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Parenting Styles as Predictors of Social, Emotional, and Academic Maturity in Adolescents

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ABSTRACT

Aim: The purpose of the study is to evaluate the influence of parenting style as a predictor of emotional, academic and social maturity of the adolescents. In addition, finding the most suitable parenting style to improve overall maturity is also an aspect that has been focused on in this study.

Methods: The primary quantitative method has been incorporated in this study, where 110-sample size has been selected by using purposive sampling. Adolescents aged from 14 to 17 are surveyed using scales of Parenting Style by Robinson et al., Rao's Social Maturity, Emotional Maturity by Singh and Bhargava and Academic Resilience by Cassidy are used for the survey. Then MANOVA and Correlation analysis are performed on the collected data.

Finding: The findings showed that parenting style (PS), an independent variable, is correlated with dependent variables, namely social maturity (SM), emotional maturity (EM) and academic resilience (AR) of the Indian adolescents at the significant level $p<0.05$. In addition, the authoritative PS was found to have more impact on the EM, AR and SM at the significant level $p<0.05$.

Conclusion: The parenting style has a significant impact on the Indian adolescents' social, academic and emotional maturity. While the authoritative PS is found to have more influence on the SM, EM and AR of Indian adolescents.

KEYWORDS: *Observed, predicted, and standard residual for AR, Observed, predicted, and standard residual for SM*

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1. INTRODUCTION

The phase of adolescence is referred to as the life-stretching point that comes between childhood and adulthood (Sawyer et al. 2018). An individual aged between 14 to 18 is mostly considered an adolescent, where they have to undergo various transitions that include biological, social, academic and psychological factors. Social maturity refers to the level of behaviour that an individual shows in accordance with the social norms and their age (APA, 2018a). Due to the biological changes, adolescents often have to face societal challenges that can impact their social maturity. On the other hand, emotional maturity refers to the level of emotional control an individual possesses (APA, 2018b). Possessing emotional maturity helps adolescents in coping with stress and making suitable decisions. In addition, both factors are important for adolescents as, with maturity, they can handle any complex problems in their lives. Parents are one of the most important parts of an adolescent's life, and due to the way they interact with parents and their control and warmth, children often develop important skills that include social, academic and emotional maturity.

Baumrind classified the parenting style into four different categories based on the control, responsiveness and warmth of the parents. Authoritative, permissive, authoritarian and neglectful are the four different parenting styles that a parent can align with the way parents interact with their children. The studies of Baumrind (1991); Spera (2005) mentioned that the authoritative parenting style often works as a positive factor in enhancing the maturity, self-regulation and academic performance of adolescents. The permissive or authoritarian parenting style often hinders the overall development of adolescents. This study tries to understand the impact of different parenting styles on the overall development of adolescents in India. Previous studies have separately provided information about social, emotional and academic; however, none of those includes information about Indian adolescents.

2. LITERATURE REVIEW

According to Smetana (2017), Baumrind's parenting style is based on two dimensions, including control of the parents and warmth from the parents. Authoritative is one of the most significant parenting styles that focuses on the balance between control and warmth. In addition, authoritarian parents often focus more on control than warmth, while permissive or indulgent parents focus more on warmth rather than control. Lastly, neglectful parents offer neither control nor warmth to their children. Among these parenting styles, the authoritative parenting style is one of the most important parenting styles and influences the overall growth of the children (Kuppens & Ceulemans, 2019). Due to the balance of psychological control and warm interaction, children often develop social and emotional maturity along with improved academic performance. While the other two parenting styles often create hurdles for the children due to their less supportive or poor boundary creation.

Anand and Bharti (2021) mentioned that social maturity is a commitment that a person can make to influence their daily lives. Social maturity often helps an individual in growth and development according to societal norms, as per their age. Social maturity benefits an individual in enhancing their behavioural appropriateness, social problem-solving, interpersonal relationship maintenance and societal judgment area. Therefore, it can be stated that possessing social maturity is an important aspect for individuals, especially among adolescents, because during the adolescent phase, an individual has to face societal changes. On the contrary, Bordhan (2015) mentioned that social maturity is an important factor correlated with the academic performance of high school students. Teachers are important in improving the overall academic performance of the students, while parents' interaction and the environment of the home help in enhancing the social maturity of the students. In addition, Bordhan have found that gender also plays an important role in developing social maturity, as female students possess comparatively more maturity than male students.

Emotional maturity is a dynamic that is influenced by social, biological and psychological factors. Emotional maturity is an important factor for individuals as this helps an individual succeed academically, personally and career wise (Joy & Mathew, 2018). In the development of the maturity scale, two factors, namely the parents' interaction and the gender of the individual, are significant, as based on the parenting style, and the gender of the personal development of emotional maturity can differ. For instance, male students are found to be emotionally mature than female students, reflecting the gender's influence on the emotional maturity development among young students. On the contrary, Bhattacharjee (2018) mentioned that emotional maturity is correlated with the general well-being of adolescents. During the transition of childhood and adulthood, an individual has to undergo biological and psychological changes. Parents help the children in managing and coping with these changes, reflecting that parents' interactions are a mediating factor in enhancing emotional maturity among adolescents.

Winne and Nesbit (2010) mentioned that educational psychology is key to the academic performance and success of a student. Peer support, classroom environment and learning are the key aspects that mostly influence the academic performance of the students. In addition, achievement goals, interest, motivation and epistemic belief are the key factors that enhance the academic performance of adolescents, where proper responsiveness and guidance from the parents help them. On the other hand, Leung et al. (1998) found that authoritative parenting style is the key style that often improves the academic performance of adolescents. In addition, parenting style like authoritarian is negatively correlated with the academic performance of the students, which tends to lower the academic performance of the students due to excessive emotional control of the parents and lower warmth.

