A Comparison of Selective Attentions in Equilibrium-oriented and Non-equilibrium-oriented Parent-Child Relationship Patterns in University Students

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Abstract: Introduction and objectives: since the relationship patterns play an important role in the future life of children, the present study aims at studying the effects of equilibrium-oriented and non-equilibrium-oriented (freedom-oriented, security-oriented) patterns in parent-child relationships on the basis of selective attention (focus) in Sabzevar State University. Methodology: to this end, a sample entailing 367 students of Medical University and Hakim Sabzevari University in Sabzevar were randomly selected. The required data were collected using Bagheri's parent-child relationship patterns questionnaire and d2 test. Findings: the ANNOVA revealed that the students who follow equilibrium-oriented relationship with both parents significantly enjoy a higher selective attention than the ones following non-equilibrium-oriented relationship with both parents. In addition, the efficiency (information processing speed) is significantly higher in these students. Conclusion: it could therefore be said that the parents grow purposeful children using a higher selective attention, which serve as a prerequisite to purposeful activities, by paving the grounds for the formation of rules, experience, individuality, and self-acceptance in children.


Keywords: child-parent relationship pattern, selective attention, university student

1. Introduction

Family has been regarded as the most crucial social entity in human societies which plays an important role in shaping and developing personality and later adaptability of the individual to the society. Many sociologists and psychologist alike believe that social deviances and personality disorders should be traced back to the early life in the family.

The role of the family becomes more evident in determining the quality of personality development if the roots of many of the psychological disorders and diseases are explored, (Heidarnia, 2005).

Family education is among the most influential and permanent elements affecting various aspects of an individual’s life such as changes in cognitive skills (Downs, 2008; Stevens & Neville, 2008), identity formation (McBrige & Rane,1997), sexual identity, and the quality of sexual life in adolescence (Losh-Hasselbar, 1987) among others.

Since the late 1980’s, research has shown that unlike the dominant patterns in parenting, child growth is not merely a product of the parental attitude and educative behavior. It is rather a bidirectional relationship (Grusec & Goodnow, 1994; Kuczynski, 2003) influenced by parent-child interactions. Thus, the child actively participates in the changes brought to him/her (Lewis, 1997). The difference between this new approach and the old parenting approach is reflected in the use such terminologies as ‘parent-child interactions’ and ‘parent-child relationships’.

The present study benefits the new approach. The parent-child relationship pattern is a theoretical model accounting for the influence of the characteristic features dominating parent-child relationships affecting directionality and purposeful activities of the child (Bagheri, 2012). In this model, the directionality and purposeful activities of the child are influenced by four variable forming its main four dimensions including (1) values and beliefs, (2) reinforcement in gaining experience, (3) individuality, and (4) self-acceptance. On the two ends of each dimension lie the two extremes of each continuum with each damaging the purposefulness and the directionality of the behavioral and psychological system of the individual. At the center of these four dimensions lies the equilibrium which represents the ideal and normal form of these variables.

Therefore, there will be three main models including security-oriented, freedom-oriented, and equilibrium-oriented models (Bagheri, 2012). The security-oriented model: it activates avoidance motivation (Baumeister, 2011), the The dominance of which causes purposeful activities as originating from fear and avoidance of unpleasant outcomes (Bagheri, 2012).
The freedom-oriented model: it activates approach motivation (Baumeister, 2011). The children brought up according to this model only undertake activities and duties which they enjoy. The equilibrium-oriented model: in such a model of parent-child relationship, it is expected that both motivation systems, i.e. avoidance and approach motivations, be grown in children almost to the same extent. In other words, children brought up within this model, are capable of observing dos and ‘don’ts and can control their interests. They also realize their own needs and interests and are able to define their goals accordingly. Children treated based on this model have relatively a higher ability to both attract and repel others in their relationships (Bagheri, 2012). One assumption in this model is the selective attention among the purposeful requirements which could grow in the family.

Selective attention is one of the main psychological functions investigated by many general and clinical psychologists.

Selective attention (focus): selective attention is the ability to focus on particular pieces of information while ignoring others. This plays a significant role in the central performance system (Shasavarani et al, 2010).

There is a relationship between lack of attention or its dysfunction and such problems as low educational efficiency, career failure, impulsivity, looking for excitement, looking for variety, excessive sexual relationships, addiction to computer games and internet and many other behaviors which lead to protraction of struggles and perplexity in life. These problems have urged the psychologists to present more precise theoretical models of attention through more extensive studies (Bagheri, 2012).

