Parental Styles, Gender and the Development of Hope and Self-Esteem

PATRICK HEAVEN* and JOSEPH CIARROCHI

Department of Psychology, University of Wollongong, Wollongong, New South Wales, Australia

Abstract

We examined the developmental trajectory of trait hope and self-esteem over 4 years and the impact of gender and perceived parental styles on these trajectories. Participants were 884 high school students. There was a general decline in hope and self-esteem over time, with females declining more rapidly than males. Girls had higher hope than boys in Grade 7, but lower hope by Grade 10. Perceived parental authoritativeness at Time 1 was related to high hope across the 4 years, whilst perceived parental authoritarianism was related to low self-esteem. We discuss the importance of perceived parental styles for adolescent well being, as well as possible explanations for changes in hope and self-esteem. Copyright © 2008 John Wiley & Sons, Ltd.

Key words: development of personality; sex differences; self-concept and self-esteem; hope; longitudinal

INTRODUCTION

Countless studies and reviews have demonstrated that one’s family of origin and experiences as a family member are important in shaping individual behaviour and overall adjustment (e.g. Parke, 2004; Smetana, Campione-Barr, & Metzger, 2006). Reflecting this line of thought, Baumrind (1993, p. 1307) stated that ‘...parents’ caretaking practices (are related) to children’s internalisation of social norms and social–emotional development’. The main aim of the present study was to assess the longitudinal effects of adolescents’ recollections of parental styles on the development of their optimistic thinking, notably, their levels of self-esteem and trait hope. As far as we are able to establish, this is the first study to document the impact of recalled parental styles on the developmental trajectories of hope and self-esteem. Given that some studies have documented substantial gender differences in variables such as self-esteem (Clay, Vignoles, & Dittmar, 2005; Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002), we also sought to examine the effects of gender on the development of hope and self-esteem.
The importance of hope and self-esteem in adolescence

As teenagers move through high school and encounter new and more challenging situations spanning the academic, sexual, political and interpersonal spheres, they require improved skills and resources. Hope and self-esteem are often assumed to help individuals adjust to adversity (Cheavens, 2000; Ciarrochi, Heaven, & Davies, 2007; Umana-Taylor & Updegraff, 2007). Self-esteem is a well-known construct and focuses on evaluations of global self-worth, whereas hope focuses on the belief that one can achieve important goals in life. Although modestly related, recent research has shown that self-esteem and hope predict different outcomes (Ciarrochi et al., 2007).

Low self-esteem is usually associated with self-damaging behaviours, whereas high self-esteem is associated with an ability to cope more effectively with life’s problems (Basic Behavioral Science Task Force, 1996). Poor self-esteem is typically associated with anxiety and depression (Dumont & Provost, 1999) and increased levels of sadness in adolescents (Ciarrochi et al., 2007), whereas those with higher self-esteem score highly on indices of adjustment, including measures of subjective well-being (DeNeve & Cooper, 1998), occupational success (Elliott, 1996), positive peer approval (Paulhus, 1998) and active coping strategies (Dumont & Provost, 1999). Individuals high in self-esteem therefore have the skills and resources that provide protection from stressors (Deater-Deckard, Ivy, & Smith, 2006; see also Kling, Hyde, Showers, & Buswell, 1999).

Snyder (2000a, p. 8) defined hope as ‘a positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-directed energy) and (b) pathways (planning to meet goals)’. Whereas dispositional optimism gives credence to thoughts that are agentic in nature, trait hope emphasises agency as well as pathways thought (Snyder, 2000a). Although both hope and dispositional optimism are focused on the future, optimism refers to the belief that positive things are likely to occur in the future; ‘that good rather than bad things will happen’ (Scheier & Carver, 1985, p. 219). In contrast, hope encompasses the ability to generate and implement plans for the future (Bailey, Eng, Frisch, & Snyder, 2007). As Bailey et al. (2007, p. 168) explain, ‘Optimism theory posits that outcome expectancies determine goal-directed behaviour, whereas hope theory posits that efficacy expectancies (Agency) are equally necessary determinants of goal-directed behaviour...’ In support of this distinctiveness, Bryant and Cvengros (2004) found hope and optimism to load on separate factors.

High hope individuals have a generalised expectancy of success such that any blockage of goals is viewed as temporary because new paths to achieve goals are often easily developed (Cheavens, 2000). High-hope individuals have the skills to cope more effectively with barriers to the achievement of goals and demonstrate high levels of competence across a wide range of human endeavour (Snyder, Rand, & Sigmon, 2002). By coping with difficult challenges in a positive way and by persevering in the face of difficulties, parents model hopeful behaviour to their children (McDermott & Hastings, 2000). Parents are primary teachers in instilling agency (motivational thinking) and pathways (routes to goals) thinking (Snyder, 2000b). This is accomplished as children begin to perceive and make sense of external events, understand that one event can lead to another, and comprehend the value of goal-directed behaviour. Consequently, children acquire ‘self-instigatory insights’ (Snyder, 2000b, p. 28) which assist them to plan goal-directed behaviour and deal with obstacles that hinder the achievement of those goals. As children develop cognitively and move into adolescence and beyond, these self-instigatory insights improve.
Personality change

Much research attention has been devoted to studying continuity and change of personality across the life span (e.g. Branje, Van Lieshout, & Gerris, 2007; Caspi, Roberts, & Shiner, 2005; Costa & McCrae, 1997; Fraley & Roberts, 2005; Graziano, 2003; Roberts & DelVecchio, 2000; Roberts & Mroczek, 2008; Roberts, Walton, & Viechtbauer, 2006; Robins et al., 2002; Trzesniewski, Donnellan, & Robins, 2003). Fewer studies have focused entirely on the adolescent years (but see McCrae et al., 2002; Pullmann, Raudsepp, & Allik, 2006) and none has examined how perceived parental styles are related to the development of traits such as hope and self-esteem.

