

# Influence of Parenting Styles on Emotional Regulation Skills among High School Students

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**Abstract**— The major focus of this research was to analyse the link between various parenting styles as well as emotional regulation skills of high students and to find out which style can best predict effective emotional regulation. The study used a correlational research design based on a purposive sample of 90 students aged 14–18. The required data were collected using two scales namely the Inventory of Parenting Style and Scale of Emotional Maturity. The conducted analyses were limited to correlation and MANOVA tests. Results showed a statistically significant positive correlation between parenting style and emotional maturity ( $p < 0.05$ ). The findings of MANOVA (Pillai's Trace = 0.116,  $F = 3.17$ ,  $p = 0.028$ ) suggested that the authoritative parenting style had the most significant influence on emotional regulation. The research endorses the idea that parental authority, which features love, is considered and exercised in a well-balanced manner among other qualities, and is what really enhances high school students' ability to regulate their emotions, become resilient, and mature, especially among Indian students.

**Keywords:** Emotional maturity, high school students, parenting style, emotional regulation, authoritative parenting style.

## I. INTRODUCTION

### I.I. BACKGROUND

The high school students are characterised as adolescents, because of their age group of 10 to 18. Adolescence is considered a phase from the age of 10 to 19, mainly the transition phase between the childhood phase and adulthood and du (WHO, 2023). During this phase, an individual often had to undergo major changes that include emotional, biological and social changes. Due to the biological changes, an individual has to face emotional turmoil; therefore, emotional regulation becomes essential for adolescents. Emotional regulation is the ability that acts to modulate the emotions of a person (APA, 2018). By monitoring, evaluating and modifying emotional responses, an adolescent can successfully cope with their external environment. Morris et al. (2007) mentioned that parents and family dynamics are the key behind an individual's emotional development. Based on the interaction pattern, the emotional development of the adolescent often changes. Baumrind (1991) mentioned four different types of parenting styles (PS), namely authoritative, permissive, neglectful and authoritarian. Each of the parenting styles can be characterised based on its nature of control and warmth to the children.

### I.II. FOCUS OF THE STUDY

Studies of Kaur and Singh (2025); Li et al. (2025); Spera (2005) have found that authoritative PS has a significant influence on the emotional regulation and resilience that can help adolescents in enhancing emotional maturity. On the other hand, Zheng (2025); Sikandar et al. (2025) mentioned that permissive and neglectful parenting styles often lead to poor emotional regulation and control. Despite the author's comprehensive focus on understanding the influence of different parenting styles on the emotional regulation of adolescents, they did not specifically focus on Indian students. This emerges as a significant gap in the overall research area. Focusing on this point, this research tries to uncover the relationship between emotional regulation and high school students in India.

### **I.III. OBJECTIVES OF THE STUDY**

1. To examine the relationship between different parenting styles and emotional regulation skills among high school students.
2. To determine which parenting style best predicts effective emotional regulation.

### **I.IV. HYPOTHESES OF THE STUDY**

**H1:** There will be a significant relationship between parenting styles and emotional regulation skills.

**H2:** Adolescents with authoritative parents will score higher on emotional regulation compared to those with authoritarian, permissive, or neglectful parents.

## **II. ARRANGEMENTS AND EQUATIONS**

### **II.I. ARGUMENTS ABOUT PARENTING STYLE AND EMOTIONAL REGULATIONS**

According to Awiszus et al. (2022), PS has a significant influence on the development of a child. Through a comprehensive literature review, the authors indicate that the authoritative PS has a significant influence on various factors, including academic performance, social competencies, resilience, and emotional regulation. Due to the responsiveness and warmth of the parents, the children are able to enhance their social competencies and emotional control of the children. The dimensions of warmth and control are the two key factors that can act as a mediating factor in the strategic way to raise children, where emotional regulation can be improved. On the contrary, Baumrind (1967, 1991) mentioned that parenting styles are important in various aspects, especially in the development of a child. Parenting style, like authoritative, is based on a balance between responsiveness and warmth helps the parents in emotionally controlling and supporting their children during the adolescent phase. Due to this support, emotional regulation and maturity often develop among the children.

On the other hand, Steinberg (2001) mentioned that parents are the most important part of a child's life. During the early development, the interaction, values and beliefs of the parents shape the identity of the child. During adolescence, the child had to go through various transitions, where the warmth of the parents and their support helped the child in their overall development. Biological changes, including hormonal changes, often impact the emotional stability of adolescents; thus, support and special attention from the parents are required. Authoritative PS is one of the most significant parenting styles that supports adolescents during their emotional changes (Suldo & Huebner, 2004). Parent-child conflict, family environment and structure are the key things that shape the life satisfaction and emotional regulation of the children. During the adolescent phase, psychological changes make the children emotionally vulnerable; therefore, supportive parents help the children in enhancing their overall development. Parenting styles like authoritarian can negatively impact the developmental outcome of adolescents due to their excessive control over emotional regulation.

On the other hand, Morris et al. (2007) mentioned that family context, including the home environment and family dynamics, is correlated with the emotional regulation of an individual. Observational learning, social referencing, and modelling are the three most crucial ways through which children learn and imitate emotional regulations. PS is a mediating factor that is associated with the family dynamics, and due to the changes in the environment and relationship, the emotional regulation often differs among children. For instance, the supportive parent-adolescent relationship helps in developing stronger emotional regulation (Ratliff et al. 2023). Due to the support from parents, adolescents' social behaviour and depressive symptoms can be lowered. An authoritative PS is an important PS in enhancing the emotional regulation of adolescents due to its nature of supportiveness and warmth. This would significantly help the adolescents in developing the skills to control and manage their emotions, leading to improved emotional regulation.

