The interrelations among the perception of parental styles and psychological well-being in adolescence: A longitudinal study

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Abstract
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Keywords
styles, study, parental, longitudinal, perception, among, interrelations, adolescence, being, well, psychological

Disciplines
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The Interrelations among the Perception of Parental Styles and Psychological Well-Being in Adolescence: A Longitudinal Study

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Abstract

Background: This longitudinal study aims to examine the relationships between the perception of parental style, hope, self-esteem and Eysenck’s psychoticism dimension throughout the span of four years.

Methods: The sample was composed of 884 students from the Wollongong Youth Study, which commenced when students entered high school. During the course of the 4 years of the study, each participant completed the test booklets each time data was collected. Data was analyzed using one way ANOVA, Post-hoc test, Repeated Measurement, Pearson and Partial Correlation and General Linear Model in order to provide the aims of the study.

Results: The mean score of hope and self-esteem among adolescents from authoritative parents were higher from permissive and authoritarian families while the hope with a permissive perception were lower than those with authoritarian, and self-esteem was lower in the authoritarian group compared to the permissive group. Children with a permissive perception reported higher psychoticism compared to the two other. Significant correlations were found between authoritative perception and hope, self-esteem and psychoticism. Finally, hope, self-esteem and psychoticism showed a significant inter correlation in all of the parental styles.

Conclusion: Adolescents with the perception of each kind of parental style showed significant between group differences in psychological well-being throughout the four years of the study.

Keywords: Parental Style, Adolescent, Well-being

Introduction

Adolescence is described as a critical stage, which has been mentioned to have many challenges (1). Family has also been indicated to be the first environment that has the most important role in the shaping of the future behavior of children and their psychological well-being (2-4). Despite the fact that health-related behavior will be influenced more and more by peers as children turn to adolescence, their parents’ roles and their influence on these children do not reduce (5).

Back to literature, parenting styles are composed of two dimensions. Demandingsness applies to the extent to which parents show control demands and supervision, and responsiveness applies to the extent to which parents show affection, approval, warmth, and participation behaviors in their interaction with their children. A four-fold classification of child-rearing patterns has been described as authoritative (both demanding and responsive), authoritarian (demanding but not responsive), permissive (responsive but not demanding), and neglectful (neither responsive nor demanding) (6-7).

Most of the prior studies have assessed parenting styles by parental reports or used observational data (6-7). However, adolescents’ achievement appeared to be more related to their perceptions of their parents than to their parents’ own beliefs (8).
Related research around the effects of different parenting styles showed that authoritarian parenting style is associated with children’s passive attitudes (9-10), lower self-esteem (11), internalizing and externalizing problems (12-14), and lower self-esteem and hope (2) compared to other parenting styles, yet, higher marks in school adjustment and lower rates of school misbehavior and drug abuse in comparison with adolescents of neglectful families (15). In permissive families, no significant relationship has been reported between permissive parental style and low self-esteem or co-dependency in children. However, in comparison to children of authoritative parents, they are reported to be more involved in drug misuse (16), future anxiety, depression, and conduct disorder (17), and higher marks in Eysenck’s psychism among boys (2). Permissive parenting has also been noted as a risk factor for the development of antisocial behavior in children and adolescents (18-19).

In contrast, authoritative parental support, supervision, and caring manners are related to positive effects and psychological well-being (20-21), higher levels of adjustment (22), psychosocial maturity (23), psychosocial competence (24), less substance use (25-26), higher academic success (27), higher hope and self-esteem, and lower marks in psychism (2).