Personality change and stability can be studied with respect to mean-level change, rank-order change, individual differences in change and structural consistency (Roberts & Mroczek, 2008). In this paper we focus on the first three indices. These are important because although the mean levels of a personality variable may increase or decrease over time (absolute stability; Donnellan, Conger, & Burzette, 2007), one’s relative position within the group may remain largely unaltered (differential stability). Additionally, although mean levels of a trait may remain constant over time, it is possible that some individuals may be increasing and others decreasing in that trait resulting in zero mean change for the cohort on that variable.

Because the measurement of hope is relatively new (see Snyder et al., 2002), research into its developmental trajectory appears non-existent. Although self-esteem is relatively high during early childhood, decline sets in during late childhood and adolescence, before increasing again during adulthood (Robins & Trzesniewski, 2005; Trzesniewski et al., 2003). The decline is steepest for girls during the adolescent years (Robins et al., 2002). Likewise, a recent meta-analysis of gender differences in self-esteem found an overall effect size of 0.21 favouring boys, and the difference was largest during the adolescent years (Kling et al., 1999).

It is well established that personality characteristics are less stable among children and young adults compared to older adults (Fraley & Roberts, 2005; Roberts & DelVecchio, 2000). For example, whereas test–retest stability coefficients in adulthood range between .50 and .80, in adolescence they can be as low as .30 and .50 (Roberts & DelVecchio, 2000). Pullmann et al. (2006) found the average test–retest correlations for all of the Big Five dimensions to be .51 for ages 12–14 years, rising to .67 for those aged 16–18 years. In their meta-analysis Trzesniewski et al. (2003) found self-esteem stability coefficients for the adolescent years in the order of .48 with very little gender difference.

Factors associated with change

To date, most studies of personality change have tended to ignore factors that might be associated with change. Personality change could occur because of a number of factors, including intrinsic developmental factors (e.g. becoming more self-controlled as one matures), role changes (Branje et al., 2007), as well as biological and cognitive transitions (Donnellan, Trzesniewski, & Robins, 2006). Personality change may also be affected by one’s daily experiences. Thus, we differ in the extent that we are exposed to or expose ourselves to positive or negative daily events and we differ in how we appraise such events (Tennen, Affleck, & Armeli, 2005). For example, emotionally unstable individuals are more likely to experience ‘emotional spillover’ (p. 1473) and are less skilled at dealing with difficult situations.
Family life is an important context within which daily experiences occur and shape personality and patterns of family interactions over time give rise to significant memories for the child and adolescent (Roberts & Wood, 2006). These memories are reflective of one’s lived experience and they have the power to shape important aspects of the individual including personality and other behavioural features (McAdams & Adler, 2006; McAdams, Anyidoho, Brown, Huang, Kaplan, & Machao, 2004; Roberts & Wood, 2006). Consequently, we expect that an adolescent’s evaluation of interactions with, and their recollection of significant memories of their parents, will have important effects on all aspects of their development. These include behaviour, academic success, social and emotional development, as well as personality development.

A further factor that may be related to personality change is gender. Although it is clear that gender differences in personality do exist at various stages of the lifespan (e.g. Robins & Trzesniewski, 2005), the actual impact of gender on trajectories of development has not always been clearly articulated. This is surprising, as it has been documented that parents’ socialisation patterns of boys and girls differ (Eccles, Freedman-Doan, Frome, Jacobs, & Yoon, 2000; Leaper, 2002; Lytton & Romney, 1991; Siegal, 1987; Tenenbaum & Leaper, 2002, 2003). What influence this might have on possible gender differences in personality or on patterns of personality development is not clear. In the present study, we examined the extent to which gender related to stability and change in hope and self-esteem over time.

**Parental styles**

Baumrind (1971, 1978) spearheaded the development of research into the effects of parenting style on children and delineated a number of different child-rearing styles, namely, authoritarian, authoritative, permissive and rejecting–neglecting. By all accounts, the authoritative style is most effective for promoting overall levels of adjustment (Baumrind, 1991a,b, 1993). Authoritative parents are viewed as demanding but responsive, and as exercising firm, negotiated, control in a warm and loving environment. These parents praise their child for recognised qualities and competencies and the children, in turn, show the highest levels of internalisation of parental standards (Baumrind, 1993).

The other parenting styles are much less conducive to overall adjustment. Permissive parents believe that any form of control or discipline inhibits the child’s natural tendencies and prospects of self-actualisation. Baumrind concluded (1978, p. 244) that ‘the permissive parent sees him- or herself as a resource for the child to use as he wishes, but not as an active agent responsible for shaping and altering the child’s ongoing and future behaviour’. In contrast, authoritarian parents are more likely to resort to punitive discipline styles to control the behaviour of their children and they give their child little room for negotiation.

