also add to an alternative narrative for vulnerable children and young people who would otherwise report high SEs when faced with social and emotional difficulties (Swinson, 2008).

Conclusion

This research represents one of the first efforts to identify how CSE is related to more general SE, as well as to social and emotional wellbeing in pre-adolescent children. This is at an age when SE is likely to be developing rapidly, before becoming more internalised in later adolescence. The research points to the importance of acquiring a fuller understanding of the increasing pressures that children and young people may feel they face to connect to certain social structures and to conform to normative social influences to feel good about themselves.

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Table 1: Participant Numbers, Ranges, Means and Standard Deviations (SD) for all Measures

Measure		N	Range		Mean	SD	
			Minimum	Maximum			
RSES ¹		277	4	30	19.90	4.53	
SWCQ ²	Domain	Academic	273	4	24	12.16	4.51
		Social Feedback	276	4	24	12.39	4.29
		Physical Appearance	276	4	24	10.43	5.03
		Activities	277	4	24	11.85	4.81
	Mean	269	4.25	21.5	11.72	3.62	
Self-reported SDQ ³	SDQ Subscales	Emotional Symptoms	279	0	10	3.37	2.33
		Conduct Problems	279	0	9	2.42	1.78
		Hyperactivity	279	0	10	3.93	2.22
		Peer Problems	279	0	9	2.20	1.70
		Prosocial	279	3	10	7.78	1.63
	Total Difficulties ⁴	265	1	30	11.94	5.70	
Teacher SDQ	SDQ Subscales	Emotional Symptoms	99	0	9	1.59	1.96
		Conduct Problems	99	0	7	.94	1.51
		Hyperactivity	99	0	10	3.25	3.09
		Peer Problems	99	0	8	1.04	1.62
		Prosocial	99	1	10	7.50	2.40
	Total Difficulties	99	0	28	6.82	6.27	

¹RSES= Rosenberg Self-Esteem Scale

²SWCQ= Self-Worth Contingency Questionnaire

³SDQ=Strength and Difficulties Questionnaire

⁴Total Difficulties=Sum of Emotional Symptoms, Conduct Problems, Hyperactivity and Peer Problems.

Table 2: Association of RSES, SWCQ and Self-Reported SDQ Scales

		RSES	SWCQ Domain					
			Academic	Social Feedback	Physical Appearance	Activities	Mean	
RSES		1	-.28**	-.39**	-.31**	.31**	-.42**	
Self-Reported SDQ	Subscales	Emotional Symptoms	-.45**	.15**	.39**	.27**	.17**	.31**
		Conduct Problems	-.32**	.03	.15**	.26**	.12*	.18**
		Hyperactivity	-.46**	.06	.23**	.30**	.18**	.22**
		Peer Problems	-.36**	.08	.23**	.15**	.13*	.20**
		Prosocial	.14*	.08	-.01	-.09	-.02	-.01
	Total Difficulties	-.58**	0.13*	.38**	.34**	.24**	.36**	

* $p \leq .05$

** $p \leq .01$

Table 3: Association of RSES, SWCQ and TSDQ Scales

		RSES	SWCQ Domain					
			Academic	Social Feedback	Physical Appearance	Activities	Mean	
Teacher SDQ	Subscales	Emotional Symptoms	-.16	.19*	.20*	.12	.06	.16
		Conduct Problems	-.08	.00	-.08	.11	.04	.03
		Hyperactivity	-.15	-.04	-.06	.06	-.06	-.05
		Peer Problems	-.21*	.16	.02	.09	.22*	.16
		Prosocial	.06	-.05	-.09	-.13	-.09	-.10
	Total Difficulties	-.18*	.05	.02	.13	.01	.05	

Table 4: Association of SWCQ and Self-Report SDQ Scores Controlling for RSES

			SWCQ Domain				
			Academic	Social Feedback	Physical Appearance	Activities	Mean
Self-Report SDQ	Subscales	Emotional Symptoms	.03	.26**	.15**	.03	.15**
		Conduct Problems	-.07	.02	.19**	.00	.05
		Hyperactivity	-.08	.08	.10	.08	.06
		Peer Problems	-.01	.11*	.06	.03	.06
		Prosocial	.12*	.03	-.06	.01	.03
	Total Difficulties	-.05	.20**	.20**	.06	.14*	

Table 5: Association of SWCQ and Self-Report SDQ Scores Controlling for Physical Appearance SWCQ Domain

		SWCQ Domain				
		Academic	Social Feedback	Activities	Mean	
SDQ	Subscales	Emotional Symptoms	.05	.31**	.06	.18**
		Conduct Problems	-.09	.01	-.03	-.05
		Hyperactivity	-.03	.16**	.13*	.12*
		Peer Problems	.03	.18**	.08	.13*
		Prosocial	.12*	.03	.01	.08
	Total Difficulties	-.01	.26**	.10	.15**	

Table 6: Association of SWCQ and Self-Report SDQ Scores Controlling for Social Feedback SWCQ Domain

		SWCQ Domain				
		Academic	Physical Appearance	Activities	Mean	
SDQ	Subscales	Emotional Symptoms	-.01	.09	.02	.04
		Conduct Problems	-.03	.23**	.05	.11*
		Hyperactivity	-.04	.12*	.02	.10
		Peer Problems	-.00	.06	.06	.05
		Prosocial	.09	-.10	-.03	-.02
	Total Difficulties	-.03	.18**	.09	.11*	