Eisenberg et al. (2010) mentioned that emotion and self-regularity an important aspect for an individual to showcase a positive development. Effortful self-regulation often helps in enhancing the overall growth of children. Since early childhood, a person has started to develop emotional and self-regulation, and in the phase of adulthood, it appears to grow slowly. During the stage of early adolescence, an individual has to face several challenges that might affect their emotional and self-regulation. In early adolescence, a person experiences an increase in normative function in their behavioural aspects, resulting in lower prosocial behaviour (Favini et al. 2023). During this situation, support from

parents and family dynamics helps adolescents in gaining support to regulate their emotional factors. Parental interaction and bonding are the important mediating factors in the development of emotional regulation in high school students. Family dysfunction or dysregulation often acts as a negative factor that impacts the development of emotional regulation in students. On the other hand, Gross and John (2003) mentioned that relationship, well-being and affection are the key factors that impact the overall emotional regulation of an individual. Reward or reappraisal positively correlated with the emotional regulation of individuals, where interpersonal functioning mediates the impact. Therefore, it can be stated that due to the family dynamic and parenting style, the development of emotional regulation can differ among adolescents.

## **II.II. STATEMENT OF THE PROBLEM**

Studies of Awiszus et al. (2022); Baumrind (1967, 1991); Steinberg (2001); Suldo and Huebner (2004) mentioned the relation between the parenting interaction and emotional regulation. By providing significant information about the prosocial behaviour and parents' interaction and support, these studies help in know that different parenting styles have different kinds of impact on the development of emotional regulation among adolescents. On the other hand, Morris et al. (2007); Ratliff et al. (2023); Eisenberg et al. (2010); Gross and John (2003) mentioned the significance of family dynamics and family environment in developing emotional regulation of the students. Despite providing enough supportive information about PS supporting the emotional regulation development of adolescents, the authors did not cover the Indian perspective. This creates a significant gap; this research tries to cover this through a comprehensive research on high school students aged from 14 to 18 from India. Therefore, it can be stated that the problem statement of this research is focused on understanding the way different parenting styles, like authoritative, neglectful, permissive and authoritarian, influence the emotional regulatory skills among the high school students of India.

## **III. METHODOLOGY**

### **Sample**

This research tries to understand the influence of PS on Indian high school students. Therefore, the high school students aged from 14 to 18 are surveyed with a questionnaire to understand the emotional regulations. Through purposive sampling, all the participants were included in the survey. The participants include both male and female participants. In addition, a total of 90 sample sizes were selected for conducting the survey. These participants are invited from a high school located in Mumbai, India. Based on the collected information, further analysis has been performed.

### **Research design**

This research incorporated a correlational research design, where the correlation between two variables, namely the PS and emotional regulation of the high school students. Initially, a survey research strategy was followed in the research to collect responses from 90 participants. The main reason for using the correlational research design is to understand the relation between the variables, and this survey strategy helps in collecting responses in an easier way and with less time.

### **Variables**

This study has two variables, including one dependent variable and one independent variable. The independent variable is parenting style, while the dependent variable is emotional regulation of the students. The independent variable has four sub-variables based on the four different parenting styles. Authoritarian, neglectful, authoritative and permissive are the four parenting styles that fall under the independent variable of parenting style. Based on the variables, further analysis was performed.

### **Research tools**

The research was conducted using a structured questionnaire based on two inventories. First, for measuring the independent variable of parenting style, the inventory scale of PS was used. This scale was developed by Robinson et al. (1995), and this questionnaire consisted of a total of 62 items to measure the PS followed by a parent. In addition, another inventory scale is used in this research for measuring the dependent variable of emotional regulation. The emotional maturity scale (EMS) developed by Singh and Bhargava (1991) was used in the survey, and this scale consisted of 48 items to understand the emotional regulation of the high school students.

### **Procedure**

The collected responses of 90 participants were analysed using the software SPSS. First, Correlation analysis was performed to understand correlation between the variables of PS and emotional maturity of the collected responses. Therefore, MANOVA was performed to evaluate the significance of the response. Using MANOVA helped in testing the alternative hypothesis that mentioned the significant relationship between the PS and emotional regulation of the high school students.

#### IV. TABLES AND FIGURES

##### IV.I. RESULTS

Based on the variables, the two tests, namely correlation and MANOVA and scatter plot, have been performed to understand the correlation and significance level of the variables.