**Research evidence**

The impact of perceived parental styles has been examined in a wide variety of contexts and results are generally in line with Baumrind’s (1971) conclusions. Parenting styles have been found to be related to self-esteem (Buri, Louiselle, Misukanis, & Mueller, 1988), social and academic outcomes (Chen, Dong, & Zhou, 1997; Heaven & Ciarrochi, 2008), happiness (Furnham & Cheng, 2000), interpersonal competence (Lamborn, Mounts, Steinberg, & Dornbusch, 1991), drug use (Pilgrim, Luo, Urberg, & Fang, 1999), narcissism (Ramsey, Watson, Biderman, & Reeves, 1996) and anxiety and coping (Uwe, Hempel, & Miles, 2003).
Research into the effects of parental styles on personality change is much more limited, however. In one longitudinal study, Heaven and Ciarrochi (2006) found that perceived parental authoritativeness at Time 1 was negatively predictive of scores on Eysenck’s Psychoticism (P) dimension 1 year later, even after controlling for P at Time 1. Thus, over the course of 1 year, students from authoritative homes experienced decreases in antisocial tendencies relative to base-line levels.

Aims and rationale of study

Adolescence is a time of rapid change and development (Steinberg & Morris, 2001), a time of promise, a time of ‘disruption and transition’ (Larson, Moneta, Richards, & Wilson, 2002, p. 1152) with new demands placed on teenagers as well as their parents. Many parents find these years among the most stressful (Smetana et al., 2006) and, although most teenagers negotiate these transitions successfully, this period is also characterised by increases in negative emotional states (Ciarrochi, Heaven, & Supavadeeprasit, 2008; Larson et al., 2002) and declines in self-esteem (Robins & Trzesniewski, 2005).

Although research has been conducted into stability and change in self-esteem among adolescents, it is not clear whether dispositional hope shows similar stability and change. Thus, the aim of this study was to assess the developmental trajectories of hope and self-esteem during the early adolescent years and to examine the effects of gender and perceived parental styles on these trajectories. This report can be distinguished from our earlier work (Ciarrochi et al., 2007) in which we assessed the impact of hope, self-esteem and attributional style on emotional well-being and school grades over 12 months. A weakness of that report was its reliance on only two waves of data therefore limiting our ability to uncover trajectories of change. We formulated the following hypotheses:

First, following Pullmann et al. (2006), Roberts and DelVecchio (2000) and Trzesniewski et al. (2003) we expected rank-order stability for self-esteem and hope to be in the order of .50. Second, following Robins and Trzesniewski (2005), we expected our sample to show declines in mean self-esteem over time. Third, reflecting this decline, we also expected mean hope scores to show deterioration over time. Fourth, we expected perceptions of authoritative parenting to predict higher levels of mean hope and self-esteem across the 4 years, and perceptions of permissiveness and authoritarianism to predict lower levels of mean hope and self-esteem (Heaven & Ciarrochi, 2006; McDermott & Hastings, 2000; Snyder, 2000b). Finally, we explored the possibility that parenting style and gender would be associated with the slope (or changes) in hope and self-esteem.

METHOD

Participants

All of our high school students were participants in the Wollongong Youth Study which commenced when students entered high school. During the course of the 4 years of the study, 884 students (445 males; 437 females; 2 unreported) consented to participate in at least one wave of data collection and 493 students completed every wave of the study. The mean age of our respondents at Time 1 was 12.30 years. (SD = 0.49) and we surveyed the same cohort of students every 12 months. The mean age of the group was 15.43 years (SD = 0.53) at the fourth wave of data collection. The students attended five high schools in
a Catholic Diocese of New South Wales, Australia. The Diocese is centred on the city of Wollongong (population approximately 250,000), but also reaches into south-western metropolitan Sydney thereby ensuring a diverse socio-economic and cultural mix of participants. Our previous publications provide details of the socio-demographic characteristics of our sample (e.g. Heaven & Ciarrochi, 2007; Heaven & Ciarrochi, 2008).

Incomplete data in any given year ranged from 11.4% (hope Grade 8) to 19.4% (Grade 7 parenting). Some students missed school due to absences which included moving out or into the school district after the study had begun (and therefore not providing all of the measures). In addition, in each year, across the five schools, we estimate that at least 50 students were unavailable to participate due to conflicting school events (e.g. rehearsals or sporting events). Mean hope of the sample who completed all waves of data ($n = 493; M_{h7} = 4.72, M_{h8} = 4.50, M_{h9} = 4.37, M_{h10} = 4.22$) was similar to mean hope of the sample that included people who completed only some of the waves ($M_{h7} = 4.69, M_{h8} = 4.45, M_{h9} = 4.32, M_{h10} = 4.23$). Similarly, mean self-esteem of the sample who completed all waves of data ($n = 486; M_{s7} = 9.36, M_{s8} = 9.36, M_{s9} = 8.88, M_{s10} = 8.88$) was similar to mean self-esteem of the sample that included people who completed only some of the waves ($M_{s7} = 9.24, M_{s8} = 9.36, M_{s9} = 8.76, M_{s10} = 8.76$).

