

A Correlational Study on the Influence of Parenting Styles on Personality Dimensions in the Sample of Chinese

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Abstract: This study examined the correlation between parenting style and child's personality in the Chinese context. A total of 205 random respondents aged 15-57 years old recalled childhood experience and reported their parents' responses in different situations, and completed Chinese Big Five Personality Inventory (CBF-PI-B) that is more suitable for Chinese people. The results showed that in most parenting situations, authoritative parenting is negatively correlated with neuroticism and positively correlated with conscientiousness. Authoritarian parenting is positively correlated with neuroticism and negatively correlated with conscientiousness. Uninvolved parenting is negatively correlated with openness. However, the findings on the correlation about permissive parenting were insufficient. In the group of parenting situations, authoritative style is positively correlated with openness, and uninvolved style is negatively correlated with agreeableness and extroversion. These results were discussed in groups according to different types of parenting situations. Also, this study found that the conclusion of the correlation between parenting style and child's personality under change of situation mostly conform to that in the general situations of previous studies.

Keywords: parenting styles, big five personality, Chinese context, different parenting situations

1. Introduction

In real life, it is common to feel that there are a variety of personalities among individuals from the aspects of different attitudes and behaviors, interpersonal outcomes and reactions to the outside world. "Why is it different?" is always a topic of interest. Up to now, there have been many studies on the development and formation of personality and factors of influencing personalities, among which it is clear that the development of personality is determined by the combined influence of innate heredity and acquired environment [1], [2], [3]. Regarding acquired environment, in the process of an individual's growth and development, the environment that earliest contacts and mainly lives is family. Raising in the family environment can be seen as a starting point for individual growth and development. Parenting style reflects the way parents interact with their children, the way parents respond to their children, and the way parents educate their children [4], [5]. Many studies have shown that parenting style significantly influences the personality shaping of children and adolescents. Different parenting styles and responsive attitudes place the emotional relationship between parents and children in different combinations of various dimensions (e.g., negative-positive, rejection-

acceptance, dependency-independence) so that children's psychosociality, psychological stability, mental health and substance dependence develop in different degrees [4], [6], [7], [8].

1.1. Literature Review

1.1.1. Parenting Styles

In the study of parenting style, Baumrind proposed four basic elements formed in two dimensions: Responsiveness and unresponsiveness, that is, the degree to which parents respond to children's needs; Demandingness and undemandingness, that is, rules parents set for children and expectations for children to follow the rules. Maccoby and Martin expanded on this and eventually four parenting styles in these two dimensions were developed: Authoritative (high demandingness, high responsiveness); Authoritarian (high demandingness and low responsiveness); Permissive (low demandingness and high responsiveness); Uninvolved (low demandingness and low responsiveness).

1.1.2. Big Five Personality Traits

As for the understanding of personality, many researchers devote themselves to studying and improving the five-factor (or Big Five) personality model that describes human personality in five dimensions, which has gained empirical support and gradually been widely used [9], [10], [11], [12]. The Big Five model includes conscientiousness, agreeableness, neuroticism, openness to experience, and extroversion. Conscientiousness refers to the ability to control, manage, and regulate one's own impulses, reflection of the ability to delay gratification, and persistence and motivation in goal-directed behavior. Agreeableness refers to an individual's attitude toward others and whether or not they value interpersonal harmony (e.g., empathy, trust, benevolence vs. ruthlessness, suspicion, cynicism). Neuroticism refers to an individual's tendency to experience negative emotions (e.g., anxiety and depression) and emotional instability. Openness to experience refers to the degree of tolerance and exploration of unfamiliar situations and the willingness to try new things. Extraversion refers to the tendency and intensity of human interaction, the need for stimulation and the ability to derive pleasure from it.

1.1.3. Influence of Parenting Styles on Big Five Personality Traits

Many of the existing studies on the relationship between parenting style and various personality dimensions are related to the influence of authoritative and authoritarian parenting style on personality, or the comparison of the influence of the two. For example, a study has noted that authoritative parenting, considered to be the most ideal parenting style, has a positive impact on children's personality development. It is significantly positively correlated with conscientiousness, extroversion, agreeableness and openness, and negatively correlated with neuroticism [13]. These conclusions were also supported by other relevant studies [4], [14], [15].

