The impact of parenting strictness on adolescents’ state anxiety and the moderation effect of parental marital quality

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Abstract: In recent years, the well-being of adolescents has received a large amount of attention from academic research and the society in general. A persistent pattern of state anxiety typically indicates serious concerns on mental health, and a failure to address the issue promptly could potentially result in mental disorders in adulthood. In the current research, I examine the potential role of parenting strictness on adolescents’ state anxiety and the moderating role of parental marital quality. A representative sample of Chinese adolescents were collected and their responses were analyzed with sequential regression analyses. The results have largely verified my hypotheses that parental strictness was positively related to state anxiety and that parental marital quality positively moderated such effect. The limitation and implications of the current research is discussed.

1. Introduction

In recent years, the wellbeing of adolescents has received substantial interests both in and outside academia. To create effective intervention programs aiming to promote mental health among adolescents, antecedents of mental disorders should be thoroughly investigated[3]. In the current research, I examine potential antecedents of adolescents’ anxiety, one of the most important indicators of psychological well-being. Severe and persistent anxiety, if not being treated promptly and effectively, could lead to mental disorders that seriously undermine individual’s cognitive and social activities[1]. Therefore, to identify the plausible causes of anxiety is of critical importance for research and practical programs that target to offer personalized aid for adolescents. In the presence of numerous life events and a rapidly changing environment, adolescents’ anxiety could have many plausible causes, such as interpersonal relations[5], peer conflicts, and academic performance. Among these risk factors, of particular significance is a host of factors related to parenting styles, given the abundant research that pointed out the central role of family environment in predicting the well-being of adolescents. More specifically, I will study a specific type of parenting style, namely parental strictness – the extent of strict parental control over children’s or adolescent’s behavior – and its impact on the anxious feelings of adolescents. Although previous research has well documented the positive effect of parental control on delinquency, surprisingly little research has directly linked parental control to the anxious feeling of adolescents. The current research is among the first attempts to address this puzzle. Moreover, the current research also tests the potential moderation effects of family environment on this relationship, thereby offering even more insights in the crucial impact of the family. Empirically, the paper has the potential to identify the adolescents at risk by looking into the interactive patterns of their family members. In what follows, I first introduce psychological research in parental strictness and the theoretical background as well as the empirical research that laid a solid foundation for the hypotheses. In the second and third part of the article, respectively methods and results are detailed. I conclude with a discussion on the limitation of the current research and the future research directions.

2. Theoretical background

A good amount of psychological research has investigated the relationship between parenting
style and anxiety. For example, it is well documented that perceived parental pressure correlates positively with trait anxiety among adolescents. When categorizing parenting styles into four distinctive types - authoritarian, authoritative, permissive and indifferent, a positive correlation has been established between the authoritarian parenting style and the trait anxiety. All of this research has suggested that the adolescents who come from families with rigorous discipline and strict parental control may face constant pressure in their education and social interaction, leading to a lower level of acceptance and a higher level of fear of failure. Therefore, I predict that parenting strictness is positively related to the anxiety levels of adolescents. Although the depression levels is always regarded as another important indicator of psychological well-being, its link with parenting strictness is more subtle, if not non-existent. I nevertheless include the depression levels as another dependent variable in the analysis, which serves as a point of reference in the current research context.

Family environment in general and marital quality in specific has been long seen as an important contextual variable in examining the developmental outcomes of adolescents. For example, using a 12-years longitudinal study, Amato, Loomis and Booth\[2\] found that levels of parental conflicts were negatively related to psychological well-being of adolescents. In essence, previous research treated parental conflicts as an indicator of coherence of the family, so that a lower level of parental conflicts typically corresponded to a higher level of agreement of the parents. Following such reasoning, in the context of parenting, I argue that a lower level of parental marital quality could potentially lead to more disagreements among the parents in parenting styles, thereby reducing the effect of parenting styles. In other words, I predict that parents’ marital quality would moderate the relationship between parental strictness and the anxiety levels among adolescent, in the sense that such relationship is stronger among those adolescents whose parents have higher marital quality.

3. Method

3.1. Participants and procedures

In the current study, a total of 50 participants from China were recruited from social media advertisement. Despite the fact that the advertisement contained explicit restriction on the age of participants – to fit in the scope of the current study, the age of eligible respondents should fall in the range of 10 years to 24 years, a criterion for defining adolescents that has been widely accepted in developmental psychology research – some participants nevertheless failed to comply with the restriction. As a result, 5 respondents who were elder than 24 years were removed from the final datasets that were used to conduct analyses subsequently. The remaining sample contains 5 boys and 40 girls, with an average age of 16.93 (SD = 1.29). The responses were free of missing entries.