**Materials**

Our participants were provided with test booklets at each time of data collection. The following measures are of interest to this report:

1. **Parental authority questionnaire (PAQ; Buri, 1991).** This scale is one of the most widely used instruments of its type and was administered at Time 1 when students were in Grade 7. It assesses adolescents’ perceptions of parental permissiveness, authoritarianism and authoritativeness. Buri (1991) originally selected items following judgments by independent raters that the items represented Baumrind’s (1971) prototypes of the various parenting styles. The scale has demonstrated reliability and validity. For example, Peterson, Smirles, & Wentworth (1997) found that parents who obtained high scores on a measure of right-wing authoritarianism reported high levels of authoritarian parenting and were viewed by their children as being authoritarian.

Because of time and space pressures, we used a shortened version of the PAQ by randomly selecting 15 of the 30 items and then modifying each item slightly to suit 12-year olds. Each of the three parenting styles was measured for mother and father. Sample items are ‘My mother expects that we do what she says immediately and without asking questions’ (authoritarian), ‘My mother does not set many guidelines and expectations for my behaviour’ (permissive), ‘If I think a family rule is wrong, my mother will discuss it with me’ (authoritative).

We used principal axis factoring of mothers’ and fathers’ data to examine the structure of our short scales. Based on scree plots and eigenvalues, three similar and discernible factors were extracted for mother and father loading on the expected factors as suggested by Buri (1991). In the case of mother these factors explained 27.65% of the variance, whereas for father they explained 34.94% of the variance.

This short measure has demonstrated validity (Heaven & Ciarrochi, 2006; Heaven & Ciarrochi, 2008). Participants were asked to think of their mother when answering the first set of 15 items and then their father (repeat set of items). Each item was scored on a five-point Likert scale with strongly disagree (scored 1) and strongly agree (scored 5) at
the end points. Students’ perceptions of mother’s and father’s parenting styles were highly correlated (all $r$, $p < .001$). For example, for authoritarianism they exceeded .60, for authoritativeness they ranged from .54 (boys) to .57, and for permissiveness they ranged from .53 (for girls) to .61. We therefore decided to combine perceptions of mother’s and father’s parenting styles for all further analyses. Alpha coefficients for both parents combined were as follows: Permissiveness $= .71$; Authoritarianism $= .80$; Authoritativeness $= .76$.

2. **Trait hope measure** (Snyder et al., 2002). Participants completed the Children’s Hope Scale at times 1–4. This is a six-item scale that measures the agency and pathways aspects of hope. Sample items are ‘I think the things I have done in the past will help me in the future’ (agency), and ‘When I have a problem, I can come up with lots of ways to solve it’ (pathways). The measure has demonstrated reliability and concurrent validity (Snyder et al., 2002). Responses were indicated on a six-point Likert scale ranging from ‘none of the time’ (scored 1) to ‘all of the time’ (6).

3. **Self-esteem scale** (Rosenberg, 1979). This well-known measure of global self-worth has excellent reliability and validity and provides a good indication of general rather than specific views of the self (see Baumeister, Campbell, Krueger, & Vohs, 2003). Participants were asked to indicate their agreement with statements about the self. High scores indicate high self-esteem.

**Procedure**

We obtained school, parental and student consent to administer our questionnaires which were approved by the university ethics committee and the Schools Authority. We renewed consent for each year of the study. Student refusals were very low each year, seldom rising above 2–4% of the student body. We attribute our good retention rate to familiarity and ease with the researchers and the research process. Participants were invited to participate in a survey on ‘Youth issues’. Questionnaires were completed anonymously in class in the presence of one of the authors or a school teacher. Questionnaires were completed without discussion. Students were fully debriefed at the end of the testing session.

**Plan of analysis**

We used latent growth curve analysis to model intra-individual change in hope and self-esteem between Grades 7 and 10, and the relationship between change and parenting style and gender. Latent growth modelling (LGM) has several strengths. First, it allows one to assess whether there are reliable individual differences in change trajectory. Second, it allows one to explicitly model the role of measurement error in the specification of the individual change trajectory. Thus, one can obtain an estimate of the relations between parenting style, gender and true mean hope and self-esteem as well as the true rate of change in hope and self-esteem (Bub, McCartney & Willet, 2007). Finally, LGM allows one to model correlations between the intercept (mean level of hope and self-esteem) and slope (changes in hope and self-esteem).

We utilised a time averaged LGM. This model utilises orthogonal polynomials to represent time, and consequently should result in fewer computing problems than other models of time (e.g. the initial status model; Bentler, 2006). The intercept in this model represents hope and self-esteem averaged across the years. The linear component is represented by the following coefficient weights: $-3$ (hope 7), $-1$ (hope 8), 1 (hope 9), 3 (hope 10). We applied the same weights to self-esteem. The quadratic effect is captured
by the coefficient weights 1, -1, -1, 1. We trialled other common weighting procedures (e.g., 9, 1, 1, 9 for the quadratic effect) and found no differences in the key effects and no improvements in model fit. Both sex and parenting style were used to predict the intercept and slope parameters.

We utilised the full information maximum likelihood (FIML) method to deal with missing data. This method is often preferred to other methods on both theoretical grounds (e.g., it makes less restrictive assumptions) and empirical grounds (the method appears to work better than its alternatives) (Bentler, 2006; Enders and Bandalos, 2001). Preliminary analysis suggested that trait hope and self-esteem was negatively skewed across all 4 years (with Skew statistic ranging from -0.41 to -0.79). We thus utilised robust standard errors to test for significance in all analyses (Bentler, 2006).