On the other hand, authoritarian parenting is positively associated with conscientiousness, possibly because children are very good at following the rules established by authoritarian parents [14], [16]. While some other studies have shown that authoritarian parenting predicts lower conscientiousness because authoritarian parents typically impose harsh punishments for children's bad behaviors far more than explicitly explaining them the rules and responsibilities [17], [18]. In addition, authoritarian parenting is significantly positively correlated with neuroticism, in which children are subjected to the pressure of strict control and harsh punishment from their parents [4] [cited in Lari 2023]. This lack of emotional responsiveness leads to lower agreeableness, openness and extroversion [14], [19].

Compared to authoritative and authoritarian parenting which are more commonly studied with personality, permissive and uninvolved parenting style are often highlighted for their risks of resulting in negative outcomes for children's mental health, personal development and psychosocialization, although some studies have found that these two parenting styles are associated with certain dimensions of personality [6], [16]. For example, some studies have shown that permissive parenting are negatively correlated with conscientiousness [14] and significantly positively correlated with openness [17]. Uninvolved parenting is correlated with lower agreeableness and openness, and higher neuroticism [19]. These conclusions are largely mutually supportive of many related research findings on the influence of these two parenting styles on various aspects of children and adolescence (e.g., self-esteem, aggressive behaviors, academic achievement) [6], [14].

2. Current Study

Through the literature review, a common situation is found that most of the research on the relationship between parenting style and personality is carried out in the context of western society (e.g., [7], [13]), studies on Chinese population or group are slightly insufficient. There are differences between Asian and Western cultures in parenting styles and the influence of parenting on shaping children's personality [20], [21]. Chinese parents prone to use more authoritarian control over children's high level of activity (e.g., high impulsive behaviors, strong emotion expression) than their Western counterparts, which encourages Chinese children to be more modest and restrained than children in Western cultures in order to conform to cultural expectations of collectivism [20], [21].

In addition, given that Baumrind and Maccoby et al. categorized parenting styles within which parents' overall styles of raising children are generally attributed to two dimensions (responsiveness-unresponsiveness; demandingness and undemandingness) and into four types (authoritative, authoritarian, permissive, uninvolved), problems such as over-idealization and lack of flexibility across culture and situation still remain [22]. Parenting decisions or styles of the same parent can vary depending on situations. For example, parents who are overly demanding of their children's academic performance can be indulgent in meeting their children's material needs.

Combined with the above two points, the current study will take Chinese people as the object, and take into account different parenting situations aligned with the Chinese context which will be reflected in the subsequent material design. Therefore, the objective of this study is to explore the correlation between parenting styles and children's personality in the Chinese context, especially how parenting styles under different situations contribute to the personality dimensions that children end up with.

3. Materials and Methods

3.1. Participants

A total of 206 responses were collected through the questionnaires published online (www.sojump.com, a professional online questionnaire platform in China), of which 205 were valid. All the respondents were Chinese people who randomly encountered the questionnaire online or were randomly invited to the survey. The 205 valid respondents were between 15 to 57 years old ($M = 23.14$, $SD = 4.55$), with 38 males and 167 females.

3.2. Measures

3.2.1. Parenting Styles and Attitudes

Considering that this study not only measures parenting styles but also concerns about varying parenting styles depending on situations, the author designed a questionnaire to collect parenting styles or attitudes of respondents' parents in different situations. It is presented in Chinese and consists of 15 single-choice questions, each describing a common situation regarding parent-child interaction or parenting. The questions involve different aspects of parenting situations from behavioral (e.g., "do my parents control the time I spend on daily entertainment, such as playing cell phone and video games, and watching TV, most of the time?") to emotional (e.g., "when I show negative emotions to my parents, such as complaining, losing temper, crying, most of the time they will:").

Each situational question is followed by four descriptions of parental response, based on Baumrind and Maccoby et al.'s parenting styles (authoritative, authoritarian, permissive, and uninvolved): (1) authoritative (e.g., "While they encourage me to have fun at reasonable hours, I need to learn to manage time for entertainment and develop good habits on my own"); (2) authoritarian (e.g., "They have strict rules on my time (such as by making a schedule) and they want me to have as little entertainment as possible"); (3) permissive (e.g., "They view my happiness as the most important thing, so they will not stop me even if I spend a long time for entertainment"); (4) uninvolved (e.g., "They seldom or don't care how much time I spend on daily entertainment"). For each parenting situational question, respondents were asked to choose the description of parental response that best matched their real-life experience as their childhood through adolescence. They were only shown the description of situational questions and parental responses, but were not told what parenting styles the parental responses they had chosen corresponded to.