Numerous studies illustrated these personality changes during adolescence through to adulthood. Family has effects on shaping their personality, behavior (19), and psychological well-being, such as self-esteem and hope later on in life (2). Lower self-esteem has been related to anxiety and depression (28), high levels of sadness (29), poor academic outcomes (29-30), suicidal thoughts (31-32), eating disorders (33), as well as decreased happiness (34) and victimization (35). In contrast, higher self-esteem is reported to be associated with better academic outcomes (29-30) and coping strategies (28, 36), as well as better adjustment (37) and acceptance between peers (38). Individuals with higher hope have been reported to have better academic achievements, higher overall academic goals and success expectations (29, 39), better psychological adjustment, such as life satisfaction, less stressful life events, and internalizing/externalizing behavior (40). Moreover, hope has been linked to lower general maladjustment (41), suicidal ideation (42), and better psychosocial development (43), better coping styles (44), decrease in anxiety and depression (45). Psychoticism (P) is the third dimension in Eysenck’s personality classification, which anticipates poor adjustment and the potential of committing antisocial behaviors (46,47). Personality disorders (such as schizotypy and paranoia) and psychotic experiences (such as aberrant beliefs, aberrant visual experiences and thought transmission) are predicted by the P scale (46). There is not a lot of research about whether the P scale can predict the future adjustment and psychological well-being of adolescents, however, a bit of research has been done in order to show that the P dimension predicts mental illness in the future. High P scale scores have been illustrated to anticipate conviction after 5 years (48) and Joviality in boys (2). Also higher P scores were related to constant violent behaviors (48), higher interest for violent movies (49) and decreased hostility, sadness and fear among girls (2).

The aim of this study was to clarify whether changes in hope, self-esteem and psychoticism in adolescents across time are related to the perceived perception of parental styles in Grade 7. Does the strong perception of any of the parental styles anticipate any specific association between our variables? Hence, the research aims were to investigate the mean score stability of hope, self-esteem and psychoticism in the top 20% of three parenting groups across the four years. Furthermore, it aimed to investigate the effect of parental perception on hope, self-esteem and psychoticism throughout Grade 7 to Grade 10.

Materials and Methods

Participants
The participants of this longitudinal study were 884 students from the Wollongong Youth Study who entered high school in one of the Catholic Diocese of New South Wales (NSW), Australia, located in the city of Wollongong and extending into southwestern Sydney thereby ensuring a diverse sample. Our research samples included a variety of demographic indicators and racial backgrounds. At Time 1 (2003), the mean age of participants was 12.30.
years (SD = 0.49) and the same group was surveyed every 12 months. In the fourth wave of data collection (2007), the mean of the group was 15.43 years (SD = 0.49). The range of incomplete data in each year was from 11.4% (hope Grade 8) to 19.4% (Grade 7 parenting). Some students could not provide all the measures because they changed schools or they came to the school after the study had commenced. Participants were asked to complete the test booklets each time data was collected. The measurements that have been used are:

1. Parental Authority Questionnaire: PAQ is one of the most widely used instruments for assessing adolescents’ perception of parental styles (authoritarian, authoritative and permissive) and has demonstrated good validity and reliability (50-51). The scale was presented based on Baumrind’s prototypes of different parental authoritarian, authoritative and permissive styles. The questionnaire was given to the students at Time 1 when they were in Grade 7 but because of the time and space limitations, it was presented in a shortened version with 15 randomly chosen items out of 30. Mothers and fathers were measured in all of the parenting styles. The scoring of the items was based on the five-point Likert scale ranging from strongly disagree (scored 1) to strongly agree (scored 5). In order to examine this short scale, Heaven and Ciarrochi used principal axis factoring of the mother’s and father’s data and reported 27.65% of variance in the mother’s case, 34.94% of variance in the father’s case and had an acceptable validity (2,52). Since the correlation between a mother’s and a father’s perception of parental style were considerably high (all re, P<.001), we used the combined perception of mothers’ and fathers’ parental styles for the analysis. The alpha coefficient for the parents combined was .71 for permissiveness; .80 for authoritarianism; .76 for authoritativeness.

2. Trait Hope Measure: The Children Hope Scale is a six-item scale that measures the agency and pathways of hope aspects, which have been reported to have reliability and validity (44). Participants were asked to complete this scale during Grades 7-10 and their responses were measured on the six-point Likert scale, ranging from “none of the items” (scored 1) to “all the items” (scored 6).

3. Self-Esteem Scale: This is one of the best-known self-esteem questionnaires that has gained good support for validity and reliability, and measures the general view of participants about themselves (53). Participants were supposed to point out whether they agree with the statements regarding the scores, and higher scores show higher self-esteem. This measure was assessed in Grades 7-10.