3. PROBLEM STATEMENT

Studies of Smetana (2017); Kuppens and Ceulemans (2019); Anand and Bharti (2021); Bordhan (2015) mentioned that the parenting style has a significant influence on the social maturity of adolescents. However, they did not focus on the Indian adolescents to uncover the impact of parenting style on social maturity; this creates a significant gap to cover. On the other hand, Joy and Mathew (2018); Bhattacharjee (2018); Winne and Nesbit (2010); Leung et al. (1998) focus on evaluating the emotional maturity and academic performance of the adolescents. Despite covering an important area about the

emotional maturity, psychological well-being and academic performance, the authors do not discuss the impact of parenting style on Indian adolescents' social maturity and academic performance. Based on the area, it can be stated that the problem statement is associated with the predictive factor of parenting style, namely authoritative, permissive, authoritarian and neglectful, impacting the academic, social and emotional maturity of the adolescents.

Research objectives

1. To understand the impact of parenting style on the academic, social and emotional maturity of Indian adolescents.
2. To evaluate the specific parenting style that can have the most impact on the overall maturity of the Indian adolescents.

Research hypothesis

H1: There is a significant relationship between the parenting style and social, emotional and academic maturity of the adolescents.

H2: Adolescents with authoritative parents reflect higher academic, social, and emotional maturity development, as compared with other parenting styles.

Methodology

Participants

This study includes 110 participants, who are mainly Indian adolescents aged from 14 to 17. Using purposive sampling, participants are invited to take part in the survey. Using the purposive sampling method helps in understanding, the similar types of characteristics of the population (Rai & Thapa, 2015). Therefore, by using the sampling method on the collected information, the required participants are invited to take part in the survey.

Instruments

This study focuses on understanding the impact of parenting style on adolescents' academic, social and emotional maturity and based on the focus, this survey used various scales to survey the invited population. The survey questionnaire includes the inventory scale of the parenting style inventory (PSI), Rao's Social Maturity Scale (RSMS), Emotional Maturity Scale (EMS) and Academic Resilience Scale (ARS). The PSI scale was invented by Robinson et al. (1995), and the scale consisted of 62 items to understand the parenting style. While the inventory scale of RSMS developed by Nalini Rao (1971) consisted of 90 items to understand the self, diffraction, openness to change and social commitment of the participants. In addition, the inventory scale of EMS developed by Singh & Bhargava (1991) covers the dimensions of emotional progression and emotional stability, consisting of 48 items. The last inventory scale used in this survey is ARS, which consisted of 30 items regarding the Perseverance, Negative Affect and Emotional Response and Reflecting and Adaptive Help-Seeking behaviour, and Cassidy (2016) developed this scale. The questions from each of the inventories used during the survey were designed to measure the maturity level of the adolescents.

Procedure

Initially, an ethical form was submitted to the university before collecting the data for the study. One of the most important things is that this study used participants who are under the age of 18 and not adults to give consent by themselves. Thus, before the survey, informed consent was collected from the parents of the participants. After that, the questionnaire was administered to the participants in their classroom setting. The survey took around 30 minutes to complete. The responses of the students are collected anonymously to maintain the confidentiality of the participants' identities.

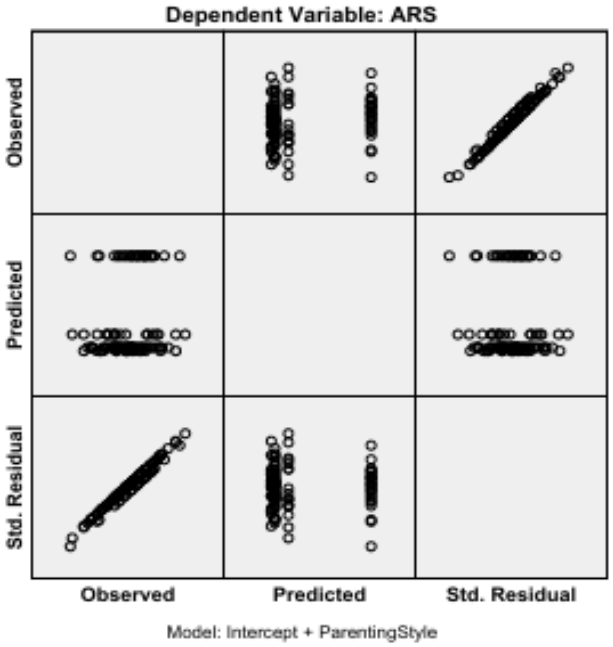
Data analysis

Initially, scatter-plot analysis is performed on the collected information to understand the spread of the statistical information. In addition, this study focuses on understanding the role of parenting style as a predictor for academic, social and emotional maturity. Therefore, to understand the relation between these factors, Pearson's correlation analysis has been performed on the collected information from 110 participants. In addition, MANOVA is used on the collected data as well to understand the influence of the variable parenting style on the variables like social, emotional and academic maturity. Hence, it can be stated that this study uses three statistical analyses, namely descriptive statistics, correlation analysis and MANOVA using the statistical software SPSS.

4. RESULT

Based on the variables like social maturity (SM), Emotional maturity (MS), Academic Resilience (AR), and parenting style (PS), the statistical analysis has been performed on the collected data. First, the spreading level of the collected data and their reduction information has been plotted.

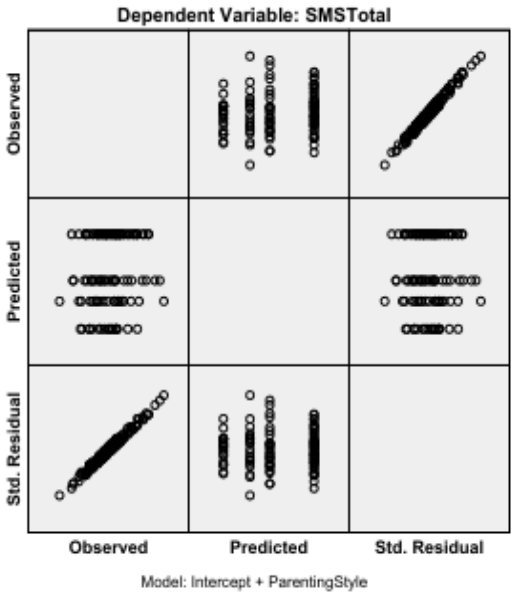
Figure 1: Observed, predicted, and standard residual for AR



(Source: Self)

Figure 1 is a residual scatter plot regarding the spread of academic resilience of adolescents, with its interception with PS. The residual analysis shows that the spread of the data regarding AR is diverse because of the roughly randomised data dispersed around zero. Indicating that the data spreading and variables have a logical representation.