3.2.2. Personality

The brief version of the Chinese Big Five Personality Inventory (CBF-PI-B), developed by Wang et al. on the basis of their Chinese Big Five Personality Inventory (CBF-PI), is adopted to measure the personality of the respondents ([23]). It is a sound psychometric instrument used to measure the Big Five personality of Chinese people ([24]). CBF-PI-B assesses five dimensions of personality: (1) Extraversion (eight items; e.g. "I try to avoid parties with lots of people and noisy environments"); (2) Neuroticism (eight items; "I always worry that something bad is going to happen"); (3) Openness (eight items; "I'm a person who loves to take risks and break the rules"); (4) Agreeableness (eight items; "Although there are some bad things in human society (such as war, evil and fraud), I still believe that human nature is generally good"); (5) Conscientiousness (eight items; "I like to plan things from the beginning"), with a total of 40 items. A 6-point Likert scale is used for reporting (1 = totally disagree, 2 = mostly disagree, 3 = a little disagree, 4 = a little agree, 5 = mostly agree, 6 = fully agree), among which 7 items are reverse scoring (questions 5, 8, 13, 15, 18, 32 and 36). The CBF-PI-B has good internal consistency (Cronbach's alpha coefficient ranging from 0.76 to 0.81, $M = 0.79$) and good test-retest reliability (ranging from 0.67 to 0.81, $M = 0.74$) [23]. Also, the inventory conforms to Chinese language conventions and is applicable to Chinese population [24].

3.3. Data Analysis

3.3.1. Grouping of Parenting Situations

For the convenience and logic of subsequent analysis and discussion, the 15 parenting situation questions are organized into 4 groups based on aspects of parenting: (1) attitudes towards autonomy

(e.g., personal opinions and decisions) (Question 1, 2, 7, 13); (2) guidance on habit formation and management (Question 4, 8, 10); (3) attitudes towards undesirable behaviors (Question 3, 6, 9, 12); (4) response to emotional experiences and needs (Question 5, 11, 14, 15).

3.3.2. Recoding and Correlation Analysis

Due to the objective of exploring the correlation between parenting styles in different parenting situations and personality dimensions rather than the correlation between situations and personality, in order to reflect the specific parenting style in each situation, IBM SPSS Statistics 21 is used to recode the parenting styles that correspond to the responses selected by respondents in all 15 situation questions. For example, for one question, the response corresponding to authoritative parenting is recoded as 1 (authoritative) and the other three are coded as 0 (non-authoritative). Parenting styles under all questions are recoded in the same way (i.e., authoritarian [1] – non-authoritarian [0], permissive [1] – non-permissive [0], and uninvolved – non-uninvolved [0]). This step enables further point-biserial correlation.

The normality of the scores of the five personality dimensions is checked before the correlation analysis, and the z-test is applied using the skewness and kurtosis of Table 1, where z-scores for skewness and kurtosis are computed through $\frac{\text{skewness}}{SE}$ and $\frac{\text{kurtosis}}{SE}$ [25]. The z-scores are all in the range of -3.29 to 3.29 (given $|z_{\text{skewness}}| = [0.21, 1.29]$ and $|z_{\text{kurtosis}}| = [0.18, 0.80]$), with 205 samples in this study ranging from 50 to 300, so the null hypothesis (alpha level 0.05) that the sample is normally distributed cannot be rejected [25]. Then, point two-biserial correlation was used to determine the relationship between different parenting styles in each parenting context and the five personality dimensions. This is done in groups based on the four aspects mentioned above.

4. Results and Discussion

The statistical description of scores of personality dimensions is shown in Table 1. Table 2, 3, 4 and 5 report the point-biserial correlation between parenting styles and children's personality dimensions in four aspects respectively.