4. Psychoticism: The 12 item scale of Corrula’s revision of the junior psychoticism scale (54) was given to participants during Grades 7-10. This scale has also been mentioned to differentiate high from low self-reported delinquents in Australia (2).

**Procedure**

The school, parents and students approved to administer all questionnaires, which were confirmed by the university ethics committee and the Schools Authority. Approval was renewed for each year of the study. There were not a lot of students who refused to cooperate, rarely increasing above 2–4% of the student body. Students were asked to participate in a survey on ‘Youth issues.’ During the course of the 4 years of the study, each participant completed the test booklets each time data was collected. They completed questionnaires anonymously and without discussion in class in the presence of one of the authors or a schoolteacher. Students were interrogated at the end of the testing session.

**Data Analysis**

All data was analyzed using the statistical package for social sciences (SPSS). The mean scores of variables were observed throughout the span of four years in all and 20% above of each parental group perception to see the stability or changes in variables over
time in all the participants. One way ANOVA was conducted to find significant differences between the mean scores of the groups of hope, self-esteem and psychoticism in each parental style each year. Then we calculated Post-hoc tests (Scheffe and Tukey) just for 20% above of each group to reveal the significant and non-significant mean differences between our main groups of study. Repeated Measurement was also done to find the significance of the differences between the means in the four years. Pearson Correlation between parental styles, hope, self-esteem and psychoticism during four years was applied to find the strength of parental styles’ relationship and our variables. In addition, Partial correlation was conducted between three different perceptions of parental style (authoritative, authoritarian and permissive), hope, self-esteem, and psychoticism in order to establish the presence of any interrelation between variables and tracking them over the four years of study. Moreover, Multivariate General Linear Model was conducted to see whether the perception of each parental style in Grade 7 had a significant effect on hope, self-esteem, and psychoticism in Grade 10.

Results

Descriptive Statistics
The mean score of 20% above of each parental style group was calculated and compared to the mean score of the participants as a whole. Also, one way ANOVA was done to see whether or not the mean scores between parental styles are significant. Furthermore, the same process has been done for all of the groups of parental styles to compare the means with the selected 20% above of each group.

Table 1: Descriptive statistic of all the participants of the top 20% of each group

<table>
<thead>
<tr>
<th></th>
<th>Grade 7 Mean</th>
<th>SD</th>
<th>Grade 8 Mean</th>
<th>SD</th>
<th>Grade 9 Mean</th>
<th>SD</th>
<th>Grade10 Mean</th>
<th>SD</th>
</tr>
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<td><strong>Hope</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authoritarian</td>
<td>27.6</td>
<td>5.5</td>
<td>26.08</td>
<td>5.62</td>
<td>25.1</td>
<td>5.89</td>
<td>24.33</td>
<td>6.49</td>
</tr>
<tr>
<td>Hope</td>
<td>26.72</td>
<td>5.58</td>
<td>25.84</td>
<td>5.86</td>
<td>24.61</td>
<td>6.4</td>
<td>24.31</td>
<td>7.14</td>
</tr>
<tr>
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<td>27.53</td>
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<td>26.87</td>
<td>5.4</td>
<td>25.87</td>
<td>5.92</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>16.02**</td>
<td></td>
<td>7.04**</td>
<td></td>
<td>9.02**</td>
<td></td>
<td>3.702*</td>
<td></td>
</tr>
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<td><strong>Sig</strong></td>
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<td></td>
<td>.001</td>
<td></td>
<td>.000</td>
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<td>.025</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authoritarian</td>
<td>8.3</td>
<td>2.62</td>
<td>8.68</td>
<td>2.64</td>
<td>8.18</td>
<td>2.59</td>
<td>8.2</td>
<td>3.003</td>
</tr>
<tr>
<td>Permissive</td>
<td>9.07</td>
<td>3.01</td>
<td>9.41</td>
<td>2.79</td>
<td>8.72</td>
<td>2.92</td>
<td>8.29</td>
<td>3.61</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>24.92</td>
<td></td>
<td>4.66</td>
<td></td>
<td>10.88</td>
<td></td>
<td>6.2</td>
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</tr>
<tr>
<td><strong>Sig</strong></td>
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<td></td>
<td>.010**</td>
<td></td>
<td>.000**</td>
<td></td>
<td>.002**</td>
<td></td>
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<td>Psychoticism</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Authoritarian</td>
<td>2.007</td>
<td>1.60</td>
<td>2.69</td>
<td>2.44</td>
<td>2.86</td>
<td>2.36</td>
<td>3.03</td>
<td>2.27</td>
</tr>
<tr>
<td>Permissive</td>
<td>2.65</td>
<td>2.24</td>
<td>3.46</td>
<td>2.72</td>
<td>3.28</td>
<td>2.79</td>
<td>3.6</td>
<td>2.86</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>25.21</td>
<td></td>
<td>15.94</td>
<td></td>
<td>10.94</td>
<td></td>
<td>11.08</td>
<td></td>
</tr>
<tr>
<td><strong>Sig</strong></td>
<td>.000***</td>
<td></td>
<td>.000***</td>
<td></td>
<td>.000***</td>
<td></td>
<td>.000***</td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05/ **p<0.01/ ***p<0.001/ One way ANOVA revealed the significant differences between the mean scores of hope, self-esteem, and psychoticism in different parental styles each year.