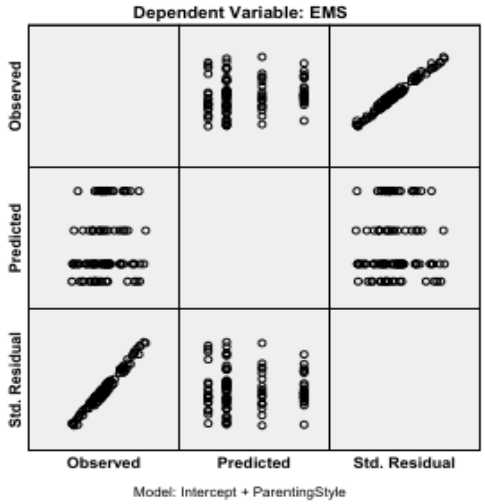
Figure 2: Observed, predicted, and standard residual for SM



(Source: Self)

Similar to Figure 1, Figure 2 also depicts that the information and intercept of SM and PS are roughly randomised data dispersed around zero, which is significant in proving that the variable of SM is diverse around PS.

Figure 3: Observed, predicted, and standard residual for EM



(Source: Self)

Similar to Figures 1 and 2, Figure 3 illustrates that the data of EM has a diverse spread along with an intersection with PS. In addition, these roughly randomised data are dispersed around zero, which is significant in proving that the variable of EM is diverse around PS.

Table 1: Correlation Analysis between EMS and PSI

		Parenting Style	**EMS**
Parenting Style	Pearson Correlation	1	-.032
	Sig. (2-tailed)		.742
	Sum of Squares and Cross-products	146.373	-163.782
	Covariance	1.343	-1.503
	N	110	110
EMS	Pearson Correlation	-.032	1
	Sig. (2-tailed)	.742	
	Sum of Squares and Cross-products	-163.782	181805.055
	Covariance	-1.503	1667.936
	N	110	110

(Source: Self)

The correlation analysis between EM and PS is 0.742, where the level of significance at $p<0.05$ is 0.187 (*df* 109). As the correlation value at a 2-tailed significant level is greater than the significance volume; therefore, it can be stated that there is a significant correlation between EM and PS.

Table 2: Kendal tau and Spearman correlation results

			Parenting Style	**EMS**
Kendall's tau_b	Parenting Style	Correlation Coefficient	1.000	-.008
		Sig. (2-tailed)	.	.909

		N	110	110
	EMS	Correlation Coefficient	-.008	1.000
		Sig. (2-tailed)	.909	.
		N	110	110
Spearman's rho	Parenting Style	Correlation Coefficient	1.000	-.013
		Sig. (2-tailed)	.	.891
		N	110	110
	EMS	Correlation Coefficient	-.013	1.000
		Sig. (2-tailed)	.891	.
		N	110	110

(Source: Self)

Table 2 is about the correlation analysis of EM and PS through Spearman's rho and Kendall's tau. The measured outcome for both analyses is 0.891 and 0.909, respectively. The significance level of Spearman's rho at $p<0.05$ (*df* 109) is ±1.982, and the measured outcome of the test is 0.891, which falls within the range. In addition, the z-score of Kendall tau at $p<0.05$ is 0.1873, as the sample size is 110. The measured value of Kendall's tau of the two variables is also greater than the significance value. Hence, it can be stated that both factors, EM and PS, are correlated with each other.

Table 3: Summary of MANOVA test

Dependent Variable	Parenting Style (Groups)	Mean Score (M)	Std. Deviation (SD)	F Statistic	p-Value	Partial Eta Squared (Effect Size)
EMS	0	119.11	46.83	0.796	0.499	0.022
	1	135.50	30.91			
	2	128.33	42.49			
	3	122.26	42.67			
SMS Total	0	269.32	29.63	0.542	0.655	0.015
	1	271.08	29.15			
	2	266.94	19.16			
	3	275.02	23.18			
ARS	0	63.84	11.78	0.828	0.481	0.023
	1	68.31	11.72			
	2	64.61	16.28			
	3	64.00	10.29			

(Source: Self)

Table 4: Representation of parenting style

Number representation	Parenting style
0	Authoritarian
1	Authoritative
2	Permissive
3	Neglectful

Table 3 is the summary of the MANOVA test performed on the dependent variables of EM, SM and AR to check whether the variables agree in correlation with PS, and Authoritative PS has the most impact on the dependent variables. Here, Table 4 denotes the numbers that represent each of the parenting styles. At a $p<0.05$ level of significance for the Between-Subjects Effects, the value of EM, SM and AR for PS is measured as 0.499, 0.655 and 0.481respectuively. These variables showed that PS is correlated with each of the dependent variables, as the significance value of $p<0.05$ is 0.028 (sample size is 110), which is lower than the measured values. This indicates that the first hypothesis (H1) has been accepted after this test. On the other hand, the result of the MANOVA test indicates that parenting style (1) has a weak-to-moderate relationship with EM (0.259), SM (0.097) and AR (0.307). This indicates that the authoritative parenting style has the most significant impact on the dependent variable. Thence, it can be stated that the second hypothesis was also accepted after the test of the MANOVA.

5. FINDINGS

The impact of parenting style on the academic, social and emotional maturity

Parenting style has a significant influence on the overall performance of an adolescent. Studies of Smetana (2017); Anand and Bharti (2021); Bhattacharjee (2018); Winne and Nesbit (2010) mentioned that parenting style has a significant influence on the emotional, academic and social maturity of the adolescents. Through the support and warmth of the parents, adolescents often get enough support and develop their characteristics. The independent variable of PS is correlated with the dependent variables, showing that PS has a significant influence on the overall development of an adolescent. During the phase of adolescence, the biological, physical and hormonal changes influence the overall growth. Thus, support from parents, especially mothers, helps the children in developing overall maturity. Even the rest of the MANOVA and correlation analysis indicate that the PS of the Indian parents has a significant influence on the social, academic and emotional maturity at the significant level of $p<0.05$. This indicates that the overall growth of an Indian adolescent highly depends on the parenting style. In addition, changes in the societal context and environment of the home and schools also act as a mediating factor in resisting the maturity of the adolescents. Therefore, through the overall discussion, it can be stated that the parenting style of the Indian parents has a significant influence on the social, academic and emotional maturity. This reveals that the study successfully discusses the components of the first objective.