Table 1: Descriptive statistics of scores of five personality dimensions

| | N | Minimum | Maximum | Mean | Std. Deviation | Skewness | | Kurtosis | |
|-------------------------------|-----------|-----------|-----------|-----------|----------------|-----------|------------|-----------|------------|
| | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| personality_neuroticism | 205 | 8.00 | 48.00 | 29.5610 | 7.66021 | -.176 | .170 | -.207 | .338 |
| personality_conscientiousness | 205 | 16.00 | 48.00 | 33.5268 | 5.99391 | -.124 | .170 | .079 | .338 |
| personality_agreeableness | 205 | 20.00 | 46.00 | 33.7073 | 5.35707 | .148 | .170 | -.247 | .338 |
| personality_openness | 205 | 17.00 | 48.00 | 34.2780 | 6.36132 | -.220 | .170 | .061 | .338 |
| personality_extraversion | 205 | 10.00 | 47.00 | 29.0878 | 7.41832 | -.036 | .170 | -.269 | .338 |
| Valid N (listwise) | 205 | | | | | | | | |

Table 2: Parental attitude to autonomy

| | | neuroticism | conscientiousness | agreeableness | openness | extraversion |
|------------------|---------------------|-------------|-------------------|---------------|----------|--------------|
| Q1_authoritative | Pearson Correlation | -.195** | .054 | .062 | .032 | .031 |
| | Sig. (2-tailed) | .005 | .440 | .381 | .648 | .663 |

Table 2: (continued)

| | | | | | | |
|------------------------------|-----------------------------|---------|---------|--------|---------|-------|
| Q1_permissive | Pearson | .029 | .105 | -.117 | .036 | .145* |
| | Correlation Sig. (2-tailed) | .681 | .134 | .096 | .606 | .038 |
| Q2_authoritarian | Pearson | .149* | -.231** | -.137* | -.250** | -.110 |
| | Correlation Sig. (2-tailed) | .033 | .001 | .050 | .000 | .115 |
| Q2_permissive | Pearson | .001 | .149* | .138* | .106 | .047 |
| | Correlation Sig. (2-tailed) | .984 | .033 | .048 | .131 | .501 |
| Q7_authoritative | Pearson | -.141* | .140* | .122 | .116 | .048 |
| | Correlation Sig. (2-tailed) | .044 | .045 | .082 | .097 | .490 |
| Q7_authoritarian | Pearson | .153* | -.109 | -.089 | -.074 | -.051 |
| | Correlation Sig. (2-tailed) | .029 | .119 | .203 | .292 | .464 |
| Q13_authoritative_permissive | Pearson | -.181** | .111 | -.049 | .137 | .002 |
| | Correlation Sig. (2-tailed) | .009 | .115 | .483 | .051 | .980 |
| Q13_authoritarian2 | Pearson | .257** | -.050 | -.059 | -.129 | -.071 |
| | Correlation Sig. (2-tailed) | .000 | .474 | .401 | .065 | .313 |

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 3: Parental guidance for habit formation

| | | neuroticism | conscientiousness | agreeableness | openness | extraversion |
|------------------|-----------------------------|-------------|-------------------|---------------|----------|--------------|
| Q4_authoritative | Pearson | -.135 | .093 | .039 | .227** | .216** |
| | Correlation Sig. (2-tailed) | .053 | .186 | .578 | .001 | .002 |
| Q4_authoritarian | Pearson | .180** | -.146* | -.033 | -.096 | -.137 |
| | Correlation Sig. (2-tailed) | .010 | .037 | .636 | .172 | .050 |
| Q4_uninvolved | Pearson | .038 | -.040 | -.181** | -.195** | -.054 |
| | Correlation Sig. (2-tailed) | .587 | .565 | .009 | .005 | .442 |
| Q8_authoritative | Pearson | -.109 | .241** | .021 | .078 | .030 |
| | Correlation Sig. (2-tailed) | .121 | .000 | .770 | .266 | .666 |
| Q8_authoritarian | Pearson | .015 | -.186** | -.005 | .032 | .005 |
| | Correlation Sig. (2-tailed) | .831 | .008 | .941 | .648 | .943 |