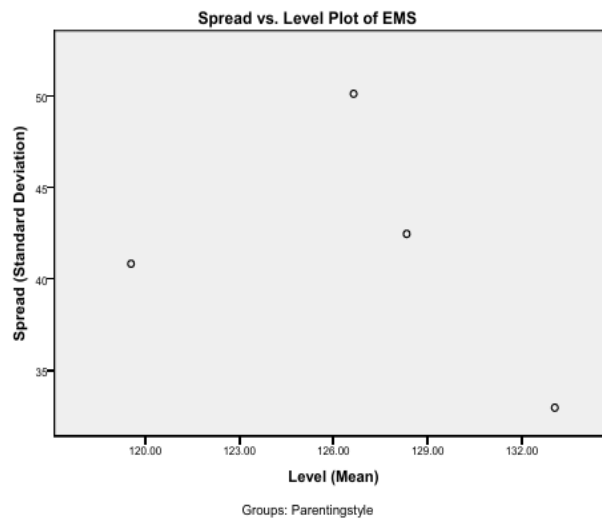
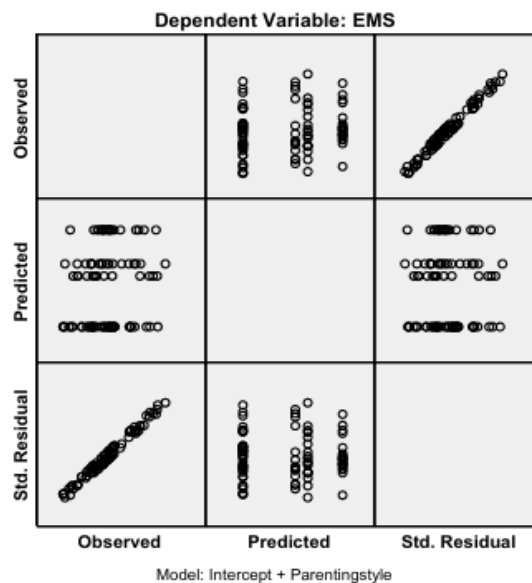


Figure 1: Spread vs level plot for EMS across parenting style

Figure 1 indicates the scatter plot for the two variables regarding their mean, standard deviation of different parenting styles with emotional maturity. The figure shows that the authoritative PS (mean 126) has a more spread and lower mean. While the other three parenting styles, like authoritarian (mean 133), permissive (mean 128) and neglectful (mean 119) have moderate spread and increase in mean.



**Figure 2: Observed, predicted, and standard residual for EMS**

Figure 2 shows that the PS is spread across the EMS; however, the spreading of PS has a significant influence on the EMS because of the random scatter of the responses.

**Table 1: Correlation Analysis**

| Correlations   |                                   |  | Parentingstyle | EMS        |
|----------------|-----------------------------------|--|----------------|------------|
| Parentingstyle | Pearson Correlation               |  | 1              | -.100      |
|                | Sig. (2-tailed)                   |  |                | .348       |
|                | Sum of Squares and Cross-products |  | 112.889        | -409.889   |
|                | Covariance                        |  | 1.268          | -4.605     |
|                | N                                 |  | 90             | 90         |
| EMS            | Pearson Correlation               |  | -.100          | 1          |
|                | Sig. (2-tailed)                   |  | .348           |            |
|                | Sum of Squares and Cross-products |  | -409.889       | 148439.789 |
|                | Covariance                        |  | -4.605         | 1667.863   |
|                | N                                 |  | 90             | 90         |

(Source: Self)

**Table 2: Results from Pearson and Kendall Tau Correlation**

| Correlations    |                |                         | Parentingstyle | EMS   |
|-----------------|----------------|-------------------------|----------------|-------|
| Kendall's tau_b | Parentingstyle | Correlation Coefficient | 1.000          | -.057 |
|                 |                | Sig. (2-tailed)         | .              | .476  |
|                 |                | N                       | 90             | 90    |
|                 | EMS            | Correlation Coefficient | -.057          | 1.000 |
|                 |                | Sig. (2-tailed)         | .476           | .     |
|                 |                | N                       | 90             | 90    |
| Spearman's rho  | Parentingstyle | Correlation Coefficient | 1.000          | -.077 |
|                 |                | Sig. (2-tailed)         | .              | .471  |
|                 |                | N                       | 90             | 90    |
|                 | EMS            | Correlation Coefficient | -.077          | 1.000 |
|                 |                | Sig. (2-tailed)         | .471           | .     |
|                 |                | N                       | 90             | 90    |

(Source: Self)

Tables 1 and 2 are derived from the Correlation analysis of the variables, namely PS and emotional maturity of the high school students. Table 1 indicates that the two variables possess significance values of 0.348, where a 2-tailed analysis is performed. At  $p < 0.05$ , the level of significance is 0.0196 ( $df$  is 89). The test result for the correlation is greater than 0.196. Therefore, it can be stated that at  $p < 0.05$ , the correlation between PSI and EMS is significant. Furthermore, the Spearman rho and the Kendall tau correlation analysis at  $p < 0.05$  are 0.195 and  $\pm 1.96$ . The result of Table 2 shows that both analyses are significant as their value are derived as 0.471 and 0.476, which indicates whether the significant value or within the range. Based on this analysis, it can be stated that there is a positive correlation between the variables of PS and the emotional maturity scale. Hence, the first alternative hypothesis (H1) is accepted in this study.

**Table 3: Summary of MANOVA**

| Statistic/Variable | EMS      |
|--------------------|----------|
| Sample Size (N)    | 90 total |

|   |                                       |
|---|---------------------------------------|
| Mean (Overall)                            | 125.41                                |
| Box's Test of Equality of Covariance      | M=21.391, p=0.345                     |
| Bartlett's Test of Sphericity             | Chi-square=123.82, p<.001             |
| Multivariate Test (Parenting Style)       | Pillai's Trace=0.116, F=3.17, p=0.028 |
| Partial Eta Squared (Effect size)         | 0.100                                 |
| Levene's Test (Homogeneity of variances)  | p=0.208                               |
| Between-subject effects (Parenting Style) | F=1.247, p=0.298                      |
| Observed Power                            | 0.323 (EMS)                           |

(Source: Self)