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Results are shown in Table 1 for all the participants in each parental style and Table 2 for the top 20%. 

**Correlations**

Pearson Correlation was conducted between three parental styles as shown in Table 2. An inter-correlation was done between self-esteem, hope and psychoticism during the four years in each parental style to see if our variables interact and to see the stability and changes of this interaction. The aim was to see the general interaction between the well-being variables regardless of parental styles. Psychoticism showed a significant increasing negative correlation with hope and self-esteem during four years in all three parental styles while hope and self-esteem showed increasing positive correlation across the time among three parental styles. It shows a significant interaction between well-being variables which has become stronger by the time \((P<0.05)\).

**Top 20% Results**

**Descriptive Statistic**

As it is demonstrated in Table 3, one way ANOVA revealed the significant differences in mean scores of hope, self-esteem and psychoticism between the top 20% of parental styles during the four years.

**Table 2: Correlation among the perception of parental styles**

<table>
<thead>
<tr>
<th></th>
<th>Permissiveness</th>
<th>Authoritativeness</th>
<th>Authoritarianism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissiveness</td>
<td>-</td>
<td>-.077*</td>
<td>-</td>
</tr>
<tr>
<td>Authoritativeness</td>
<td>-.077*</td>
<td>-</td>
<td>.188**</td>
</tr>
<tr>
<td>Authoritarianism</td>
<td>-.204**</td>
<td>.188**</td>
<td>-</td>
</tr>
</tbody>
</table>

*Correlation is significant at the level 0.05/ **Correlation is significant at the level 0.01