Table 3: (continued)

| | | | | | | |
|-------------------|-----------------------------|-------------|--------|---------|---------|--------|
| Q8_uninvolved | Pearson | .051 | -.153* | -.206** | -.231** | -.040 |
| | Correlation Sig. (2-tailed) | .468 | .028 | .003 | .001 | .571 |
| Q10_authoritative | Pearson | -.137* | .106 | .178* | .088 | .061 |
| | Correlation Sig. (2-tailed) | .050(.4999) | .131 | .011 | .211 | .386 |
| Q10_authoritarian | Pearson | .142* | -.046 | .029 | .080 | .140* |
| | Correlation Sig. (2-tailed) | .042 | .514 | .676 | .256 | .045 |
| Q10_permissive | Pearson | .007 | .001 | -.097 | -.014 | -.141* |
| | Correlation Sig. (2-tailed) | .926 | .992 | .166 | .838 | .043 |
| Q10_uninvolved | Pearson | .039 | -.111 | -.209** | -.215** | -.111 |
| | Correlation Sig. (2-tailed) | .582 | .112 | .003 | .002 | .114 |

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 4: Parental response to undesirable behaviors

| | | neuroticism | conscientiousness | agreeableness | openness | extraversion |
|------------------|-----------------------------|-------------|-------------------|---------------|----------|--------------|
| Q3_authoritative | Pearson | -.189** | .087 | .108 | .043 | .049 |
| | Correlation Sig. (2-tailed) | .007 | .215 | .122 | .537 | .485 |
| Q3_permissive | Pearson | .162* | -.059 | -.004 | -.044 | -.041 |
| | Correlation Sig. (2-tailed) | .021 | .402 | .956 | .532 | .556 |
| Q6_authoritative | Pearson | -.241** | .164* | .168* | .146* | .128 |
| | Correlation Sig. (2-tailed) | .000 | .019 | .016 | .037 | .068 |
| Q6_authoritarian | Pearson | .230** | -.185** | -.113 | -.048 | -.143* |
| | Correlation Sig. (2-tailed) | .001 | .008 | .108 | .494 | .041 |
| Q6_uninvolved | Pearson | .014 | .005 | -.052 | -.167* | .004 |
| | Correlation Sig. (2-tailed) | .838 | .946 | .458 | .016 | .956 |

Table 4: (continued)

| | | | | | | |
|-------------------|-----------------------------|--------|---------|--------|---------|--------|
| Q9_authoritative | Pearson | -.120 | .225** | .207** | .080 | .066 |
| | Correlation Sig. (2-tailed) | .087 | .001 | .003 | .253 | .345 |
| Q9_authoritarian | Pearson | .197** | -.192** | -.140* | -.046 | -.107 |
| | Correlation Sig. (2-tailed) | .005 | .006 | .045 | .508 | .127 |
| Q9_uninvolved | Pearson | -.057 | -.159* | -.133 | -.120 | -.105 |
| | Correlation Sig. (2-tailed) | .416 | .023 | .058 | .088 | .133 |
| Q12_authoritative | Pearson | -.158* | .125 | .094 | .053 | .082 |
| | Correlation Sig. (2-tailed) | .024 | .073 | .179 | .453 | .240 |
| Q12_authoritarian | Pearson | .166* | -.110 | -.037 | -.068 | -.101 |
| | Correlation Sig. (2-tailed) | .017 | .116 | .594 | .334 | .151 |
| Q12_permissive | Pearson | -.022 | .082 | -.026 | .139* | .076 |
| | Correlation Sig. (2-tailed) | .756 | .243 | .716 | .046 | .280 |
| Q12_uninvolved | Pearson | .084 | -.234** | -.104 | -.253** | -.138* |
| | Correlation Sig. (2-tailed) | .231 | .001 | .137 | .000 | .049 |

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 5: Parental response to emotional experiences

| | | neuroticism | conscientiousness | agreeableness | openness | extraversion |
|------------------|-----------------------------|-------------|-------------------|---------------|----------|--------------|
| Q5_authoritative | Pearson | -.080 | .215** | -.042 | .138* | .099 |
| | Correlation Sig. (2-tailed) | .256 | .002 | .551 | .048 | .159 |
| Q5_authoritarian | Pearson | .160* | -.093 | .001 | .005 | -.100 |
| | Correlation Sig. (2-tailed) | .022 | .185 | .984 | .939 | .153 |
| Q5_uninvolved | Pearson | .032 | -.144* | -.108 | -.189** | -.174* |
| | Correlation Sig. (2-tailed) | .646 | .040 | .124 | .007 | .012 |