Table 3 is the summary table from the MANOVA test, which indicates the result of tests like Box's test, partial Eta test, and Levene's Test. The result shows that the Box's Test is  $M=21.391$  at  $p < 0.345$ . This particular result indicates that the relationship between the two variables is not significant, and the assumption about the equal covariates is met across all the groups of parenting styles. On the other hand, the test result of Bartlett's for Chi-square is 123.82 at a  $p < 0.001$  level of significance. This supports that the variables of EMS and PSI are correlated for MANOVA. The result of the Multivariate Test regarding the PS shows that Pillai's Trace is 0.116, where F is 3.17, at the level  $p = 0.028$ . In addition, the overall test result shows the PS 0.00 (authoritative) has the significance level of 0.583 at t critical values 0.551. Where the other parenting styles, such as the permissive (2), authoritarian (1) and neglectful (3) have a lower significance than the critical value, only the PS (0) has greater values, indicating a significant impact on the EMS. In addition, Levene's Test result comes as  $p=0.208$  and Between-subject effects as F is 1.247 at  $p=0.298$ . This result shows that the homogeneity of the PS variances does not violate for EMS. Lastly, Observed Power resulted in 0.323, indicating that this test might not detect the small differences in the EMS. Based on the entire test, it can be stated that the second hypothesis is proven through the MANOVA test result. The test result of the Multivariate Test is the most significant one in proving the second alternative hypothesis to be true, namely, the authoritative PS is most significant in enhancing the emotional maturity scale of the high school students.

## IV.II. DISCUSSION

### The relationship between different parenting styles and emotional regulation skills among high school students

This research provides strong evidence that the style of parenting has a significant influence on the emotional regulation abilities of high school students. Pearson, Kendall Tau, and Spearman rho correlation analyses all pointed to significant associations ( $p < 0.05$ ), which means that changes in parenting styles have a significant impact on the emotional maturity of students. This aligns with the findings of Awiszus et al. (2022); Steinberg (2001), who found that emotionally supportive and warm parental (known as authoritative parenting style) relations lead to better emotional control and the development of resilience in the adolescent population. In addition, the findings of the study also align with the statements of Morris et al. (2007), as the study shows that the family environment and parenting behaviours become the intermediaries in emotional growth. Adolescents in the study who were brought up in a warm family environment showed advanced emotional maturity, whereas those growing up under the rule of an authoritarian or neglectful PS had poor regulation skills. Results from MANOVA tests also point to the existence of a multivariate impact of PS on emotional maturity, implying that emotional regulation is something that evolves in the interactional context of the family. Hence, all the data here are consistent with the theory that parental warmth, responsiveness, and control are the factors that most determine the level of adolescents' emotional management skills, their stress-coping abilities, and the exhibition of prosocial behaviour during a period that is critical for psychological and social development. Therefore, it can be stated that the first objective has been achieved through the overall analysis.

### Parenting style best predicts effective emotional regulation

Among the four parenting styles, namely, authoritative, authoritarian, permissive, and neglectful, the data pointed out most distinctly that the authoritative PS is the best predictor of emotional regulation in high school students. The test result of MANOVA, where Pillai's Trace is 0.116 at F is 3.17, at the significance level p is 0.028, shows a significant multivariate effect, which supports the fact that the authoritative PS has a significant impact on the emotional maturity scale (EMS). This outcome is in line with the previous literature of Baumrind (1967, 1991); Steinberg (2001); Suldo & Huebner (2004), who considered authoritative parenting the most stable and most suitable because it combined the factors of love, sensitivity, and provision of reasonable control. The emotional support and freedom provided by authoritative parents help high school students to develop in themselves emotional regulation skills and the ability to control their feelings. On the other hand, the results showed that the worst emotional outcomes were those of children under the care of authoritarian and neglectful parenting styles, which, among other things, exerted rigid control and were emotionally detached. The statistical proof from correlation and MANOVA also convincingly demonstrates that authoritative parenting not only leads to emotional maturity but also stability, resilience, and social competence. Hence, the authoritative style of parenting can be considered the most influential factor in determining the emotional regulation capacity of adolescents, thus leading to the achievement of their psychological and emotional health. Therefore, it can be stated that the in-site study has successfully achieved its second research objective.

## V. CONCLUSION

The research finds that the way parents raise their children influences the emotional regulation of high school students in India to a great extent. Out of the four different parenting styles, the authoritative style turned out to be the most potent in developing emotional maturity, resilience, and social competence. The statistical analyses done on the data collected from the study, such as correlation and MANOVA, found a positive and significant relationship between PS and emotional regulation. Proving that H1 and H2 are significant for this research. This means that the adolescents whose parents were authoritative had better emotional control than those adolescents whose parents were authoritarian or neglectful. Therefore, parental warmth, responsiveness, and balanced control are the necessary ingredients for adolescents' emotional stability and psychological well-being to be nurtured during the vital developmental phase.

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Appendix

Result of MANOVA

**General Linear Model**

[DataSet0]

**Between-Subjects Factors**

|                    | N  |
|--------------------|----|
| Parentingstyle .00 | 14 |
| 1.00               | 20 |
| 2.00               | 18 |
| 3.00               | 38 |