The specific parenting style has the most impact on overall maturity

Authoritative, permissive, neglectful and authoritarian PS are the four different parenting styles that influence the growth and social, emotional and academic maturity of the adolescents. Study of Kuppens and Ceulemans (2019) mentioned that authoritative PS influences the overall growth of the adolescents. In addition, Bordhan (2015); Joy and Mathew, (2018); Leung et al. (1998) also found that authoritative parenting style significantly influences the social, academic and emotional maturity of the adolescents. Therefore, it can be stated that authoritative PS, as compared with the other three parenting styles, mostly influences the overall growth of an Indian adolescent. The test result of MANOVA also showed that the growth of parenting style (1.00) has a comparatively higher influence on the SM, EM and AR at the significance level of $p<0.005$ in a 2-tailed test. This suggests that the overall growth of Indian adolescents is highly influenced because of the balanced warmth and control of the authoritative parents. Hence, through the discussion of the MANOVA test and existing literature, it can be stated that the second objective has also been achieved, where authoritative PS was found to have the most influence on the overall maturity of Indian adolescents.

6. CONCLUSION

The entire study regarding the influence of PS, an independent variable, on the dependent variables like EM, SM and AR. A survey on 110 school students from Mumbai has been conducted based on different scales. From the test results of correlation and MANOVA, it has been found that PS is correlated with EM, SM, and AR and accepted the first alternative hypothesis (H1) has been accepted by this study. In addition, the test result also proved that authoritative PS has a significant influence on EM, AR and SM, accepting the second alternative hypothesis (H2). In addition, the existing articles also supported the findings of the study, as authoritative PS proved to have a comparatively higher influence on the social, academic and emotional maturity of Indian adolescents. Hence, it can be concluded that the entire study successfully

achieved its two objectives by finding a correlation between the independent and dependent variables and showing that authoritative parenting mostly influences the overall growth and maturity of Indian adolescents.

REFERENCE LIST

1. Anand, A. K., & Bharti, J. (2021). Social Maturity: Key Of Well-Being. *GIS Science Journal*, *8*(3), 862-867. https://www.academia.edu/download/67770368/28_SOCIAL_MATURITY_AND_WELLBEING.pdf
2. APA (2018a). *APA Dictionary of Psychology*. American Psychological Association. https://dictionary.apa.org/social-maturity
3. APA (2018b). *APA Dictionary of Psychology*. American Psychological Association. https://dictionary.apa.org/emotional-maturity
4. Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. Journal of Early Adolescence, 11(1), 56–95. https://doi.org/10.1177/0272431691111004
5. Bhattacharjee, A. (2016). Emotional maturity among young adults: A comparative study. *Indian Journal of Psychological Science*, *6*(2), 73-79. https://www.napsindia.org/wp-content/uploads/2017/05/09-Anjana-Bhatcharjee-min.pdf
6. Bordhan, S. (2015). Role of social maturity in academic achievement of high school students. *International Journal of Applied Research*, *1*(7), 44-46. https://www.academia.edu/download/86068198/1-6-53.1.pdf
7. Cassidy, S. (2016). The Academic Resilience Scale (ARS-30): A new multidimensional construct measure. Frontiers in Psychology, 7, 1787. https://doi.org/10.3389/fpsyg.2016.01787
8. Joy, M., & Mathew, A. (2018). Emotional maturity and general well-being of adolescents. *IOSR Journal of Pharmacy*, *8*(5), 01-06. https://www.researchgate.net/profile/Molly-Joy/publication/333918195_Emotional_Maturity_and_General_Well-Being_of_Adolescents/links/5e327cc092851c7f7f0c39d8/Emotional-Maturity-and-General-Well-Being-of-Adolescents.pdf
9. Kuppens, S., & Ceulemans, E. (2019). Parenting styles: A closer look at a well-known concept. https://doi.org/10.1007/s10826-018-1242-x
10. Leung, K., Lau, S., & Lam, W. L. (1998). Parenting styles and academic achievement: A cross-cultural study. *Merrill-Palmer Quarterly (1982-)*, 157-172. https://timothydavidson.com/Library/Articles/13.%20Duplicate%20articles%20to%20be%20delete/Kwok-Leung-1998-Parenting%20Styles%20and%20Academic%20Achievement%20-%20A%20Cross-Cultural%20Study-DUP.pdf
11. Rai, N., & Thapa, B. (2015). A study on purposive sampling method in research. *Kathmandu: Kathmandu School of Law*, *5*(1), 8-15. https://www.academia.edu/download/48403395/A_Study_on_Purposive_Sampling_Method_in_Research.pdf
12. Rao, N. (1971). Manual for Rao's Social Maturity Scale (RSMS). Agra: National Psychological Corporation.
13. Robinson, C. C., Mandleco, B., Olsen, S. F., & Hart, C. H. (1995). Authoritative, authoritarian, and permissive parenting practices: Development of a new measure. Psychological Reports, 77(3), 819–830. https://doi.org/10.2466/pr0.1995.77.3.819
14. Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D., & Patton, G. C. (2018). The age of adolescence. *The lancet child & adolescent health*, *2*(3), 223-228. https://www.why.org.au/sites/default/files/2019-11/2018Sawyer_Age_of_AdolescenceFINAL.pdf
15. Singh, Y., & Bhargava, M. (1991). Emotional Maturity Scale. Agra: National Psychological Corporation.
16. Smetana, J. G. (2017). Current research on parenting styles, dimensions, and beliefs. *Current opinion in psychology*, *15*, 19-25. https://doi.org/10.1016/j.copsyc.2017.02.012
17. Spera, C. (2005). A review of the relationship among parenting practices, parenting styles, and adolescent school achievement. Educational Psychology Review, 17(2), 125–146. https://doi.org/10.1007/s10648-005-3950-1
18. Winne, P. H., & Nesbit, J. C. (2010). The psychology of academic achievement. *Annual review of psychology*, *61*(1), 653-678. https://doi.org/10.1146/annurev.psych.093008.100348