Table 5: (continued)

| | | | | | | |
|------------------------------|-----------------|---------|---------|--------|--------|--------|
| Q11_authoritative_permissive | Pearson | .241** | .179* | .067 | .162* | .150* |
| | Correlation | | | | | |
| Q11_authoritarian | Sig. (2-tailed) | .001 | .010 | .341 | .020 | .032 |
| | Pearson | .157* | -.104 | -.114 | -.035 | -.034 |
| Q11_uninvolved | Correlation | | | | | |
| | Sig. (2-tailed) | .025 | .138 | .104 | .615 | .633 |
| Q14_authoritative | Pearson | .144* | -.116 | .013 | -.150* | -.138* |
| | Correlation | | | | | |
| Q14_authoritarian | Sig. (2-tailed) | .040 | .098 | .851 | .032 | .048 |
| | Pearson | -.274** | .177* | .175* | .050 | -.018 |
| Q14_permissive | Correlation | | | | | |
| | Sig. (2-tailed) | .000 | .011 | .012 | .477 | .800 |
| Q15_authoritative | Pearson | .165* | -.175* | -.070 | -.033 | .000 |
| | Correlation | | | | | |
| Q15_authoritarian | Sig. (2-tailed) | .018 | .012 | .317 | .637 | .998 |
| | Pearson | .028 | -.075 | -.140* | -.134 | -.021 |
| Q15_uninvolved | Correlation | | | | | |
| | Sig. (2-tailed) | .688 | .283 | .045 | .055 | .763 |
| Q14_permissive | Pearson | -.114 | .131 | .066 | .137 | .191** |
| | Correlation | | | | | |
| Q15_uninvolved | Sig. (2-tailed) | .104 | .061 | .345 | .050 | .006 |
| | Pearson | .229** | -.188** | -.021 | -.070 | -.155* |
| Q14_permissive | Correlation | | | | | |
| | Sig. (2-tailed) | .001 | .007 | .764 | .320 | .026 |
| Q15_uninvolved | Pearson | .023 | .052 | -.142* | -.042 | -.023 |
| | Correlation | | | | | |
| Q14_permissive | Sig. (2-tailed) | .744 | .462 | .042 | .547 | .746 |
| | Pearson | | | | | |

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

4.1. Attitude to Autonomy

Table 2 shows that under 3 out of 4 situations authoritative parenting (Q1, 7, 13) is negatively correlated with neuroticism ($p < 0.05$), while authoritarian parenting (Q2, 7, 13) is positively correlated with neuroticism ($p < 0.05$). It indicates that parents giving their children sufficient autonomy, including asking for willingness, respecting opinions and decisions, and allowing privacy, is conducive to the development of greater emotional stability, which may include the reason that children often gain satisfaction from autonomy and accumulate fewer negative emotions. By contrast, control and authoritarianism keep children in a state of chronic dissatisfaction and tension, and they are more prone to experience emotional breakdown. In addition, for situation 13 (whether parents knock before entering the room), two different authoritarian response options are designed – 1) promise to knock first but in fact often ignore or forget and directly come straight into the room; 2) never accept my shutting and locking the door, thinking that I must be doing something bad in the room – which is to reflect the two common responses of authoritarian parents more accurately in China. As can be seen from the table, the latter response that is considered to be more extreme authoritarian parenting (authoritarian_2) is significantly associated with higher levels of neuroticism ($p < 0.01$).

4.2. Guidance for Habit Formation

As shown in Table 3, under 2 out of the 3 situations (Q4, 8) authoritarian parenting style is negatively correlated with conscientiousness ($p < 0.05$) and (Q4, 10) positively correlated with neuroticism ($p < 0.05$). In the training and formation of children's habits, excessive orders and intimidation from parents accumulate more negative emotions and stress than mutual agreements and commitments between parents and children. Children are more sensitive to external stimuli and have worse emotional regulation. The sense of unfreedom under long-term repression may lead to later rebellion and retaliatory self-indulgence subconsciously against the control of rules and authority, even if it is at the cost of own interests. In addition, uninvolved parenting styles are significantly correlated with lower agreeableness and lower openness in all three situations of this group ($p < 0.01$). Children hardly receive reminders and guidance from neglectful parents about manners and habits, and they lack awareness of the positive and negative aspects of what they do and think. Compared with paying attention to and empathizing with others, they focus more on their own feelings and interests.