3.2. Measurements

3.2.1. Anxiety and Depression

Both anxiety and depression were measured by the short-form version of the Depression Anxiety Stress Scales. Participants were instructed to indicate, on a 7-point Likert scale, to what extent would they describe themselves with one of the emotional status mentioned. Both scales enjoy sound reliability, with Cronbach’s Alpha equaling .88 for the anxiety scale and .77 for the depression scale.

3.2.2. Perceived parental strictness

Parental strictness was measured by the sub-scale of Perceived Parent-Child Relationships and Parental Monitoring. The sub-scale comprises 5 items and respondents were required to rate the extent to which each item described their daily encounters with their parents on a 7-point Likert scale. Good psychometric property was ensured in the scale, since empirically, Cronbach’s Alpha of the scale equaled .70.
3.2.3. Parents’ marital quality

Parents’ marital quality was measured by a single item, where the respondents were asked to rate their parents’ marital quality on a scale that ranges from 1 (the worst) to 7 (the best).

3.2.4. Control variables

Several background and demographic variables that have been verified to influence anxiety, depression and parental strictness were also added in the current analysis and served as control variables. These variables included the gender and age of the participants, the health status of both the fathers and the mothers as well as whether the fathers and the mothers were psychopaths. The questions on the health status and on the psychopathy symptoms of the parents were binary choices questions, such that only the individuals with no major health issues or psychopathy symptoms were recorded as “0”, and all other answers were recorded as “1”. Note that among all 45 participants, none of their mother were reported to be psychopaths even once in their lives; consequently, this variable was removed from the analysis because of its lack of variation.

3.2.5. Analysis strategy

To test the proposed hypotheses, a sequential regression analysis strategy was applied. More specifically, three models were built with increasing complexities for each of the two dependent variables, i.e., self-reported anxiety and depression. In other words, the two dependent variables were analyzed separately. In sequential testing, Model 1, also referred to as the baseline model, only included all control variables. The main effects were added in Model 2 while the interaction term were only included in Model 3.

4. Results

The means, standard deviations of all variables as well as the correlations between these variables are shown in Table 1, from which I could also derive some initial insights. First, not surprisingly, self-reported depression and anxiety are highly correlated ($r = .68$, $p < .05$), which replicates a consistent finding obtained across different disciplines of psychology. Moreover, in agreement with my hypotheses, parenting strictness was only related to self-reported anxiety ($r = .33$, $p < .05$) but not to self-reported depression ($r = .03$, n.s.). Last, marital quality of the parents was found to be negatively correlated with self-reported anxiety ($r = -.35$, $p < .05$), but less so with self-reported depression ($r = -.29$, $p < .05$).

Subsequently, sequential regression analyses were conducted to directly test the hypotheses. Table 2 and Table 3 report the results of the regression analysis with respectively self-reported depression and self-reported anxiety as dependent variables. From Table 2, it is clear that the main effect of parental strictness on self-reported depression was not significant ($b = .02$, 95% CI = [-.22, .27], n.s.; Model 2). As a result, we would not pursue further to test the moderation effect of marital quality. The results summarized in Table 3, however, depicted a totally different picture that concerned the effect of parental strictness on self-reported anxiety. More specifically, parental strictness has been found to be positively related to self-reported anxiety among adolescents ($b = .34$, 95% CI = [0, .68], $p < .05$; Model 2), and such effect was exaggerated when the marital quality of the parents were relatively high ($b = .29$, 95% CI = [.08, .49], $p < .05$; Model 3). In other words, interestingly, the excellent relationships of the parents would “fuel” the impact of parental strictness on adolescents’ self-reported anxiety.
Table 1 Means, standard deviations, and correlations with confidence intervals.

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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</thead>
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<td></td>
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<td></td>
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<td>1.47</td>
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<td>3.54</td>
<td>1.29</td>
<td>.03</td>
<td>.33*</td>
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<tr>
<td>strictness</td>
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<td>(.26..32)</td>
<td>.04</td>
<td></td>
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<td>4. Marital</td>
<td>5.24</td>
<td>1.67</td>
<td>-.29</td>
<td>-.35*</td>
<td>-.06</td>
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<tr>
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<td>(.34..00)</td>
<td>(.39..33)</td>
<td>(.00..37)</td>
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<td></td>
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<td>5. Father</td>
<td>0.02</td>
<td>0.15</td>
<td>.33*</td>
<td>.30*</td>
<td>.05</td>
<td>-.29*</td>
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<td>(.04..00)</td>
<td>(.24..34)</td>
<td>(.01..37)</td>
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<td>6. Age</td>
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<td>-.06</td>
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<td>.06</td>
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<td>7. Gender</td>
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<td>.09</td>
<td>.10</td>
<td>.12</td>
<td>-.05</td>
<td>.02</td>
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<td></td>
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<td>(.38..38)</td>
<td>(.38..38)</td>
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<td>8. Father</td>
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<td>1.17</td>
<td>-.22</td>
<td>-.12</td>
<td>.08</td>
<td>.30*</td>
<td>-.22</td>
<td>.11</td>
<td>-.20</td>
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<td></td>
<td>(.48..18)</td>
<td>(.40..38)</td>
<td>(.01..38)</td>
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<td>9. Mother</td>
<td>5.82</td>
<td>1.01</td>
<td>-.38*</td>
<td>-.31*</td>
<td>.00</td>
<td>.45*</td>
<td>-.28</td>
<td>.06</td>
<td>-.15</td>
<td>.74*</td>
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<td>(.50..30)</td>
<td>(.55..30)</td>
<td>(.19..53)</td>
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</tr>
</tbody>
</table>