RESULTS

Reliabilities of measures

Table 1 shows Cronbach’s coefficient alpha for hope and self-esteem across each grade level. Alpha coefficients were excellent and ranged between .79 and .90. It is also apparent that students became more consistent in their responses with increasing age.

Mean scores and correlations

Table 1 presents the descriptive statistics for the key variables in the study, broken down by gender. Boys and girls reversed their relative positions on the hope scale over time. Girls reported significantly higher mean hope than boys in Grade 7, but significantly lower mean hope than boys by Grade 10. There were no significant gender differences in mean self-esteem in Grade 7, but boys had significantly higher mean self-esteem in Grades 8–10, with the largest effect sizes in Grades 9 and 10. Girls perceived significantly more authoritative parenting at Grade 7. Following Kling et al. (1999), some of the effect sizes for self-esteem in Grades 9 and 10 can be regarded as moderate and are larger than the average effect size (0.33) for adolescents noted by Kling et al. in their meta-analysis. Our effect sizes are

Table 1. Mean scores and alpha coefficients on various measures across all school grades

<table>
<thead>
<tr>
<th>Gender</th>
<th>Hope 7</th>
<th>Hope 8</th>
<th>Hope 9</th>
<th>Hope 10</th>
<th>SE 7</th>
<th>SE 8</th>
<th>SE 9</th>
<th>SE 10</th>
<th>TAT 7</th>
<th>TAR 7</th>
<th>PER 7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.87</td>
<td>0.94</td>
<td>0.97</td>
<td>1.02</td>
<td>2.69</td>
<td>2.45</td>
<td>2.14</td>
<td>2.72</td>
<td>1.29</td>
<td>1.35</td>
<td>1.19</td>
</tr>
<tr>
<td></td>
<td>.79</td>
<td>.84</td>
<td>.85</td>
<td>.89</td>
<td>.81</td>
<td>.79</td>
<td>.82</td>
<td>.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>4.78</td>
<td>4.52</td>
<td>4.29</td>
<td>4.11</td>
<td>9.04</td>
<td>8.93</td>
<td>8.04</td>
<td>8.06</td>
<td>7.24</td>
<td>5.87</td>
<td>5.29</td>
</tr>
<tr>
<td></td>
<td>0.88</td>
<td>0.95</td>
<td>1.00</td>
<td>1.06</td>
<td>2.83</td>
<td>2.92</td>
<td>2.69</td>
<td>3.23</td>
<td>1.26</td>
<td>1.47</td>
<td>1.23</td>
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<td></td>
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<td>.87</td>
<td>.90</td>
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<td>.85</td>
<td>.87</td>
<td>.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F value</td>
<td>7.95**</td>
<td>3.31</td>
<td>0.56</td>
<td>10.06**</td>
<td>2.55</td>
<td>15.82***</td>
<td>42.59***</td>
<td>36.97***</td>
<td>4.68*</td>
<td>1.30</td>
<td>1.64</td>
</tr>
<tr>
<td>Cohen’s d</td>
<td>0.18</td>
<td>0.12</td>
<td>0.06</td>
<td>0.23</td>
<td>0.15</td>
<td>0.27</td>
<td>0.50</td>
<td>0.45</td>
<td>0.16</td>
<td>0.09</td>
<td>0.13</td>
</tr>
</tbody>
</table>

Note: Parenting measures were combined for males and females. Alpha coefficients are reported in the text. SE = self-esteem, TAT = authoritativeness, TAR = authoritarianism and PER = permissiveness.

*p < .05; **p < .01; ***p < .001.
comparable to that obtained in another Australian study, albeit with older adolescent respondents (Feather, 1991).

The means in Table 1 were estimated from the full dataset which included participants with some missing data. The same pattern of means emerged for the sub-sample of participants who completed all waves of data. Amongst full completers, girls’ hope \((n = 249; \text{means} = 4.8, 4.5, 4.3, 4.1)\) started off higher than boys \((n = 244; \text{means} = 4.6, 4.4, 4.4, 4.34)\) in Grade 7, but ended up lower in Grade 10. Also similar to Table 1, girls’ self-esteem \((n = 246; \text{means} = 9.2, 9.1, 8.2, 8.2)\) decreased from Grades 7 to 10, and was consistently lower than boys’ self-esteem \((n = 240; \text{means} = 9.5, 9.6, 9.7, 9.5)\).

In line with the first hypothesis, both hope and self-esteem showed moderate rank-order stability as evidenced by test–retest correlations. The mean correlation coefficient for hope was .52, whereas for self-esteem it was .54. These are a little higher than the stability coefficients suggested by Roberts and DelVecchio (2000) as well as Trzesniewski et al. (2003). Table 2 shows the correlations of hope and self-esteem with the parenting variables. Perceptions of authoritative parenting were significantly related to hope and self-esteem at each time point with the magnitude of correlations being higher for hope than self-esteem. There were no significant associations between the other parenting styles and hope. Perceptions of authoritarian parenting were significantly negatively related to low self-esteem in Grades 7 and 9.