4.3. Response to Undesirable Behaviors

Consistent with the results of the previous two groups of parenting situations, Table 4 presents that authoritative parenting is correlated with lower neuroticism ($p < 0.05$) and authoritarian parenting style is correlated with higher neuroticism ($p < 0.05$) and lower conscientiousness ($p < 0.01$) in this group. Also, authoritative style in this group is positively correlated with conscientiousness and agreeableness ($p < 0.05$), and uninvolved style is negatively correlated with lower openness ($p < 0.05$) and lower conscientiousness ($p < 0.05$). This distinction suggests that in dealing with children's undesirable behaviors, compared with unilateral harsh punishment or no demands, creating an equal and open communication and giving feedback to help improve the behaviors enable children to have higher emotional stability and stronger impulse control in the face of problems. Having warm support and being able to successfully overcome obstacle in the long run provide children with confidence in facing challenges, meanwhile, communication and cooperation with parents tends to build trust in others and an optimistic attitude toward humanity.

4.4. Response to Emotional Experiences

In two parenting situations (Q5, 11) of this group in Table 5, which are about parents' response to children displaying positive or negative sign of emotion, authoritative parenting is correlated with higher conscientiousness and openness, while uninvolved parenting is correlated with lower openness and extroversion. There is still a positive correlation between authoritarian parenting and neuroticism ($p < 0.05$). These results show that listening to children and responding positively to their emotions promote children's ability to control impulse and stick to goals. They often receive high levels of response and support from parents, which makes them feel more comfortable and interested in accepting new ideas. Lack of parental response or being scolded can make children prefer routine and conservatism and need less external stimuli such as interpersonal contact, which may be a tendency to protect themselves away from the risk of further negative responses under a sense of insecurity in the face of unfamiliar situations. In addition, the positive correlation between authoritative parenting and extroversion in Q11 and Q15 indicates that stable and harmonious parent-child interaction leads to a higher level of vitality and enables children to gain pleasure through interpersonal interaction more easily.

5. Conclusion and Limitation

Overall, in most parenting situations, authoritative style can influence children to develop lower neuroticism and higher conscientiousness, while authoritarian style is associated with higher neuroticism and lower conscientiousness, and uninvolved parenting is associated with lower openness. The results from the 4 groups of parenting situations show that the degree to which parents value their child's autonomy tends to have more influence on the child's development of neuroticism. Parental attitudes in guiding child's habit formation may influence more on child's conscientiousness, agreeableness and openness. In addition, the way parents respond to their child's undesirable behaviors has more of an effect on neuroticism and conscientiousness. Parents' response to children's emotions has a certain degree of influence on all dimensions of personality, which suggests the importance of emotional needs in child's personality development. However, the results on the effects of permissive parenting on personality are insufficient to draw any conclusions.

This study found that the influence of parenting style on personality under different situations is basically consistent with the previous research findings in the literature review on the influence of parenting style on personality in general situation. However, it cannot be determined that the influence of situational difference on personality is not significant. Meanwhile, it is worth noting that the correlation between parenting style in a certain situation and personality may also be jointly influenced by different parenting styles in other situations, be related to child's experiences before and after parent-child interaction, as well as child's interpretation of parents' attitudes in specific situations, especially under the effect of Chinese traditional thought of filial piety. Therefore, this study verified the correlation, and further comparative analysis is needed if want to examine the extent to which various parenting situations affect the personality that child eventually develops, in order to explore what parenting attitudes are more important in what situations.