**Descriptive Statistics**

|          | Parentingstyle | Mean     | Std. Deviation | N  |
|----------|----------------|----------|----------------|----|
| EMS      | .00            | 126.6429 | 50.16068       | 14 |
|          | 1.00           | 133.0500 | 32.96805       | 20 |
|          | 2.00           | 128.3333 | 42.48737       | 18 |
|          | 3.00           | 119.5526 | 40.85088       | 38 |
|          | Total          | 125.4111 | 40.83948       | 90 |
| SMSTotal | .00            | 271.6429 | 28.47025       | 14 |
|          | 1.00           | 269.7500 | 29.05870       | 20 |
|          | 2.00           | 266.9444 | 19.15716       | 18 |
|          | 3.00           | 277.5526 | 22.90721       | 38 |
|          | Total          | 272.7778 | 24.61286       | 90 |
| ARS      | .00            | 61.3571  | 11.05655       | 14 |
|          | 1.00           | 68.2500  | 10.48746       | 20 |
|          | 2.00           | 64.6111  | 16.27752       | 18 |
|          | 3.00           | 62.9737  | 9.50814        | 38 |
|          | Total          | 64.2222  | 11.62599       | 90 |

**Box's Test of Equality of Covariance Matrices<sup>a</sup>**

|         |           |
|---------|-----------|
| Box's M | 21.391    |
| F       | 1.099     |
| df1     | 18        |
| df2     | 12016.753 |
| Sig.    | .345      |

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + Parentingstyle

**Bartlett's Test of Sphericity<sup>a</sup>**

|                    |         |
|--------------------|---------|
| Likelihood Ratio   | .000    |
| Approx. Chi-Square | 123.825 |
| df                 | 5       |
| Sig.               | .000    |

Tests the null hypothesis that the residual covariance matrix is proportional to an identity matrix.

a. Design: Intercept + Parentingstyle

**Multivariate Tests<sup>a</sup>**

| Effect         |                    | Value   | F                     | Hypothesis df | Error df | Sig. |
|----------------|--------------------|---------|-----------------------|---------------|----------|------|
| Intercept      | Pillai's Trace     | .992    | 3437.422 <sup>b</sup> | 3.000         | 84.000   | .000 |
|                | Wilks' Lambda      | .008    | 3437.422 <sup>b</sup> | 3.000         | 84.000   | .000 |
|                | Hotelling's Trace  | 122.765 | 3437.422 <sup>b</sup> | 3.000         | 84.000   | .000 |
|                | Roy's Largest Root | 122.765 | 3437.422 <sup>b</sup> | 3.000         | 84.000   | .000 |
| Parentingstyle | Pillai's Trace     | .116    | 1.157                 | 9.000         | 258.000  | .323 |
|                | Wilks' Lambda      | .885    | 1.167                 | 9.000         | 204.585  | .318 |
|                | Hotelling's Trace  | .128    | 1.172                 | 9.000         | 248.000  | .313 |
|                | Roy's Largest Root | .111    | 3.173 <sup>c</sup>    | 3.000         | 86.000   | .028 |

**Multivariate Tests<sup>a</sup>**

| Effect         |                    | Partial Eta Squared | Noncent. Parameter | Observed Power <sup>d</sup> |
|----------------|--------------------|---------------------|--------------------|-----------------------------|
| Intercept      | Pillai's Trace     | .992                | 10312.267          | 1.000                       |
|                | Wilks' Lambda      | .992                | 10312.267          | 1.000                       |
|                | Hotelling's Trace  | .992                | 10312.267          | 1.000                       |
|                | Roy's Largest Root | .992                | 10312.267          | 1.000                       |
| Parentingstyle | Pillai's Trace     | .039                | 10.411             | .568                        |
|                | Wilks' Lambda      | .040                | 8.477              | .462                        |
|                | Hotelling's Trace  | .041                | 10.551             | .574                        |
|                | Roy's Largest Root | .100                | 9.520              | .716                        |

a. Design: Intercept + Parentingstyle

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

d. Computed using alpha = .05

**Levene's Test of Equality of Error Variances<sup>a</sup>**

|          | F     | df1 | df2 | Sig. |
|----------|-------|-----|-----|------|
| EMS      | 1.548 | 3   | 86  | .208 |
| SMSTotal | .942  | 3   | 86  | .424 |
| ARS      | 3.785 | 3   | 86  | .013 |

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Parentingstyle

Tests of Between-Subjects Effects

| Source          | Dependent Variable | Type III Sum of Squares | df | Mean Square | F        |
|-----------------|--------------------|-------------------------|----|-------------|----------|
| Corrected Model | EMS                | 2646.230 <sup>a</sup>   | 3  | 882.077     | .520     |
|                 | SMSTotal           | 1680.252 <sup>b</sup>   | 3  | 560.084     | .922     |
|                 | ARS                | 501.340 <sup>c</sup>    | 3  | 167.113     | 1.247    |
| Intercept       | EMS                | 1267271.847             | 1  | 1267271.847 | 747.532  |
|                 | SMSTotal           | 5800085.743             | 1  | 5800085.743 | 9549.239 |
|                 | ARS                | 325369.996              | 1  | 325369.996  | 2427.246 |
| Parentingstyle  | EMS                | 2646.230                | 3  | 882.077     | .520     |
|                 | SMSTotal           | 1680.252                | 3  | 560.084     | .922     |
|                 | ARS                | 501.340                 | 3  | 167.113     | 1.247    |
| Error           | EMS                | 145793.559              | 86 | 1695.274    |          |
|                 | SMSTotal           | 52235.303               | 86 | 607.387     |          |
|                 | ARS                | 11528.216               | 86 | 134.049     |          |
| Total           | EMS                | 1563955.000             | 90 |             |          |
|                 | SMSTotal           | 6750610.000             | 90 |             |          |
|                 | ARS                | 383234.000              | 90 |             |          |
| Corrected Total | EMS                | 148439.789              | 89 |             |          |
|                 | SMSTotal           | 53915.556               | 89 |             |          |
|                 | ARS                | 12029.556               | 89 |             |          |