Note. M and SD are means and standard deviations of variables in question, respectively. Values in square brackets indicate the 95% confidence interval for parameter estimations.  
* p < .05. ** p < .01.

Table 2 Regression results using self-reported anxiety as the dependent variable.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>b</th>
<th>95% CI [LL, UL]</th>
<th>r</th>
<th>Fit</th>
<th>Difference</th>
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</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>3.31</td>
<td>[-0.75, 7.37]</td>
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<td>R² = .134</td>
</tr>
<tr>
<td>Father psychopath</td>
<td>1.95</td>
<td>[-0.09, 4.00]</td>
<td>.33*</td>
<td></td>
<td>95% CI [.00..27]</td>
</tr>
<tr>
<td>Father health</td>
<td>-.14</td>
<td>[-.41, .13]</td>
<td>-.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.02</td>
<td>[-.21, .25]</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.10</td>
<td>[-1.06, .85]</td>
<td>-.01</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| (Intercept)           | 2.97  | [-1.30, 7.23]  |       |             | R² = .155  |
| Parental strictness   | 0.02  | [-0.22, 0.27]  | .03   |             | ΔR² = .021 |
| Marital quality       | -.09  | [-0.30, 0.11]  | -.29  |             | 95% CI [.00..25] CI[-.06..10] |
| Father psychopath     | 1.59  | [-0.62, 3.80]  | .33*  |             |            |
| Father health         | -.11  | [-0.40, 0.18]  | -.22  |             |            |
| Age                   | .03   | [-0.22, 0.28]  | .01   |             |            |
| Gender                | -.04  | [-1.04, 0.96]  | .01   |             |            |

Note. b represents unstandardized regression weights, while r represents the zero-order correlation. The pair of LL and UL indicate the lower and upper limits of a confidence interval for the estimate under consideration.  
* p < .05. ** p < .01.
Table 3 Regression results using self-reported anxiety as the dependent variable.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>b</th>
<th>95% CI</th>
<th>r</th>
<th>Fit</th>
<th>Difference</th>
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</thead>
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<td>Model 1</td>
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<tr>
<td>Intercept</td>
<td>4.83</td>
<td>[1.12, 10.91]</td>
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<tr>
<td>Father psychopath</td>
<td>-0.03</td>
<td>[-0.13, 0.00]</td>
<td>-0.30</td>
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<tr>
<td>Father health</td>
<td>-0.07</td>
<td>[-0.42, 0.28]</td>
<td>-0.12</td>
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</tr>
<tr>
<td>Age</td>
<td>0.49</td>
<td>[-0.95, 1.92]</td>
<td>-0.06</td>
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<tr>
<td>Gender</td>
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<tr>
<td>Model 2</td>
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<tr>
<td>Intercept</td>
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<td>[-3.07, 8.69]</td>
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<tr>
<td>Marital quality</td>
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<td>[-0.53, 0.04]</td>
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<td>Model 3</td>
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<td>Parental strictness</td>
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<tr>
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<td>[-0.24, 0.52]</td>
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<tr>
<td>Age</td>
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<tr>
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<td>0.46</td>
<td>[-0.80, 1.73]</td>
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</tbody>
</table>

Note. b represents unstandardized regression weights, while r represents the zero-order correlation. The pair of LL and UL indicate the lower and upper limits of a confidence interval for the estimate under consideration.

\* p < .05. ** p < .01.

5. Discussion

The current research is of course not without limitations. First and foremost, limited by the cross-sectional design of the current research, hardly any causal relationships could be detected. I therefore encourage future research to adapt a longitudinal design such that the potential causal effects of parental strictness could be possibly investigated. Another important shortcoming is that the sample is restricted in its small size. Ideally a replication study could be carried out with larger sample to verify the current findings. Last, the sample used in the current study only include individuals in middle adolescence, it will be important and interesting to find out whether the current findings could be generated to other stage of adolescence.

6. Conclusion

In the current research, in accordance with my hypotheses, I have found that parental strictness are positively related to the anxiety levels of parents and that higher levels of parental marital quality would exaggerate such effect. The interesting adverse effect of the parental marital quality—higher parents’ marital quality, in some circumstances, could lead to higher anxiety levels of adolescents – is somewhat a surprise finding that requires future research.

References