<table>
<thead>
<tr>
<th></th>
<th>Grade 7 Mean</th>
<th>SD</th>
<th>Grade 8 Mean</th>
<th>SD</th>
<th>Grade 9 Mean</th>
<th>SD</th>
<th>Grade10 Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope Authoritarian</td>
<td>28.6</td>
<td>5.2</td>
<td>26.75</td>
<td>5.62</td>
<td>25.61</td>
<td>5.78</td>
<td>24.33</td>
<td>6.7</td>
</tr>
<tr>
<td>Hope Permissive</td>
<td>26.68</td>
<td>5.7</td>
<td>25.29</td>
<td>6.16</td>
<td>24.63</td>
<td>6.57</td>
<td>23.66</td>
<td>7.14</td>
</tr>
<tr>
<td>Hope Authoritative</td>
<td>29.25</td>
<td>4.76</td>
<td>27.77</td>
<td>5.25</td>
<td>27.23</td>
<td>5.62</td>
<td>26.09</td>
<td>6.7</td>
</tr>
<tr>
<td>F Sig</td>
<td>13.49**</td>
<td>.000</td>
<td>6.04**</td>
<td>.003</td>
<td>5.71**</td>
<td>.004</td>
<td>5.03**</td>
<td>.007</td>
</tr>
<tr>
<td>Self-esteem Authoritarian</td>
<td>8.12</td>
<td>2.7</td>
<td>8.64</td>
<td>2.6</td>
<td>8.18</td>
<td>2.76</td>
<td>8.33</td>
<td>3.06</td>
</tr>
<tr>
<td>Self-esteem Permissive</td>
<td>8.92</td>
<td>3.23</td>
<td>9.3</td>
<td>2.97</td>
<td>8.51</td>
<td>3.09</td>
<td>7.83</td>
<td>3.7</td>
</tr>
<tr>
<td>Self-esteem Authoritative</td>
<td>9.76</td>
<td>2.32</td>
<td>9.67</td>
<td>2.41</td>
<td>9</td>
<td>2.16</td>
<td>9.29</td>
<td>2.66</td>
</tr>
<tr>
<td>F Sig</td>
<td>21.53**</td>
<td>.000</td>
<td>3.309**</td>
<td>.037</td>
<td>5.57**</td>
<td>.004</td>
<td>8.49**</td>
<td>.000</td>
</tr>
<tr>
<td>Psychoticism Authoritarian</td>
<td>1.59</td>
<td>1.66</td>
<td>2.42</td>
<td>2.27</td>
<td>2.4</td>
<td>2.02</td>
<td>2.74</td>
<td>2.2</td>
</tr>
<tr>
<td>Psychoticism Permissive</td>
<td>2.65</td>
<td>2.23</td>
<td>3.43</td>
<td>2.62</td>
<td>3.44</td>
<td>2.74</td>
<td>3.52</td>
<td>2.76</td>
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<tr>
<td>Psychoticism Authoritative</td>
<td>1.38</td>
<td>1.55</td>
<td>1.89</td>
<td>1.83</td>
<td>2.25</td>
<td>2.23</td>
<td>2.33</td>
<td>2.08</td>
</tr>
<tr>
<td>F Sig</td>
<td>24.27**</td>
<td>.000</td>
<td>18.1**</td>
<td>.000</td>
<td>10.12**</td>
<td>.000</td>
<td>8.35**</td>
<td>.000</td>
</tr>
</tbody>
</table>

*P<0.05/ **P<0.01/ ***P<0.001

Available at:  [http://ijph.tums.ac.ir](http://ijph.tums.ac.ir)
Post-hoc tests (Tukey and Scheffe) showed statistically significant differences between all groups (P<0.05) hence, no significant differences were observed between the mean score of permissive with authoritarian in hope in all grades and with authoritative group in grades 10, permissive with authoritarian and authoritative in self-esteem in grades 8 and 10 and with authoritative in grade 9 and permissive with authoritarian in grades 9 and 10 in psychoticism. Moreover, Repeated Measures was established to find any significant changes during the time and it showed a significant Linear decrease of hope (F=107.899, P<.001), self-esteem (F=25.974, P<.001) and psychoticism (F=95483, P<.001) during the four years in all parental styles.

Correlation
Table 4 illustrates the result of Pearson correlation among parental styles, hope, self-esteem and psychoticism during the four years. We also set the Partial Correlation to see the relation strength of well-being variables in each parental style during the four years.

Table 4: Correlation among parental styles, hope, self-esteem and psychoticism during the four years

<table>
<thead>
<tr>
<th>Permissiveness</th>
<th>Authoritativeness</th>
<th>Authoritarianism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope 7</td>
<td>-.053</td>
<td>.351**</td>
</tr>
<tr>
<td>Hope 8</td>
<td>-.041</td>
<td>.288**</td>
</tr>
<tr>
<td>Hope 9</td>
<td>-.009</td>
<td>.279**</td>
</tr>
<tr>
<td>Hope 10</td>
<td>-.043</td>
<td>.182**</td>
</tr>
<tr>
<td>Self-esteem 7</td>
<td>.049</td>
<td>.180**</td>
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<td>Self-esteem 9</td>
<td>.060</td>
<td>.125**</td>
</tr>
<tr>
<td>Self-esteem 10</td>
<td>.003</td>
<td>.159**</td>
</tr>
<tr>
<td>Psychoticism 7</td>
<td>.148**</td>
<td>-.271**</td>
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<tr>
<td>Psychoticism 8</td>
<td>.45**</td>
<td>-.255**</td>
</tr>
<tr>
<td>Psychoticism 9</td>
<td>.082*</td>
<td>-.266**</td>
</tr>
<tr>
<td>Psychoticism 10</td>
<td>.079</td>
<td>-.210**</td>
</tr>
</tbody>
</table>