**Tests of Between-Subjects Effects**

| Source          | Dependent Variable | Sig. | Partial Eta Squared | Noncent. Parameter | Observed Power <sup>d</sup> |
|-----------------|--------------------|------|---------------------|--------------------|-----------------------------|
| Corrected Model | EMS                | .669 | .018                | 1.561              | .152                        |
|                 | SMSTotal           | .434 | .031                | 2.766              | .245                        |
|                 | ARS                | .298 | .042                | 3.740              | .323                        |
| Intercept       | EMS                | .000 | .897                | 747.532            | 1.000                       |
|                 | SMSTotal           | .000 | .991                | 9549.239           | 1.000                       |
|                 | ARS                | .000 | .966                | 2427.246           | 1.000                       |
| Parentingstyle  | EMS                | .669 | .018                | 1.561              | .152                        |
|                 | SMSTotal           | .434 | .031                | 2.766              | .245                        |
|                 | ARS                | .298 | .042                | 3.740              | .323                        |
| Error           | EMS                |      |                     |                    |                             |
|                 | SMSTotal           |      |                     |                    |                             |
|                 | ARS                |      |                     |                    |                             |
| Total           | EMS                |      |                     |                    |                             |
|                 | SMSTotal           |      |                     |                    |                             |
|                 | ARS                |      |                     |                    |                             |
| Corrected Total | EMS                |      |                     |                    |                             |
|                 | SMSTotal           |      |                     |                    |                             |
|                 | ARS                |      |                     |                    |                             |

a. R Squared = .018 (Adjusted R Squared = -.016)

b. R Squared = .031 (Adjusted R Squared = -.003)

c. R Squared = .042 (Adjusted R Squared = .008)

d. Computed using alpha = .05

Parameter Estimates

| Dependent Variable | Parameter             | B              | Std. Error | t      | Sig. | 95% ...     |
|--------------------|-----------------------|----------------|------------|--------|------|-------------|
|                    |                       |                |            |        |      | Lower Bound |
| EMS                | Intercept             | 119.553        | 6.679      | 17.899 | .000 | 106.275     |
|                    | [Parentingstyle=.00]  | 7.090          | 12.873     | .551   | .583 | -18.500     |
|                    | [Parentingstyle=1.00] | 13.497         | 11.374     | 1.187  | .239 | -9.114      |
|                    | [Parentingstyle=2.00] | 8.781          | 11.781     | .745   | .458 | -14.639     |
|                    | [Parentingstyle=3.00] | 0 <sup>a</sup> | .          | .      | .    | .           |
| SMSTotal           | Intercept             | 277.553        | 3.998      | 69.423 | .000 | 269.605     |
|                    | [Parentingstyle=.00]  | -5.910         | 7.705      | -.767  | .445 | -21.227     |
|                    | [Parentingstyle=1.00] | -7.803         | 6.808      | -1.146 | .255 | -21.337     |
|                    | [Parentingstyle=2.00] | -10.608        | 7.052      | -1.504 | .136 | -24.627     |
|                    | [Parentingstyle=3.00] | 0 <sup>a</sup> | .          | .      | .    | .           |
| ARS                | Intercept             | 62.974         | 1.878      | 33.529 | .000 | 59.240      |
|                    | [Parentingstyle=.00]  | -1.617         | 3.620      | -.447  | .656 | -8.812      |
|                    | [Parentingstyle=1.00] | 5.276          | 3.198      | 1.650  | .103 | -1.082      |
|                    | [Parentingstyle=2.00] | 1.637          | 3.313      | .494   | .622 | -4.948      |
|                    | [Parentingstyle=3.00] | 0 <sup>a</sup> | .          | .      | .    | .           |

Parameter Estimates

| Dependent Variable | Parameter             | 95% ...     | Partial Eta Squared | Noncent. Parameter |
|--------------------|-----------------------|-------------|---------------------|--------------------|
|                    |                       | Upper Bound |                     |                    |
| EMS                | Intercept             | 132.831     | .788                | 17.899             |
|                    | [Parentingstyle=.00]  | 32.680      | .004                | .551               |
|                    | [Parentingstyle=1.00] | 36.109      | .016                | 1.187              |
|                    | [Parentingstyle=2.00] | 32.201      | .006                | .745               |
|                    | [Parentingstyle=3.00] | .           | .                   | .                  |
| SMSTotal           | Intercept             | 285.500     | .982                | 69.423             |
|                    | [Parentingstyle=.00]  | 9.407       | .007                | .767               |
|                    | [Parentingstyle=1.00] | 5.732       | .015                | 1.146              |
|                    | [Parentingstyle=2.00] | 3.410       | .026                | 1.504              |
|                    | [Parentingstyle=3.00] | .           | .                   | .                  |
| ARS                | Intercept             | 66.707      | .929                | 33.529             |
|                    | [Parentingstyle=.00]  | 5.579       | .002                | .447               |
|                    | [Parentingstyle=1.00] | 11.635      | .031                | 1.650              |
|                    | [Parentingstyle=2.00] | 8.223       | .003                | .494               |
|                    | [Parentingstyle=3.00] | .           | .                   | .                  |