Many studies have been carried out on selective attention an example of which is the role of selective attention in laying the educational foundations (Stevens & Bavelier, 2012).

Despite many studies conducted on parenting methods, it seems that selective attention has not received due attention. The selective attention variable exerts a strong influence on child’s personality development and can greatly improve his/her future performance.

Regarding the importance of selective attention in personality development and its function in future performance of children, the present study is an attempt to investigate the relationship between parent—child relationship and selective attention. The parent-child relationship pattern is considered as an external (family) factor in the formation of selective attention.

2. Methodology

As this study aims at comparing the retrospective parent-child relationship patterns and selective attention; therefore, it is a comparative-analytical study.

The sample of the study involves all the students studying in Sabzevar Medical University and Hakim Sabzevari University.

The overall number of the students is 8324 out of whom 1069 students study medical sciences and 7255 study at majors other than medicine. The volume of the sample is 367 with an error of 0.05.

The sampling was a multi-stage one. Demographic questionnaires were first given to ten accessible students at each dormitory. To undergo d2, the administrator gave 20 seconds to each subject to fill each line as quickly and correctly as possible having read the standardized instructions of the test and the way to carry it out.

3. Instrumentation

The data of the study were collected through Bagheri’s ‘parent-child relationship pattern’ questionnaire and d2 test.

Bagheri’s ‘parent-child relationship pattern’ questionnaire entails 80 questions devised separately for the father and the mother as a five-item Likert scale (strongly disagree, disagree, neutral, agree, and strongly agree).

Three parent-child relationship patterns can be drawn from the questionnaire including freedom-oriented, control-oriented, and equilibrium-oriented (Bagheri & Ghaffari, forthcoming).

The Cronbach alpha for the security-oriented style for the parents is 0.92 and for the freedom-oriented style is 0.95. The Cronbach alpha for the whole questionnaire is 0.66. It should be noted that since the security-oriented and freedom-oriented styles form two outward dimensions out of the four dimensions of the model, they oppose each other. It is then logical that the Cronbach alpha value of the questionnaire be smaller than the two style.

Factor loadings were not smaller than 0.6 in any of the subscales, and most of the factor loadings stood between 0.75 and 0.85 (Bagheri & Ghaffari, forthcoming).

Moreover, d2 test was used in this study in order to measure the subjects’ selective attention (focus). The 9th and newest version of the test was introduced in 2002 and its norm-detection ranges from 9 to 60 year-old subjects. The new norm detection was presented by Berlin University from 1999 to 2000. The test was normalized by Bagheri (Bagheri, 2011).
Reliability: the recent findings in Germany and the findings in Iranian normalized society indicate the high reliability of d2 test scales for all the age groups. The indices obtained from the internal consistency of the previous studies and Tehran’s normalized sample are larger than 0.9 which indicates the high reliability of the test (Bagheri, 2011).

4. Data analysis

The data gathered were analyzed using inferential and descriptive statistics. For the descriptive statistics, descriptive statistics parameters table was used. The students were categorized into three groups: in group I both parents were equilibrium-oriented, in group II both parents were non-equilibrium-oriented, and group III (heterogeneous) had one equilibrium-oriented and one non-equilibrium-oriented parent. The tests used in data analysis are ANNOVA, Tukey test, and Kruskal-Wallis test which is used to compare the selective attention among the students.

As could be seen in the table, the numbers for the male and female subjects are not the same, but the differences between the three groups (non-equilibrium-oriented, heterogeneous, and equilibrium-oriented) are not significant either. More than 88% of the subjects were studying at BA level. The results show that the differences between the three groups (non-equilibrium-oriented, heterogeneous, and equilibrium-oriented) are significant regarding the educational level of the subjects.