Table 2 also shows the partial correlations between the parenting variables and self-esteem and trait hope controlling respectively for the same grade level of hope and self-esteem. Perceived authoritativeness was still significantly related to hope, but the correlations with self-esteem were reduced to non-significance. However, after controlling for hope, perceptions of authoritarianism were significantly, albeit weakly, related to low self-esteem in Grades 7–9.

We next examined the extent that self-esteem and hope correlated with each other. There was a moderate link between self-esteem and hope within each year \((r_7 = .39; r_8 = .40; r_9 = .50; r_{10} = .57)\). Correlated growth modelling revealed that there was a significant relationship between the linear slope of self-esteem and hope \((r = .72)\), which indicated that approximately 49% of the change in hope could be explained by change in self-esteem and vice versa.

### Table 2. Pearson correlations between parenting variables and hope and self-esteem at various grade levels (Partial correlations are shown in brackets)

<table>
<thead>
<tr>
<th>Variables and school grade level</th>
<th>Authoritativeness</th>
<th>Authoritarianism</th>
<th>Permissiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope 7</td>
<td>.35*** (.31**)</td>
<td>.02 (.10*)</td>
<td>−.05 (−.08*)</td>
</tr>
<tr>
<td>Hope 8</td>
<td>.29*** (.25***)</td>
<td>−.01 (.03)</td>
<td>−.04 (−.07)</td>
</tr>
<tr>
<td>Hope 9</td>
<td>.28*** (.25***)</td>
<td>−.04 (.01)</td>
<td>−.01 (−.04)</td>
</tr>
<tr>
<td>Hope 10</td>
<td>.18*** (.11***)</td>
<td>−.07 (−.07)</td>
<td>−.04 (−.05)</td>
</tr>
<tr>
<td>Self-esteem 7</td>
<td>.18*** (.03)</td>
<td>−.14*** (−.17***)</td>
<td>.05 (.08)</td>
</tr>
<tr>
<td>Self-esteem 8</td>
<td>.14*** (.02)</td>
<td>−.07 (−.08*)</td>
<td>.03 (.06)</td>
</tr>
<tr>
<td>Self-esteem 9</td>
<td>.13*** (−.00)</td>
<td>−.10* (−.08*)</td>
<td>.06 (.07)</td>
</tr>
<tr>
<td>Self-esteem 10</td>
<td>.16*** (.07)</td>
<td>−.03 (.02)</td>
<td>.00 (.03)</td>
</tr>
</tbody>
</table>

Note: Partial correlations for hope control for the same grade level of self-esteem. Partial correlations for self-esteem control for the same grade level of hope.

*p <.05; **p <.01; ***p <.001.
Main analyses

The first primary LGM analysis was used to reveal the individual differences in change over time that were present in the data (Bub et al., 2007), before including parenting style and gender as predictors. We evaluated the fit of a series of LGM models of increasing complexity. The first model assumed only an intercept and linear growth parameter, and resulted in modest fit for hope ($\chi^2 = 37.2, \text{DF} = 6, \text{NFI} = 0.98, \text{RMSE} = 0.096$). The next model included an estimate of quadratic growth, and significantly improved the Chi-square fit of both hope ($\chi^2 = 23.1, \text{DF} = 4, \text{NFI} = 0.98, \text{RMSEA} = 0.071$) and self-esteem ($\chi^2 = 40.04, \text{DF} = 4, \text{NFI} = 0.99, \text{RMSEA} = 0.08$). In the next model, we assumed a correlated disturbance between the intercept and slope parameter, and this significantly improved fit for both hope ($\chi^2 = 6.52, \text{DF} = 3, \text{NFI} = 0.99, \text{RMSEA} = 0.03$) and self-esteem ($\chi^2 = 27.95, \text{DF} = 3, \text{NFI} = 0.99, \text{RMSEA} = 0.077$). Finally, fit was not improved by assuming correlated disturbances between the quadratic term and the intercept term, all $p > .1$.

Supporting the second and third hypotheses, the model indicated that there was a significant linear decline in hope ($B = -0.078, \text{SE} = 0.005, t = -14.29, p < .001$) and self-esteem ($B = -0.008, \text{SE} = 0.001, t = -6.00, p = .002$). There was also a significant quadratic effect for hope ($B = 0.03, \text{SE} = 0.009, t = 3.1 p < .01$), suggesting that the decline in hope is lessened over time (see Fig. 1). Examining the variance components, there was evidence for significant individual differences in the intercept (hope: $2 = 0.533, \text{SE} = 0.03, t = 17.5, p < .001$; self-esteem: $2 = 0.035, \text{SE} = 0.002, t = 16.45, p = .002$), linear slope (hope: $2 = 0.018, \text{SE} = 0.003, t = 5.98, p < .001$; self-esteem: $2 = 0.001, \text{SE} = 0.00015, t = 6.85, p < .05$) and quadratic slope (hope: $2 = 0.023, \text{SE} = 0.009, t = 2.46, p < .05$; self-esteem: $2 = 0.003, \text{SE} = 0.001, t = 3.52, p < .05$). Finally, there was a significant covariance between the intercept and slope variances (hope: $B = 0.026, \text{SE} = 0.005, t = 5.03, p < .01$; self-esteem: $B = 0.001, \text{SE} = 0.00034, t = 2.95, p < .05$), indicating that adolescents who had a higher mean level of hope and self-esteem also tended to show less decline (or more increase) in these variables over time.