References

- [1] McGue, M., Bacon, S., & Lykken, D. T. (1993). *Personality stability and change in early adulthood: A behavioral genetic analysis. Developmental psychology*, 29(1), 96.
- [2] Caspi, A., Roberts, B. W., & Shiner, R. L. (2005). *Personality development: Stability and change. Annu. Rev. Psychol.*, 56, 453-484.
- [3] South, S. C., & Krueger, R. F. (2008). *An interactionist perspective on genetic and environmental contributions to personality. Social and Personality Psychology Compass*, 2(2), 929-948.
- [4] Maddahi, M. E., Javidi, N., Samadzadeh, M., & Amini, M. (2012). *The study of relationship between parenting styles and personality dimensions in sample of college students. Indian Journal of Science and Technology*, 9(5).
- [5] Ge, M., Sun, X., & Huang, Z. (2022). *Correlation between parenting style by personality traits and mental health of college students. Occupational Therapy International*, 2022.
- [6] Huang, X., Zhang, H., Li, M., Wang, J., Zhang, Y., & Tao, R. (2010). *Mental health, personality, and parental rearing styles of adolescents with Internet addiction disorder. Cyberpsychology, Behavior, and Social Networking*, 13(4), 401-406.
- [7] Loudová, I., & Lašek, J. (2015). *Parenting style and its influence on the personal and moral development of the child. Procedia-Social and Behavioral Sciences*, 174, 1247-1254.
- [8] Ramesh, R., & Ramana, G. V. (2023). *Relationship between Personality and Parenting Styles. International Journal of Indian Psychology*, 11(1).
- [9] Digman, J. M. (1989). *Five robust trait dimensions: Development, stability, and utility. Journal of personality*, 57(2), 195-214.
- [10] McCrae, R. R., & John, O. P. (1992). *An introduction to the five-factor model and its applications. Journal of personality*, 60(2), 175-215.
- [11] Goldberg, L. R. (1993). *The structure of phenotypic personality traits. American psychologist*, 48(1), 26.
- [12] Chmielewski, M. S. (2013). *Five-factor model of personality. In: Gellman, M.D., Turner, J.R. (eds) Encyclopedia of Behavioral Medicine. Springer, New York, NY. https://doi.org/10.1007/978-1-4419-1005-9_1226*
- [13] Akhter, N., Noor, A. E., & Iqbal, S. (2020). *Impact of parents' authoritative style on personality traits of children: a case study of Elementary class students in Pakistan. Journal of Elementary Education*, 29(2), 37-50.
- [14] Maddahi, M. E. and Samadzadeh, M. (2010). *Parenting styles and personality traits. J. Thinking & Behavior*.

- [15] Zhang, Y. (2023). *A Study on the Relationship Between Parenting Style and Adolescent Personality Inward and Outward Orientation*. In *2nd International Conference on Education, Language and Art (ICELA 2022)* (pp. 871-878). Atlantis Press.
- [16] Sanvictores, T., & Mendez, M. D. (2021). *Types of parenting styles and effects on children*.
- [17] Metwally, S. (2018). *The relationship between parenting styles and adolescents' personality traits*. *Mansoura Nursing Journal*, 5(2), 37-51.
- [18] Kuppens, S., & Ceulemans, E. (2019). *Parenting styles: A closer look at a well-known concept*. *Journal of child and family studies*, 28, 168-181.
- [19] Fan, W., Li, M., & Chen, X. (2021). *Reciprocal relationship between parenting styles and interpersonal personality in Chinese adolescents*. *Frontiers in Psychology*, 12, 740026.
- [20] Porter, C., Hart, C., Yang, C., Robinson, C., Frost Olsen, S., Zeng, Q., ... & Jin, S. (2005). *A comparative study of child temperament and parenting in Beijing, China and the western United States*. *International Journal of Behavioral Development*, 29(6), 541-551.
- [21] Chen, S. H., Zhou, Q., Eisenberg, N., Valiente, C., & Wang, Y. (2011). *Parental expressivity and parenting styles in Chinese families: Prospective and unique relations to children's psychological adjustment*. *Parenting*, 11(4), 288-307.
- [22] Smetana, J. G. (2017). *Current research on parenting styles, dimensions, and beliefs*. *Current opinion in psychology*, 15, 19-25.
- [23] Wang, M. C., & Dai, X. Y., & Yao, S. (2011). *Development of the Chinese Big Five Personality Inventory (CBF-PI) III: psychometric properties of CBF-PI brief version*. *Chin J. Clin. Psychol*, 19(4), 454-457.
- [24] Zhang, X., Wang, M. C., He, L., Jie, L., & Deng, J. (2019). *The development and psychometric evaluation of the Chinese Big Five Personality Inventory-15*. *PLoS One*, 14(8), e0221621.
- [25] Kim, H. Y. (2013). *Statistical notes for clinical researchers: assessing normal distribution (2) using skewness and kurtosis*. *Restorative dentistry & endodontics*, 38(1), 52-54.