**Correlation is significant at the level 0.01
*Correlation is significant at the level 0.05

The correlation between all variables in the four years was found to be significant except that no significant relationship was found among the authoritarian group between psychoticism in grade 9 and self-esteem in grade 7( P<0.05). There was also no significant relationship found among the permissive group between psychoticism in grade 9, self-esteem in grade 7, psychoticism in grade 7, self-esteem in grade 8( P<0.05). Finally, among the authoritative group, no significant relationship was found between psychoticism in grades 7 and 8 with self-esteem throughout the span of four years, and psychoticism in grades 9 and 10 with self-esteem in grades 7 and 8 (P<0.05).

General Linear Model (MANOVA)

To find out the prediction power of any type of parenting style, Multivariate Analysis Of Variance (MANOVA) was used to examine the effectiveness of parental styles on hope, self-esteem and psychoticism in Grade 10. Findings showed the significant main effects of authoritativeness on perception (Wilkas' Lambda = 0.924, F (16.04) P<0.001) and authoritarian perception (Wilkas' Lambda= 0.980, F (3.90) C<0.001) but there was no significant effect for a permissive perception of parental style. Authoritative parental perception had a significant effect on hope (P<0.001, partial η= 0.039, t = 4.85), self-esteem (P<0.001, partialη= 0.028, t = 4.1) and psychoticism in Grade 10 (P<0.001, partialη= 0.050, t = -5.51). While authoritarian perception demonstrated an effect on hope (P<0.005, partial η= 0.014, t = -2.86) and a low effect on psychoticism in Grade 10 (P<0.05, partial η=0.09, t = 2.29).

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Discussion

Significant differences were found in the hope, self-esteem and psychoticism means of each perception of the parental styles. Moreover, general changes were observed in our variables’ means during the time. All of the participants showed significant decreases in the mean of hope and self-esteem, and a general decrease in psychoticism during the four years. In addition, significant correlations were found between different parental styles as well as a significant inter correlation between hope, self-esteem and psychoticism. In addition, a positive correlation was illustrated between hope, self-esteem, and a negative correlation between hope and self-esteem with psychoticism. Finally, we found authoritativensness perception to have a significant positive effect on self-esteem and hope, and a negative effect on psychoticism, while authoritarianism showed to have a negative effect on hope and a positive effect on psychoticism in Grade 10. A permissive perception of parental style showed no significant effect on any variables after four years.

Effects of Parental Styles

All of the parental styles showed to be correlated with each other. Having the perception of authoritarianism showed a negative correlation with permissive perception, and a positive correlation with authoritative perception. The reason for this positive correlation is the overlap of the demanding behaviours, which are common between both styles. Both parents set rules for their kids but they differ in the way they are behaving with their children (i.e. with an authoritative style, it is in a discursive way while with an authoritarian style, it is rigid and strict). In addition, a negative correlation between permissive style and authoritative style demonstrates the importance of responsiveness of parents in adolescents’ perception.

Authoritativensness

Participants who were categorized as the top 20% of authoritative perception reported higher mean scores in hope and self-esteem and lower experiencing of psychoticism compared to the other two parental styles. In addition, a significant relationship between having the perception of authoritativensness with hope, self-esteem and psychoticism was observed during four years and a significant effect of authoritative parenting on hope, self-esteem and psychoticism after four years in Grade 10. In addition, it was founded that the amount of correlation between authoritativensness perception and psychoticism tended to increase during four years with a great effect size on psychoticism in Grade 10. These results are congruent with Baumrind’s idea (55) and the other research, which suggested a better psychological adjustment and well-being in adolescents from authoritative families (22). Present research results also suggest that since family is the first place that children learn how to think about themselves as in internalizing and externalizing thinking (40), and genetic and pathways thinking (44), children from authoritative families showed better scores in self-esteem and hope compared to other types of family styles.