APPENDIX

Result of MANOVA

```
GLM EMS SMSTotal ARS BY ParentingStyle
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /PRINT=DESCRIPTIVE ETASQ OPOWER PARAMETER TEST(SSCP) RSSCP TEST(MMATRIX) HO
MOGENEITY LOF GEF
  /PLOT=SPREADLEVEL RESIDUALS
  /CRITERIA=ALPHA(.05)
  /DESIGN= ParentingStyle.
```

General Linear Model

```
[DataSet0]
```

Between-Subjects Factors

		N
ParentingStyle	.00	19
	1.00	26
	2.00	18
	3.00	47

Descriptive Statistics

	ParentingStyle	Mean	Std. Deviation	N
EMS	.00	119.1053	46.83173	19
	1.00	135.5000	30.91052	26
	2.00	128.3333	42.48737	18
	3.00	122.2553	42.66883	47
	Total	125.8364	40.84038	110
SMSTotal	.00	269.3158	29.63491	19
	1.00	271.0769	29.14917	26
	2.00	266.9444	19.15716	18
	3.00	275.0213	23.18497	47
	Total	271.7818	25.17075	110
ARS	.00	63.8421	11.77692	19
	1.00	68.3077	11.72269	26
	2.00	64.6111	16.27752	18
	3.00	64.0000	10.28507	47
	Total	65.0909	11.98665	110

Box's Test of Equality of Covariance Matrices[a]

Box's M	21.142
F	1.103
df1	18
df2	17921.328
Sig.	.342

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[a]

Likelihood Ratio	.000
Approx. Chi-Square	137.414
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[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.992	4187.060[b]	3.000	104.000	.000
	Wilks' Lambda	.008	4187.060[b]	3.000	104.000	.000
	Hotelling's Trace	120.781	4187.060[b]	3.000	104.000	.000
	Roy's Largest Root	120.781	4187.060[b]	3.000	104.000	.000
ParentingStyle	Pillai's Trace	.066	.798	9.000	318.000	.618
	Wilks' Lambda	.934	.795	9.000	253.259	.621
	Hotelling's Trace	.069	.791	9.000	308.000	.625
	Roy's Largest Root	.055	1.957[c]	3.000	106.000	.125

Multivariate Tests[a]

Effect		Partial Eta Squared	Noncent. Parameter	Observed Power[d]
Intercept	Pillai's Trace	.992	12561.179	1.000
	Wilks' Lambda	.992	12561.179	1.000
	Hotelling's Trace	.992	12561.179	1.000
	Roy's Largest Root	.992	12561.179	1.000
ParentingStyle	Pillai's Trace	.022	7.186	.397
	Wilks' Lambda	.022	5.789	.316
	Hotelling's Trace	.023	7.122	.393
	Roy's Largest Root	.052	5.870	.492

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[a]

	F	df1	df2	Sig.
EMS	1.220	3	106	.306
SMSTotal	1.280	3	106	.285
ARS	2.599	3	106	.056

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	4003.829[a]	3	1334.610	.796
	SMSTotal	1042.889[b]	3	347.630	.542
	ARS	358.748[c]	3	119.583	.828
Intercept	EMS	1519848.051	1	1519848.051	906.090
	SMSTotal	6976316.237	1	6976316.237	10872.308
	ARS	404919.712	1	404919.712	2804.897
ParentingStyle	EMS	4003.829	3	1334.610	.796
	SMSTotal	1042.889	3	347.630	.542
	ARS	358.748	3	119.583	.828
Error	EMS	177801.226	106	1677.370	
	SMSTotal	68015.875	106	641.659	
	ARS	15302.343	106	144.362	
Total	EMS	1923632.000	110		
	SMSTotal	8194248.000	110		
	ARS	481712.000	110		
Corrected Total	EMS	181805.055	109		
	SMSTotal	69058.764	109		
	ARS	15661.091	109		

Tests of Between-Subjects Effects

Source	Dependent Variable	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[d]
Corrected Model	EMS	.499	.022	2.387	.217
	SMSTotal	.655	.015	1.625	.158
	ARS	.481	.023	2.485	.224
Intercept	EMS	.000	.895	906.090	1.000
	SMSTotal	.000	.990	10872.308	1.000
	ARS	.000	.964	2804.897	1.000
ParentingStyle	EMS	.499	.022	2.387	.217
	SMSTotal	.655	.015	1.625	.158
	ARS	.481	.023	2.485	.224
Error	EMS				
	SMSTotal				
	ARS				
Total	EMS				
	SMSTotal				
	ARS				
Corrected Total	EMS				
	SMSTotal				
	ARS				

a. R Squared = .022 (Adjusted R Squared = -.006)

b. R Squared = .015 (Adjusted R Squared = -.013)

c. R Squared = .023 (Adjusted R Squared = -.005)

d. Computed using alpha = .05

Parameter Estimates

Dependent Variable	Parameter	B	Std. Error	t	Sig.	95% ... Lower Bound
EMS	Intercept	122.255	5.974	20.465	.000	110.411
	[ParentingStyle=.00]	-3.150	11.134	-.283	.778	-25.225
	[ParentingStyle=1.00]	13.245	10.010	1.323	.189	-6.601
	[ParentingStyle=2.00]	6.078	11.352	.535	.593	-16.429
	[ParentingStyle=3.00]	0[a]	.	.	.	.
SMSTotal	Intercept	275.021	3.695	74.433	.000	267.696
	[ParentingStyle=.00]	-5.705	6.886	-.829	.409	-19.359
	[ParentingStyle=1.00]	-3.944	6.191	-.637	.525	-16.219
	[ParentingStyle=2.00]	-8.077	7.021	-1.150	.253	-21.997
	[ParentingStyle=3.00]	0[a]	.	.	.	.
ARS	Intercept	64.000	1.753	36.518	.000	60.525
	[ParentingStyle=.00]	-.158	3.266	-.048	.962	-6.634
	[ParentingStyle=1.00]	4.308	2.937	1.467	.145	-1.514
	[ParentingStyle=2.00]	.611	3.330	.183	.855	-5.992
	[ParentingStyle=3.00]	0[a]	.	.	.	.