**Parameter Estimates**

| Dependent Variable | Parameter             | Observed Power <sup>b</sup> |
|--------------------|-----------------------|-----------------------------|
| EMS                | Intercept             | 1.000                       |
|                    | [Parentingstyle=.00]  | .085                        |
|                    | [Parentingstyle=1.00] | .217                        |
|                    | [Parentingstyle=2.00] | .114                        |
|                    | [Parentingstyle=3.00] | .                           |
| SMSTotal           | Intercept             | 1.000                       |
|                    | [Parentingstyle=.00]  | .118                        |
|                    | [Parentingstyle=1.00] | .205                        |
|                    | [Parentingstyle=2.00] | .319                        |
|                    | [Parentingstyle=3.00] | .                           |
| ARS                | Intercept             | 1.000                       |
|                    | [Parentingstyle=.00]  | .073                        |
|                    | [Parentingstyle=1.00] | .371                        |
|                    | [Parentingstyle=2.00] | .078                        |
|                    | [Parentingstyle=3.00] | .                           |

a. This parameter is set to zero because it is redundant.

b. Computed using alpha = .05

**General Estimable Function<sup>a</sup>**

| Parameter             | Contrast |    |    |    |
|-----------------------|----------|----|----|----|
|                       | L1       | L2 | L3 | L4 |
| Intercept             | 1        | 0  | 0  | 0  |
| [Parentingstyle=.00]  | 0        | 1  | 0  | 0  |
| [Parentingstyle=1.00] | 0        | 0  | 1  | 0  |
| [Parentingstyle=2.00] | 0        | 0  | 0  | 1  |
| [Parentingstyle=3.00] | 1        | -1 | -1 | -1 |

a. Design: Intercept + Parentingstyle

**Transformation Coefficients (M Matrix)**

| Dependent Variable | Transformed Variable |          |     |
|--------------------|----------------------|----------|-----|
|                    | EMS                  | SMSTotal | ARS |
| EMS                | 1                    | 0        | 0   |
| SMSTotal           | 0                    | 1        | 0   |
| ARS                | 0                    | 0        | 1   |

**Between-Subjects SSCP Matrix**

|            |                |            | EMS         | SMSTotal    | ARS         |
|------------|----------------|------------|-------------|-------------|-------------|
| Hypothesis | Intercept      | EMS        | 1267271.847 | 2711140.972 | 642131.012  |
|            |                | SMSTotal   | 2711140.972 | 5800085.743 | 1373744.473 |
|            |                | ARS        | 642131.012  | 1373744.473 | 325369.996  |
|            | Parentingstyle | EMS        | 2646.230    | -1851.970   | 864.356     |
|            |                | SMSTotal   | -1851.970   | 1680.252    | -465.755    |
|            |                | ARS        | 864.356     | -465.755    | 501.340     |
| Error      | EMS            | 145793.559 | 14773.192   | -4376.578   |             |
|            | SMSTotal       | 14773.192  | 52235.303   | 5571.199    |             |
|            | ARS            | -4376.578  | 5571.199    | 11528.216   |             |

Based on Type III Sum of Squares

**Residual SSCP Matrix**

|                                   |          | EMS        | SMSTotal  | ARS       |
|-----------------------------------|----------|------------|-----------|-----------|
| Sum-of-Squares and Cross-Products | EMS      | 145793.559 | 14773.192 | -4376.578 |
|                                   | SMSTotal | 14773.192  | 52235.303 | 5571.199  |
|                                   | ARS      | -4376.578  | 5571.199  | 11528.216 |
| Covariance                        | EMS      | 1695.274   | 171.781   | -50.890   |
|                                   | SMSTotal | 171.781    | 607.387   | 64.781    |
|                                   | ARS      | -50.890    | 64.781    | 134.049   |
| Correlation                       | EMS      | 1.000      | .169      | -.107     |
|                                   | SMSTotal | .169       | 1.000     | .227      |
|                                   | ARS      | -.107      | .227      | 1.000     |

Based on Type III Sum of Squares

**Lack of Fit**

Multivariate Tests

| Dependent Variables |                    | Value | F                 | Hypothesis df | Error df | Sig.  |
|---------------------|--------------------|-------|-------------------|---------------|----------|-------|
| EMS, SMSTotal, ARS  | Pillai's Trace     | .000  | .                 | .000          | .000     | .     |
|                     | Wilks' Lambda      | 1.000 | .                 | .000          | 85.000   | .     |
|                     | Hotelling's Trace  | .000  | .                 | .000          | 2.000    | .     |
|                     | Roy's Largest Root | .000  | .000 <sup>a</sup> | 3.000         | 83.000   | 1.000 |
| EMS, SMSTotal       | Pillai's Trace     | .000  | .                 | .000          | .000     | .     |
|                     | Wilks' Lambda      | 1.000 | .                 | .000          | 85.500   | .     |
|                     | Hotelling's Trace  | .000  | .                 | .000          | 2.000    | .     |
|                     | Roy's Largest Root | .000  | .000 <sup>a</sup> | 2.000         | 84.000   | 1.000 |
| EMS, ARS            | Pillai's Trace     | .000  | .                 | .000          | .000     | .     |
|                     | Wilks' Lambda      | 1.000 | .                 | .000          | 85.500   | .     |
|                     | Hotelling's Trace  | .000  | .                 | .000          | 2.000    | .     |
|                     | Roy's Largest Root | .000  | .000 <sup>a</sup> | 2.000         | 84.000   | 1.000 |
| SMSTotal, ARS       | Pillai's Trace     | .000  | .                 | .000          | .000     | .     |
|                     | Wilks' Lambda      | 1.000 | .                 | .000          | 85.500   | .     |
|                     | Hotelling's Trace  | .000  | .                 | .000          | 2.000    | .     |
|                     | Roy's Largest Root | .000  | .000 <sup>a</sup> | 2.000         | 84.000   | 1.000 |
| EMS                 | Pillai's Trace     | .000  | .                 | .000          | .000     | .     |
|                     | Wilks' Lambda      | 1.000 | .                 | .000          | 86.000   | .     |
|                     | Hotelling's Trace  | .000  | .                 | .000          | 2.000    | .     |
|                     | Roy's Largest Root | .000  | .000 <sup>a</sup> | 1.000         | 85.000   | 1.000 |
| SMSTotal            | Pillai's Trace     | .000  | .                 | .000          | .000     | .     |
|                     | Wilks' Lambda      | 1.000 | .                 | .000          | 86.000   | .     |
|                     | Hotelling's Trace  | .000  | .                 | .000          | 2.000    | .     |
|                     | Roy's Largest Root | .000  | .000 <sup>a</sup> | 1.000         | 85.000   | 1.000 |
| ARS                 | Pillai's Trace     | .000  | .                 | .000          | .000     | .     |
|                     | Wilks' Lambda      | 1.000 | .                 | .000          | 86.000   | .     |
|                     | Hotelling's Trace  | .000  | .                 | .000          | 2.000    | .     |
|                     | Roy's Largest Root | .000  | .000 <sup>a</sup> | 1.000         | 85.000   | 1.000 |