Authoritarianism

Participants who were categorized as the top 20% of the group which perceived their parents to be authoritarian, reported lower self-esteem compared to the other two groups, lower hope with higher psychoticism compared to authoritative parenting style and higher hope with lower psychoticism compared to permissive parenting style during four years. A significant negative correlation between authoritarian style and self-esteem is congruent with previous research, which reported low self-confidence, self-worth and self-esteem in children from authoritarian families (2, 6, 11). No significant correlation was found in this research between authoritarianism perception with hope and psychoticism during the time. Hence, having low self-esteem compared to other children is an expected result of growing up in such a family, which showed to have still an effect on hope and psychoticism while also influencing self-esteem.

Permissiveness

Participants who were categorized as 20% above of the group with the parental perception of permissiveness, showed lower hope and higher psychoticism means compared to the other two groups and reported self-esteem measures higher
than the authoritarian group and lower than the authoritarian group. These results are corresponded with previous research, which reported no significant relationship with the permissive parental style and low self-esteem in children (50, 56). Also, higher reporting of psychoticism compared to the other two groups is also congruent with previous findings which indicated that children from permissive families are more involved in drug abuse, anxiety, depression, conduct disorder and antisocial behaviors than those from authoritative families (16-17,57).

**General Changes in Hope, Self-esteem and Psychoticism**

One of the significant changes was the general decrease in trait hope during the four years. Researchers showed adolescence as a challenging and stressful period in which adolescents experience an increase in their negative emotions (2, 4,5 8). The decrease in hope found during the first few years of adolescence corresponds with these findings. While hope tends to decrease during this time, self-esteem showed a small amount of change and remained more consistent during adolescence. This finding is congruent with previous studies, which showed overall stability or few changes in self-esteem during adolescence (59-60). There is not a lot of research explaining the reason for this stability. It is thought to be more of a genetic attribute as opposed to being affected by environmental factors in this stage of life (61). However, since this research was not based on finding the underlying cause of the changes or stabilities, more research should be done in the area of environmental and genetic factors to reveal the reason for the general decrease in hope and stability of self-esteem.

A general increase for psychoticism was observed during the time span in all the participants, which shows that adolescents’ experience of psychoticism tends to grow by the time they are reaching the middle stages of adolescence. Since it happens to all of the participants regardless of their parental perception, there must be some other important factors involved in this issue. Because on the other hand, self-esteem, hope and psychoticism, showed an escalating inter-relationship themselves which corresponded with prior research which reported the relationship between the increase of hope, self-esteem, better adjustment (37), and better psychological well-being (2), while an increase in psychoticism reported to be related to poor psychological well-being (52) and psychotic experiences (62). One of the important factors is the nature of adolescence, which is mentioned to be stressful and challenging. New areas open in adolescent life, which has dramatic effects on one’s total psychological well-being throughout adolescence (1). However, an authoritative parenting style showed to be significantly influential during this period to help their children pass this stage with better psychological well-being compared to other kids from other parenting styles.

**Limitations and Further Directions**

This study has been established based on a longitudinal study by Professor Patrick Heaven and Dr. Joseph Ciarrochi at University of Wollongong, Wollongong, Australia. Therefore, one of the limitations of this research was that the researcher was working on an archive set of data from the Wollongong Youth Study, so any new manipulations in the gathering of data and the basic research methods were impossible. Yet, all the possible and available information about the procedure, participants, ethics and data collecting were carefully gathered and mentioned. Furthermore, this research was only based on children’s self-report of the perception of their parental styles and not their parents’ perception of parenting. Hence, the current result established on adolescents’ recalled memory is that it might be influenced by memory biases.

**Conclusion**

Adolescents with the perception of each kind of parental style showed significant between group differences in psychological well-being throughout the four years of the study.
Ethical considerations

Ethical issues (Including plagiarism, Informed Consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc) have been observed by the authors.

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