Figure 1. The relationships between authoritative parenting in Grade 7 and hope in Grades 7–10.
Finally, we examined whether parenting style and gender significantly predicted the intercept and slope parameters. There were no significant interaction effects involving parenting style and gender, \( p > .05 \). The only significant effects for hope involved family authoritative style and gender so we focus on these. Perceptions of authoritative parenting style had a significant effect on the intercept (\( B = 0.21, \text{SE} = 0.024, t = 8.694, p < .001 \)) whilst gender had a significant impact on the linear slope (\( B = -0.07, \text{SE} = 0.013, t = 5.52, p < .001 \)). There were no other significant effects involving gender and parenting style. Figure 1 illustrates the key effects. We substituted values of plus and minus one standard deviation into the LGM equations to generate this figure and the predicted lines (Aiken & West, 1991).

Perceptions of high parental authoritativeness were associated with higher trait hope across all years. Gender had a strong association with the slope, with greater decline in hope for females than males. Females were higher in hope than males in Grade 7, but lower in hope by Grade 10 (see also Table 2).

We focused on authoritarian parenting style in the self-esteem analysis, given that this parenting style was the only one linked to self-esteem in the correlational analysis (Table 2). Perceptions of authoritarian parenting style had a significant relationship with the intercept (\( B = -0.015, \text{SE} = 0.005, t = -3.02, p < .05 \)) whilst gender had significant relationships with the intercept (\( B = -0.084, \text{SE} = 0.013, t = -6.23, p < .05 \)) and the linear slope (\( B = -0.016, \text{SE} = 0.003, t = -4.911, p < .05 \)). On average, boys were therefore higher than girls in self-esteem across the years. There were no other significant effects involving gender and parenting style. Figure 2 illustrates the key relationships. Perceptions of authoritarian parenting were associated with lower levels of self-esteem across the 4 years. Females were generally lower than males in self-esteem (the intercept effect), and this difference increased over time.

**DISCUSSION**

The main aim of this longitudinal research was to model stability and change in hope and self-esteem over time and to determine whether gender or parenting style predicted these
trajectories of development. Not only did we find moderate test-retest stability over time, but we also found significant individual differences in mean hope and self-esteem. Overall, participants tended to decline in their expressed self-esteem and hope over the course of the study. However, girls' decline in hope was steeper than that of boys' so that the gender groups reversed their relative positions on this variable after 4 years. On self-esteem, girls had lower mean scores than boys in Grades 8–10. Those with higher levels of hope and self-esteem tended to show less decline over time.

Participants also reliably differed in the extent that they were on a downward trajectory (the linear effect) and differed in the extent that they rebounded from this trajectory (the quadratic effect). Perceived parenting style and gender were found to be related to mean levels of hope and self-esteem over time. Perceptions of parental authoritativeness were associated with high hope, whilst females showed a greater decline in hope. Perceptions of parental authoritarianism were related to low self-esteem with females manifesting lower self-esteem than boys. This gender difference in self-esteem increased between Grades 7 and 10.

Changes in hope

Our study is the first to demonstrate a significant decline in trait hope during the early years of adolescence with the effect being greater for those low on hope as well as for girls. Some researchers have alluded to the fact that the adolescent years bring about new and sometimes stressful challenges for the individual (Steinberg & Morris, 2001; Larson et al., 2002; Smetana et al., 2006). Our participants' decline in hope is consistent with these reports and may be reflective of the various challenges associated with this period of the lifespan.

We found a significantly greater rate of decline in hope for girls. Whereas girls had higher hope than boys in Grade 7, by Grade 10 the situation was completely reversed. How is this to be explained? One possibility is that as girls enter adolescence, they may come to believe the stereotype that they are less effective than boys. Research suggests that most parents encourage sex-typed behaviour (Lytton & Romney, 1991) with the father's behaviour being a significant factor in sex-typing and gender identity (Siegal, 1987). For instance, Tenenbaum and Leaper (2003) found that parents tend to underestimate their daughter's interest in science whilst overestimating their son's interest. Moreover, fathers use more cognitively demanding language when teaching their son a physics task than when teaching their daughter the same task. Thus, parents may unwittingly communicate and interact with their children in gender-biased ways thereby 'internalising the gender ideology of their larger culture' (Tenenbaum & Leaper, 2003, p. 35).

Most Western cultures profess to be non-sexist and, increasingly, young females are being encouraged into, and are successful at, traditionally male-dominated professions such as engineering, science and management. However, women are still largely responsible for the home and for child care (Leaper, 2002). Thus, young women are subjected to diverse and often contradictory messages about their role and place in society, messages that emanate from the family, the media and industry. Young women are encouraged to take on roles that gender-based stereotypes suggest they are not very good at (e.g. science, mathematics; Tenenbaum & Leaper, 2003). These contradictory messages might explain the observed reduction in trait hope.
Changes in self-esteem

We found girls to have lower self-esteem than boys in line with previous research (e.g. Robins et al., 2002; see also Figure 2). Robins and Trzesniewski (2005) suggest that a decline in self-esteem during adolescence may be due to cognitive development and the ability to compare oneself to one’s peers on a range of different dimensions as well as the receipt of negative feedback from others.