**Multivariate Tests**

| Dependent Variables |                    | Partial Eta Squared | Noncent. Parameter | Observed Power <sup>b</sup> |
|---------------------|--------------------|---------------------|--------------------|-----------------------------|
| EMS, SMSTotal, ARS  | Pillai's Trace     | .                   | .                  | .                           |
|                     | Wilks' Lambda      | .                   | .                  | .                           |
|                     | Hotelling's Trace  | .                   | .                  | .                           |
|                     | Roy's Largest Root | .000                | .000               | .050                        |
| EMS, SMSTotal       | Pillai's Trace     | .                   | .                  | .                           |
|                     | Wilks' Lambda      | .                   | .                  | .                           |
|                     | Hotelling's Trace  | .                   | .                  | .                           |
|                     | Roy's Largest Root | .000                | .000               | .050                        |
| EMS, ARS            | Pillai's Trace     | .                   | .                  | .                           |
|                     | Wilks' Lambda      | .                   | .                  | .                           |
|                     | Hotelling's Trace  | .                   | .                  | .                           |
|                     | Roy's Largest Root | .000                | .000               | .050                        |
| SMSTotal, ARS       | Pillai's Trace     | .                   | .                  | .                           |
|                     | Wilks' Lambda      | .                   | .                  | .                           |
|                     | Hotelling's Trace  | .                   | .                  | .                           |
|                     | Roy's Largest Root | .000                | .000               | .050                        |
| EMS                 | Pillai's Trace     | .                   | .                  | .                           |
|                     | Wilks' Lambda      | .                   | .                  | .                           |
|                     | Hotelling's Trace  | .                   | .                  | .                           |
|                     | Roy's Largest Root | .000                | .000               | .050                        |
| SMSTotal            | Pillai's Trace     | .                   | .                  | .                           |
|                     | Wilks' Lambda      | .                   | .                  | .                           |
|                     | Hotelling's Trace  | .                   | .                  | .                           |
|                     | Roy's Largest Root | .000                | .000               | .050                        |
| ARS                 | Pillai's Trace     | .                   | .                  | .                           |
|                     | Wilks' Lambda      | .                   | .                  | .                           |
|                     | Hotelling's Trace  | .                   | .                  | .                           |
|                     | Roy's Largest Root | .000                | .000               | .050                        |

a. Exact statistic

b. Computed using alpha = .05

**Univariate Tests**

| Dependent Variable | Source      | Sum of Squares | df | Mean Square | F | Sig. |
|--------------------|-------------|----------------|----|-------------|---|------|
| EMS                | Lack of Fit | .000           | 0  | .           | . | .    |
|                    | Pure Error  | 145793.559     | 86 | 1695.274    |   |      |
| SMSTotal           | Lack of Fit | .000           | 0  | .           | . | .    |
|                    | Pure Error  | 52235.303      | 86 | 607.387     |   |      |
| ARS                | Lack of Fit | .000           | 0  | .           | . | .    |
|                    | Pure Error  | 11528.216      | 86 | 134.049     |   |      |

**Univariate Tests**

| Dependent Variable | Source      | Partial Eta Squared | Noncent. Parameter | Observed Power <sup>a</sup> |
|--------------------|-------------|---------------------|--------------------|-----------------------------|
| EMS                | Lack of Fit | .000                | .000               | .                           |
|                    | Pure Error  |                     |                    |                             |
| SMSTotal           | Lack of Fit | .000                | .000               | .                           |
|                    | Pure Error  |                     |                    |                             |
| ARS                | Lack of Fit | .000                | .000               | .                           |
|                    | Pure Error  |                     |                    |                             |

a. Computed using alpha = .05

**SSCP Matrix**

|             |          | EMS        | SMSTotal  | ARS       |
|-------------|----------|------------|-----------|-----------|
| Lack of Fit | EMS      | .000       | .000      | .000      |
|             | SMSTotal | .000       | .000      | .000      |
|             | ARS      | .000       | .000      | .000      |
| Pure Error  | EMS      | 145793.559 | 14773.192 | -4376.578 |
|             | SMSTotal | 14773.192  | 52235.303 | 5571.199  |
|             | ARS      | -4376.578  | 5571.199  | 11528.216 |