Parameter Estimates

Dependent Variable	Parameter	95% ... Upper Bound	Partial Eta Squared	Noncent. Parameter
EMS	Intercept	134.099	.798	20.465
	[ParentingStyle=.00]	18.925	.001	.283
	[ParentingStyle=1.00]	33.091	.016	1.323
	[ParentingStyle=2.00]	28.585	.003	.535
	[ParentingStyle=3.00]	.	.	.
SMSTotal	Intercept	282.347	.981	74.433
	[ParentingStyle=.00]	7.948	.006	.829
	[ParentingStyle=1.00]	8.330	.004	.637
	[ParentingStyle=2.00]	5.844	.012	1.150
	[ParentingStyle=3.00]	.	.	.
ARS	Intercept	67.475	.926	36.518
	[ParentingStyle=.00]	6.318	.000	.048
	[ParentingStyle=1.00]	10.130	.020	1.467
	[ParentingStyle=2.00]	7.214	.000	.183
	[ParentingStyle=3.00]	.	.	.

Parameter Estimates

Dependent Variable	Parameter	Observed Power[b]
EMS	Intercept	1.000
	[ParentingStyle=.00]	.059
	[ParentingStyle=1.00]	.259
	[ParentingStyle=2.00]	.083
	[ParentingStyle=3.00]	.
SMSTotal	Intercept	1.000
	[ParentingStyle=.00]	.130
	[ParentingStyle=1.00]	.097
	[ParentingStyle=2.00]	.207
	[ParentingStyle=3.00]	.
ARS	Intercept	1.000
	[ParentingStyle=.00]	.050
	[ParentingStyle=1.00]	.307
	[ParentingStyle=2.00]	.054
	[ParentingStyle=3.00]	.

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

b. Computed using alpha = .05

General Estimable Function[a]

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	1519848.051	3256215.693	784484.822
		SMSTotal	3256215.693	6976316.237	1680728.403
		ARS	784484.822	1680728.403	404919.712
	ParentingStyle	EMS	4003.829	-624.374	1129.987
		SMSTotal	-624.374	1042.889	-124.761
		ARS	1129.987	-124.761	358.748
Error		EMS	177801.226	9765.446	-3670.351
		SMSTotal	9765.446	68015.875	5181.943
		ARS	-3670.351	5181.943	15302.343

Based on Type III Sum of Squares

Residual SSCP Matrix

		EMS	SMSTotal	ARS
Sum-of-Squares and Cross-Products	EMS	177801.226	9765.446	-3670.351
	SMSTotal	9765.446	68015.875	5181.943
	ARS	-3670.351	5181.943	15302.343
Covariance	EMS	1677.370	92.127	-34.626
	SMSTotal	92.127	641.659	48.886
	ARS	-34.626	48.886	144.362
Correlation	EMS	1.000	.089	-.070
	SMSTotal	.089	1.000	.161
	ARS	-.070	.161	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	105.000	.
	Hotelling's Trace	.000	.	.000	2.000	.
	Roy's Largest Root	.000	.000[a]	3.000	103.000	1.000
EMS, SMSTotal	Pillai's Trace	.000	.	.000	.000	.
	Wilks' Lambda	1.000	.	.000	105.500	.
	Hotelling's Trace	.000	.	.000	2.000	.
	Roy's Largest Root	.000	.000[a]	2.000	104.000	1.000
EMS, ARS	Pillai's Trace	.000	.	.000	.000	.
	Wilks' Lambda	1.000	.	.000	105.500	.
	Hotelling's Trace	.000	.	.000	2.000	.
	Roy's Largest Root	.000	.000[a]	2.000	104.000	1.000
SMSTotal, ARS	Pillai's Trace	.000	.	.000	.000	.
	Wilks' Lambda	1.000	.	.000	105.500	.
	Hotelling's Trace	.000	.	.000	2.000	.
	Roy's Largest Root	.000	.000[a]	2.000	104.000	1.000
EMS	Pillai's Trace	.000	.	.000	.000	.
	Wilks' Lambda	1.000	.	.000	106.000	.
	Hotelling's Trace	.000	.	.000	2.000	.
	Roy's Largest Root	.000	.000[a]	1.000	105.000	1.000
SMSTotal	Pillai's Trace	.000	.	.000	.000	.
	Wilks' Lambda	1.000	.	.000	106.000	.
	Hotelling's Trace	.000	.	.000	2.000	.
	Roy's Largest Root	.000	.000[a]	1.000	105.000	1.000
ARS	Pillai's Trace	.000	.	.000	.000	.
	Wilks' Lambda	1.000	.	.000	106.000	.
	Hotelling's Trace	.000	.	.000	2.000	.
	Roy's Largest Root	.000	.000[a]	1.000	105.000	1.000

Multivariate Tests

Dependent Variables		Partial Eta Squared	Noncent. Parameter	Observed Power[b]
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	177801.226	106	1677.370		
SMSTotal	Lack of Fit	.000	0	.	.	.
	Pure Error	68015.875	106	641.659		
ARS	Lack of Fit	.000	0	.	.	.
	Pure Error	15302.343	106	144.362		

Univariate Tests

Dependent Variable	Source	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
EMS	Lack of Fit	.000	.000	.
	Pure Error			
SMSTotal	Lack of Fit	.000	.000	.
	Pure Error			
ARS	Lack of Fit	.000	.000	.
	Pure Error			