What may explain why girls declined but not boys? As mentioned above, girls might be susceptible to conflicting messages about their role in society. Clay et al. (2005) also found significant declines in girls’ self-esteem with gender differences being greatest in middle adolescence. They suggested that body image may be one possible explanation for this decline as body image is a core component of self-definition. They suggested that girls are socialised in a way that attaches great importance to a particular body shape and size and that this affects girls’ self-esteem. Although we are not able to verify this assertion, the possibility remains that the declines in hope and self-esteem observed in our study may be symptomatic of similar influences and these could include socialisation experiences as well as issues related to body image. Future studies should investigate these possibilities.

It is interesting to note that the developmental trends for self-esteem and hope were somewhat different. Girls tended to be lower than boys in self-esteem across all the adolescent years, which is consistent with past research (Kling et al., 1999; Robins et al., 2002). In contrast, girls were actually higher than boys in Grade 7 hope, and only by Grade 10 did they become less hopeful than boys. Thus, something appeared to change for girls between Grades 7 and 10. It may be that their environment went from encouraging hope to discouraging it (relative to boys). Or it may be that biological changes conferred some sort of advantage for boys over girls. It could be a combination of both of these factors. Future research is needed to pinpoint the environmental and biological changes that are associated with reductions in hope and self-esteem.

The effects of parenting styles

Perceptions of authoritative and authoritarian parenting were respectively related to high hope and low self-esteem over the course of the study. Even though hope declined over time, teenagers from authoritative families were at a distinct advantage regarding mean levels of hope. Likewise, self-esteem declined over time, but perceptions of low parental authoritarianism appeared to boost participants’ self-esteem, an effect that remained for the duration of the study. We found no evidence of perceived parenting style predicting changes in hope and self-esteem. Thus, whatever benefit perceived authoritative and low authoritarian parenting may have for the child, those benefits were already present in Grade 7 and persisted until Grade 10.

The chief characteristic of an authoritative style is that parents typically set clear limits for acceptable behaviour, but this is done lovingly and rationally and the parent shares with the child the reasons for particular rules and expectations (Baumrind, 1971). Our data suggest that the children of such families are more successful at setting achievable goals for themselves, finding the means to achieve those goals, and overcoming barriers to their goals (Snyder et al., 2002). Based on our results, we would argue that those youth reared by parents perceived to be authoritative are more skilled at agentic and pathways thinking than youth who reported other parental styles. Thus, our data accord with the views of
McDermott and Hastings (2000, p. 191) who claimed that ‘The high-hope home, then, has parents who model hopeful thinking and behaviours... Praise is given for effort... and negative criticism, if used at all, is directed toward the child’s action and not the child’.

In contrast, perceived authoritarian parenting was related to low self-esteem. Authoritarian parents tend to judge the behaviour and accomplishments of their children by an ‘absolute standard’ derived from and motivated by a ‘higher authority’ (Baumrind, 1971, p. 22). Naturally, children are not always able to meet exacting standards, yet authoritarian parents typically respond in a punitive and forceful manner in an attempt to shape children’s behaviour. Not surprisingly, children who grow up in such homes have been found to be less optimistic and to manifest high levels of internalised distress, relative to other children (Baumrind, 1991b). The research on parenting style and optimism is consistent with our findings that perceived authoritarianism relates to low self-esteem.

Thus authoritative parents differ from authoritarian parents in substantive ways. For instance, it is possible that authoritative parents, in setting boundaries for their child’s behaviour, emphasise the effects of unacceptable behaviour on others. However, when confronted by the unacceptable behaviour of their children, authoritarians probably focus on the failings of their child (the child’s ‘worth’), rather than the effects of the child’s behaviour. Thus, authoritative and authoritarian parents emphasise quite different features of the child and his/her behaviour. These ideas are speculative and future qualitative research is required to examine these hypotheses.

**Limitations and future directions**

It is possible that parental styles are a response to the child’s behaviour, rather than *vice versa* (Bell, 1968). However, as we do not yet have multiple measures of perceived parenting styles, we are not able to test this possibility. Another limitation of the present study is our reliance on self-reports, although it would be extremely difficult to obtain observer ratings of parental behaviours for such a large sample and without disrupting normal family interactions. Future research should therefore consider parental reports of family life. We relied on adolescents’ recalled memories of family life. McAdams and colleagues suggest that significant memories are a reflection of one’s life experiences and are a driving force that moulds important aspects of the individual, including personality (McAdams et al., 2004). One should therefore not underestimate the importance of such recalled memories.

Gray and Steinberg (1999) have shown that various dimensions of authoritativeness differ in their ability to predict outcomes. Thus, they noted differences in behavioural control, autonomy and perceptions of parental involvement. Future research might therefore need to explore the effects on hope and self-esteem of various dimensions, rather than categories, of parental styles. Furthermore, as it is our intention to continue tracking our participants, we will be in a good position to determine future trajectories of hope and self-esteem; that is, when do the declines in hope and self-esteem rebound? Is the observed gender difference maintained or reversed? We shall also be able to ascertain whether any rebound effect is associated with particular perceived parental styles. In conclusion, we have provided new data on the downward trajectory of hope and self-esteem in the first few years of high school and elucidated how gender and perceived parenting style are related to these trajectories.
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REFERENCES