5. Descriptive data
Table 2 Descriptive parameters of the students’ selective attentions in three groups of non-equilibrium-oriented, heterogeneous, and equilibrium-oriented parents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Number</th>
<th>Average</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negligence</td>
<td>Equilibrium</td>
<td>105</td>
<td>37.23</td>
<td>28.65</td>
<td>1</td>
<td>151</td>
</tr>
<tr>
<td></td>
<td>Heterogeneous</td>
<td>39</td>
<td>39.21</td>
<td>27.98</td>
<td>3</td>
<td>124</td>
</tr>
<tr>
<td></td>
<td>Non-equilibrium</td>
<td>217</td>
<td>41.47</td>
<td>31.36</td>
<td>2</td>
<td>159</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Equilibrium</td>
<td>105</td>
<td>520.90</td>
<td>87.85</td>
<td>343</td>
<td>653</td>
</tr>
<tr>
<td></td>
<td>Heterogeneous</td>
<td>39</td>
<td>522.56</td>
<td>83.62</td>
<td>328</td>
<td>653</td>
</tr>
<tr>
<td></td>
<td>Non-equilibrium</td>
<td>217</td>
<td>495.66</td>
<td>90.95</td>
<td>263</td>
<td>653</td>
</tr>
<tr>
<td>Selective Attention</td>
<td>Equilibrium</td>
<td>105</td>
<td>194.66</td>
<td>45.08</td>
<td>122</td>
<td>416</td>
</tr>
<tr>
<td></td>
<td>Heterogeneous</td>
<td>39</td>
<td>191.28</td>
<td>39.23</td>
<td>100</td>
<td>281</td>
</tr>
<tr>
<td></td>
<td>Non-equilibrium</td>
<td>217</td>
<td>177.33</td>
<td>40.18</td>
<td>80</td>
<td>291</td>
</tr>
</tbody>
</table>

As could been seen in table 2, the students having non-equilibrium-oriented parent-child relationship patterns are more negligent and enjoy less efficiency and selective attention than the other groups.

To check this hypothesis and study the differences between the students’ selective attention in the three groups of non-equilibrium-oriented, heterogeneous, and equilibrium-oriented parents, ANNOVA was used. Before presenting the hypotheses and testing them, the consistency of the variances was confirmed using Lord’s test.

Table 3 ANNOVA results: a comparison of negligence, efficiency, and selective attention between the three groups

<table>
<thead>
<tr>
<th>Component</th>
<th>Source of changes</th>
<th>Squares added</th>
<th>Freedom</th>
<th>Squares average</th>
<th>F</th>
<th>Significance</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negligence</td>
<td>Between-group variance</td>
<td>1300.04</td>
<td>2</td>
<td>650.02</td>
<td>0.71</td>
<td>0.492</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>Within-group variance</td>
<td>327502.93</td>
<td>358</td>
<td>914.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall variance</td>
<td>328802.97</td>
<td>360</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficiency</td>
<td>Between-group variance</td>
<td>57208.08</td>
<td>2</td>
<td>28604.04</td>
<td>3.59</td>
<td>0.029</td>
<td>0.020</td>
</tr>
<tr>
<td></td>
<td>Within-group variance</td>
<td>2855037.08</td>
<td>358</td>
<td>7974.69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall variance</td>
<td>2912245.16</td>
<td>360</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selective</td>
<td>Attention Between-group variance</td>
<td>23650.07</td>
<td>2</td>
<td>11825.03</td>
<td>684</td>
<td>0.001</td>
<td>0.037</td>
</tr>
<tr>
<td>Selective</td>
<td>Attention Within-group variance</td>
<td>61857.32</td>
<td>358</td>
<td>1727.73</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selective</td>
<td>Attention Overall variance</td>
<td>64177.39</td>
<td>360</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As could be seen in the table, the significance for negligence is higher than 0.05. Thus, taking the obtained F (0.71) into account, there is no significant relationship between the students’ negligence averages in the three groups. Furthermore, the significance for efficiency is smaller than 0.05. Therefore, taking the obtained F (3.59) into account, there is a significant relationship between the students’ efficiency averages in the three groups.

Tukey test was used to determine the significance of the differences between different groups. The results of this test are presented in Table 4. Finally, Table 3 reveals that the significance for selective attention is smaller than 0.001. Thus, taking the obtained F (6.84) into account, there is a significant relationship between the selective attention averages in the three groups (non-equilibrium-oriented, heterogeneous, and equilibrium-oriented parents).
equilibrium-oriented, heterogeneous, and equilibrium-oriented).
Therefore, to determine the significance of the differences between the groups, Tukey test was used. The results of this test are presented in the following table.

<table>
<thead>
<tr>
<th>Component</th>
<th>Variables</th>
<th>Difference in averages</th>
<th>SEM</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>Equilibrium-heterogeneous</td>
<td>1.659</td>
<td>746.16</td>
<td>0.995</td>
</tr>
<tr>
<td></td>
<td>Equilibrium-nonequilibrium</td>
<td>25.241</td>
<td>616.10</td>
<td>0.047</td>
</tr>
<tr>
<td></td>
<td>Heterogeneous-nonequilibrium</td>
<td>26.901</td>
<td>16.746</td>
<td>0.195</td>
</tr>
<tr>
<td>Selective attention</td>
<td>Equilibrium-heterogeneous</td>
<td>3.375</td>
<td>7.795</td>
<td>0.902</td>
</tr>
<tr>
<td></td>
<td>Equilibrium-nonequilibrium</td>
<td>17.330</td>
<td>4.941</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Heterogeneous-nonequilibrium</td>
<td>13.955</td>
<td>7.229</td>
<td>0.132</td>
</tr>
</tbody>
</table>