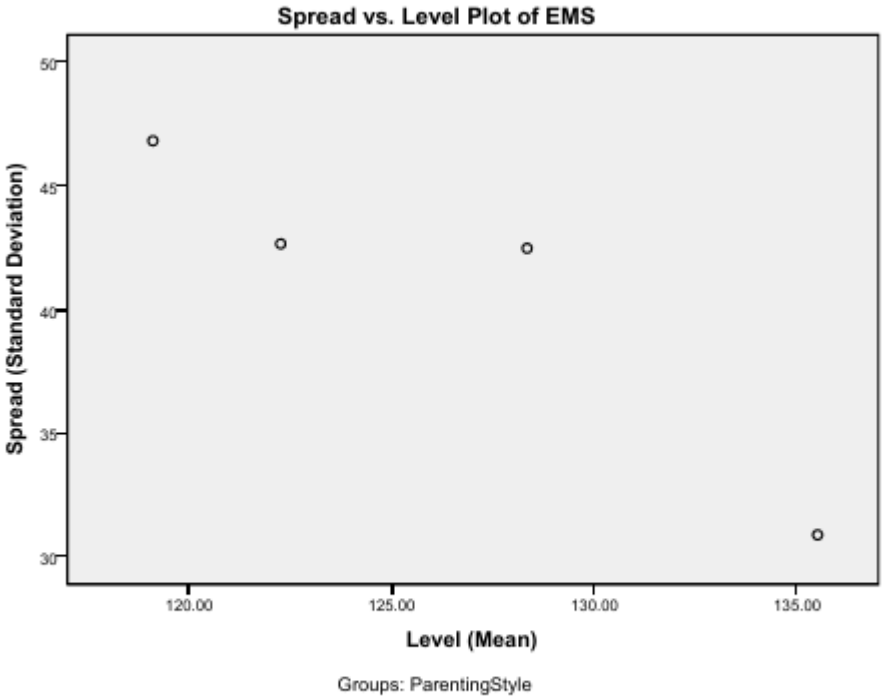
a. Computed using alpha = .05

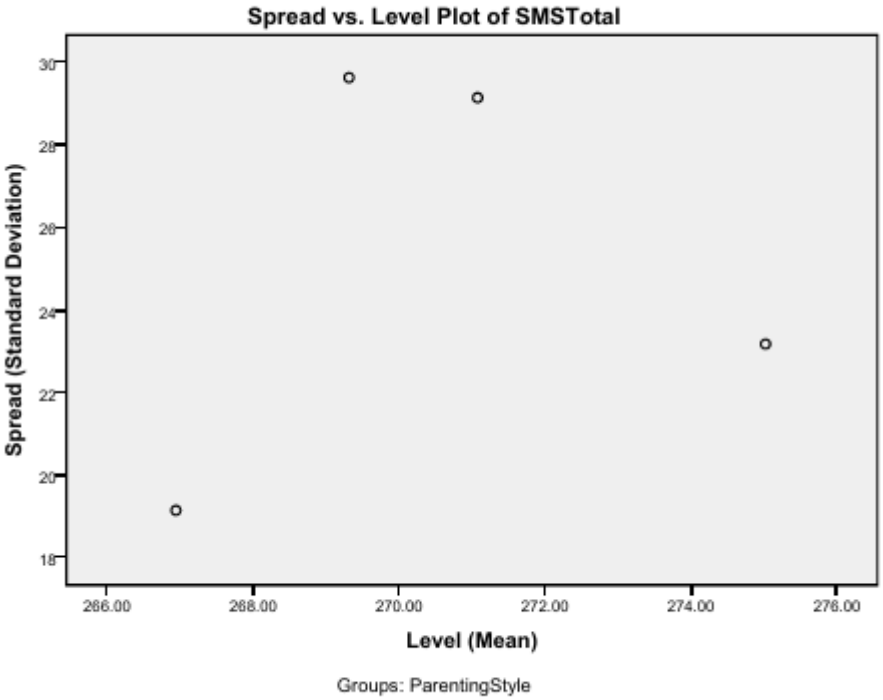
SSCP Matrix

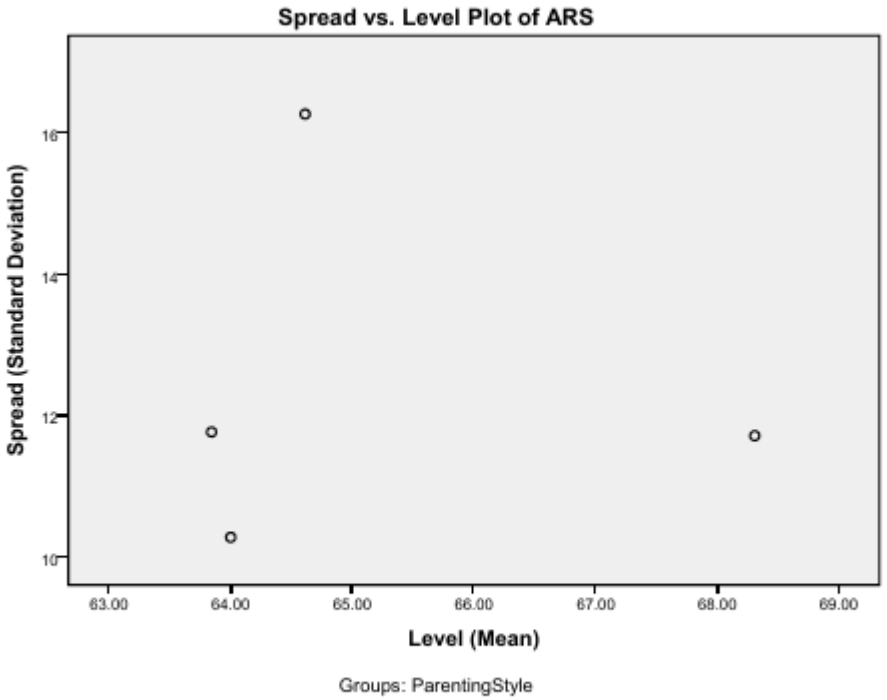
		EMS	SMSTotal	ARS
Lack of Fit	EMS	.000	.000	.000
	SMSTotal	.000	.000	.000
	ARS	.000	.000	.000
Pure Error	EMS	177801.226	9765.446	-3670.351
	SMSTotal	9765.446	68015.875	5181.943
	ARS	-3670.351	5181.943	15302.343

Spread-versus-Level Plots

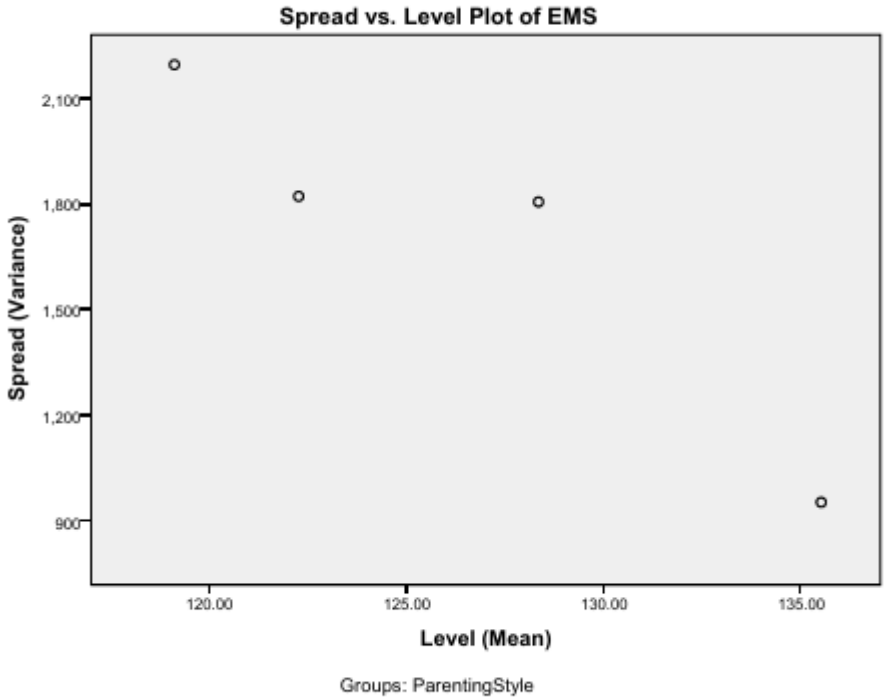
Standard Deviations versus Means

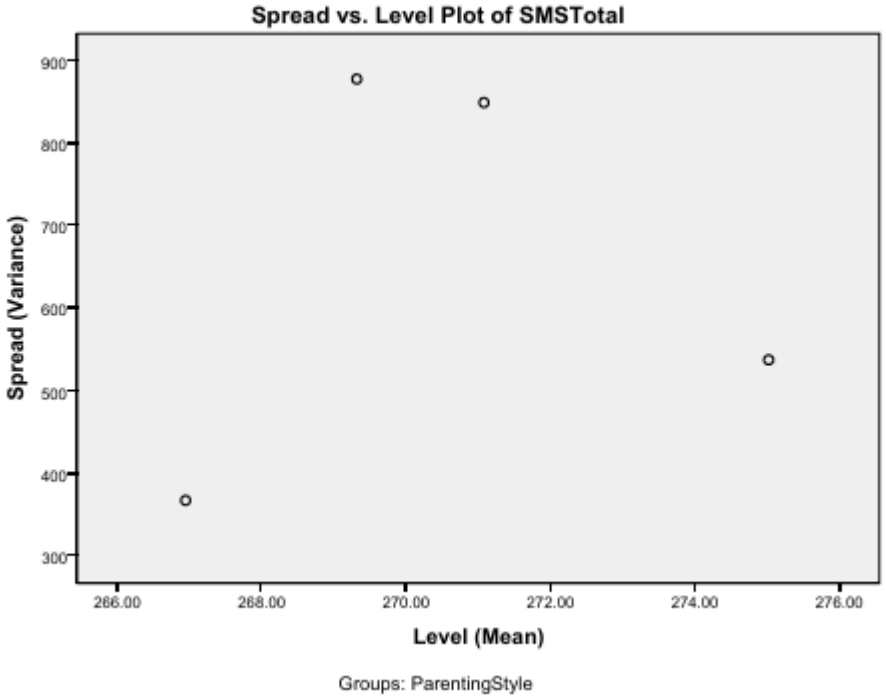

Spread vs. Level Plot of EMS
Spread (Standard Deviation)
50
45
40
35
30
120.00
125.00
130.00
135.00
Level (Mean)
Groups: ParentingStyle

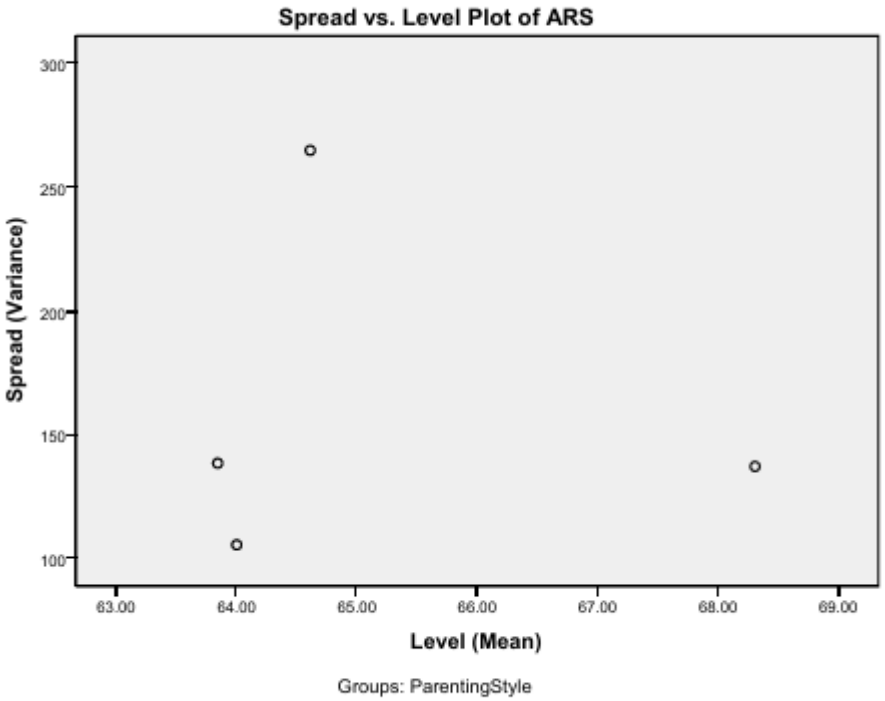

Spread vs. Level Plot of SMSTotal
Spread (Standard Deviation)
30
28
26
24
22
20
18
266.00
268.00
270.00
272.00
274.00
276.00
Level (Mean)
Groups: ParentingStyle



Variances versus Means







Observed * Predicted * Std. Residual Plots