The results presented in Table 4 show that the students who follow the equilibrium pattern with both parents enjoy a higher efficiency in comparison to the students who follow the non-equilibrium pattern; this difference is significant at $p \leq 0.05$. Moreover, the students who follow the equilibrium pattern with both parents enjoy a higher selective attention in comparison to the students who follow the non-equilibrium pattern; this difference is significant at $p \leq 0.001$. But, there is no significant difference between the students who follow the heterogeneous pattern (with one equilibrium-oriented and one nonequilibrium-oriented parent) and the two other groups i.e. the students whose parents are both equilibrium-oriented or both nonequilibrium-oriented.

6. Concluding remarks

This study was carried out to determine the effect of equilibrium-oriented and nonequilibrium-oriented (freedom-oriented, security-oriented) parent-child relationship patterns on the selective attention (focus) of the state universities in Sabzevar. One of the main assumptions in this model is that one of the necessities of forming purposeful activities which may find their way to develop is the psychological function. The normal development of this function is possible in the equilibrium-oriented pattern. On the contrary, nonequilibrium-oriented models are damaged as the prerequisites such as focusing capability cannot be reinforced and developed due to the damage in the formation of the four main conditions necessary for the development of purposeful activities.

In line with this assumption, the findings of this study show that selective attention in students who follow the equilibrium-oriented pattern with both parents (the father and the mother) is significantly higher than those who follow the nonequilibrium-oriented (security-oriented, freedom-oriented) pattern. In addition, the efficiency (information processing speed) of the students who follow the equilibrium-oriented pattern with both parents is higher in comparison to the students who follow the nonequilibrium-oriented pattern with both parents.

The results coming from the studies conducted on the relationship between parenting methods and attention disorder and hyperactivity reveal that the authoritative parenting reduces the signs of inattention and impulsivity and increases the attention span. This is in line with other research including Ghani Zadeh and Shahrivar (2005), Rajabloo (2006), Danforth et al (2006), and Bahmani and Alizadeh (2011). Since authoritative parenting matched the equilibrium-oriented parent-child relationship pattern, the findings could be generalized.

It could be said that since children who are brought up in an equilibrium-oriented environment have been brought up with almost the same levels of avoidance and approach motivations: they are both capable of following the needs and controlling the impulses and interests on the one hand, and are familiar with their own interests and are capable of defining and following their own goals on the other. These abilities affect the attention span in two ways: firstly, defining a goal requires its selection and maintenance in the working memory; without such an ability,
selecting a purposeful activity does not seem plausible; secondly, practice and repetition in selecting goals and carrying out purposeful activities inevitably reinforce doing constant works and pursuing goals. On the contrary, in nonequilibrium-oriented relationships, children will not find the opportunity to form and show purposeful activities. This leads to more impulsive and stimulus-oriented activities or responses. Such behaviors will exert an adverse effect on the psychological function; that happens because attention itself gets used to being controlled not by goals but getting attracted toward any direction and toward strong stimuli. The variety and the great competition among the stimuli gradually decrease the capability to enjoy a focused and constant attention to a particular goal.

The results of the present study indicate that to avoid bringing up children who behave impulsively and are unable to carry out purposeful activities, some measures should be taken from within the family and from the very childhood. Forming a particular relationship pattern, theoretically called equilibrium-oriented parent-child relationship, can pave the grounds for forming the main elements of purposefulness. The findings of the study could also be used in clinically. It could be conducted that to change the behavior of the people who mostly behave impulsively and excitedly, two methods should be applied simultaneously. Particular procedures should be followed to increase the attention on psychological function by undergoing particular practices. Needless to say that such practices will not prove fruitful if they are not aimed at compensating for the damages done to the elements forming purposeful activities throughout education and growth.

With respect to the findings of the study, in addition to informing parents in terms of parent-child relationship patterns and the influences they exert, authorities, who actually stand as the secondary-order parent, should be informed about these patterns and the ranges of their consequences to avoid the possible damages that might arise due to ignorance.

It is suggested that similar studies be carried out in different cultures and with different age groups and that in future studies different dimensions of parent-child relationship patterns be taken into account.

References


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