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Roles of parenting styles and emotion regulation in test anxiety among secondary school students

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Abstract

This study investigated the roles of parenting styles and emotion regulation in test anxiety among secondary school students. Participants were 202 students of a secondary school in Nsukka urban area of Enugu state. Their age ranged from 12-20 years with the mean age of 15.79 years. Parenting styles was based on the three typologies of authoritarian, permissive and authoritative parenting styles. Three measures, namely, Parenting Styles Inventory – II (PSI-II), Emotion Regulation Questionnaire (ERQ) and Test Anxiety Inventory (TAI) were used for data collection. Hierarchical multiple regression was used to analyze the data. Results showed that authoritative parenting style negatively predicted test anxiety, but permissive parenting style and authoritarian parenting style did not significantly predict test anxiety. Cognitive reappraisal negatively predicted test anxiety but expressive suppression did not significantly predict test anxiety. Findings of this study highlight the importance of positive parenting practices in child upbringing and the need to facilitate cognitive reappraisal as an adaptive emotion regulation strategy in reducing test anxiety among students.

Key Words*: Parenting style. Educational policy. Emotion regulation. Secondary school. Test anxiety*.

One of the anxiety structures surveyed by researchers during the last decades, which is related to the student's academic problems is test anxiety. It is a kind of anxiety related to students learning process and achievement in educational institutions (Erzen, 2017). In scientific fields, test anxiety is defined as a sign of fear of poor performance and negative self-evaluation before, during and after the test (Herzer, Wendt, & Hamm, 2014). It is a combination of physiological over-arousal, tension and somatic symptoms, along with worry, dread, fear of failure, and catastrophizing, that occur before or during test situations (Zeidner, 1998). As a construct, test anxiety involves cognitive, affective, physiological, and

behavioural reactions to evaluative situations (Hong, 1998). Many students suffering from test anxiety may have spent a lot of time for studying and preparing themselves for the test but they have problems such as focusing, distraction, and mental interruptions (Tahmasebipour, 2011). The physical symptoms of anxiety can be shortness of breath, heart palpitations, dizziness, sweating, shaking and/or trembling, hot and cold flashes, and nausea or abdominal problems. Psychological symptoms such as feelings of going crazy or losing control, difficulty organizing one's thoughts, sense of 'going blank', and inability to stay focused or concentrate may also be experienced (http://www.qcc.cuny.edu/counseling/Brochures/Test%20Anxiety%20pamphlet.pdf)

Given that in modern society, evaluation and assessment are among the most important principles in each educational system (Nejad & Asadzade, 2014), test anxiety can have broader consequences, negatively affecting a student's social, emotional and behavioural development, as well as their feelings about themselves and school (Salend, 2012). Birenbaum and Nasser (1994) claimed that test anxiety has become one of the most disruptive factors in school and other settings where testing is performed. One fundamental stage in the educational career of a students is the secondary education. This level of education, in Nigeria, usually coincides with the adolescent stage of human development.

Some studies have shown that despite the increase in peer influence during adolescence, parents have an overriding influence on their children's behaviours, even during adolescence and young adulthood (Clark et al., 2015; Darling & Steinberg, 1993). Experiences within the family environment play a critical role in exposing adolescents to both the risks and protective factors involved in the development of anxiety disorders (Yap et al., 2013). This view supports Erickson's (1968) proposition that an adolescent develops through an identity crisis in which he/she begins to identify with parental beliefs/views/values. Parenting styles and practices interface with self-concept in adolescent psychosocial development (Darling & Steinberg, 1993). Hence, as the individual is facing the challenges of adolescence, he/she also has to grapple with the expectations from significant persons. One expectation from students at this period is for them to perform well in their academics. In addition, emotion regulation in general has significant effects on a variety of domains. Educational setting is one of those domains as the emotion regulation processes that are utilized both before and during the test-takings situations are claimed to determine academic performance (Schutz & Davis, 2000). Regulating emotions is especially necessary as well as important during the moments of challenge such

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as a test which activates emotions like anxiety (Gross, 1999). Therefore, the purpose of the present study is to examine the role of parenting styles and emotion regulation in test anxiety.

Studies have shown that parents have a powerful impact on child's growth (e.g., Besharat, Azizi, & Poursharifi, 2011). The psychological assessment of child rearing practices or strategies in a family is often represented by means of the parenting styles. Parenting styles represent broader patterns of parenting practices (Spera, 2005). Generally, two important elements of parenting are captured in the construct: parental responsiveness, and parental demandingness (Maccoby & Martin, 1983). According to Baumrind (1991), parental responsiveness (that is, parental warmth or supportiveness) refers to the extent to which parents intentionally foster individuality, self-regulation are supportive and acquiescent to children's special needs and demands. Parental demandingness (that is, behavioural control) refers to the claims parents make on children to become integrated into the family as a whole, by their maturity demands, supervision, disciplining efforts and willingness to confront the child who disobeys (Baumrind, 1991).

Baumrind (1967) identified three common parenting styles known as authoritative, authoritarian and permissive parenting styles. These parenting styles reflect the patterns of parental values, practices and behaviours as well as a distinct balance of responsiveness and demandingness presenting different outcomes for children. The building blocks of these parenting styles are warmth and control (Maccoby & Martin, 1983). Authoritative parenting style is characterized by a child-centred approach that holds high expectations of maturity. Authoritative parents are usually demanding and responsive which may make the children more independent and self-reliant (Kathleen, 2012). According to Santrock (2007), authoritarian parenting is a restrictive, punishment-heavy parenting style in which parents make their children follow their directions with little or no explanation or feedback and focus on the child's and family's perception and status. Since such parents are demanding but not responsive, children raised on the basis of this type of parenting may have less social competence. Permissive parenting style is a style of parenting in which parents are responsive to the needs of their children but place few demands or controls on them (Santrock, 2007). In the present study, parenting styles refers to secondary school students' perceptions of the parenting styles of their parents.

A strong positive relationship has been found between negative parental caring (rejection and over-protection) and psychopathology in childhood, adolescence, and adulthood (Mamorstein & Iacono, 2004; Anli, I., & Karsli, 2010; McLeod, Wood, & Weisz, 2007; Niditch & Varela, 2012; Yap, Pilkington, Ryan, & Jorm, 2013). Authoritarian parenting pattern, in particular, have been associated with generalized anxiety (Bakhla, Sinha, Sharan, Binay, Verma, & Chaudhury, 2013), and social anxiety (Aka & Gencoz, 2014; Xu, Ni, Ran, & Zhang, 2017). Theoretically, Bandura (1999) postulates that parental figures may be the earliest and possibly the strongest source for modeling, internalization, and the creation of outcome expectations for their children's behaviour (Huta, 2012). From a social-cognitive perspective, early childhood environments may set the stage for children to internalize parental demands and warmth, or lack thereof, as their own cognitive expectancies in relation to assessment situations (Soysa & Weiss, 2014). A social-cognitive perspective suggests that the high demands and lack of warmth displayed by authoritarian parents may create internalized cognitive expectancies of unrealistic standards in their children, while the high demands and warmth of authoritative parents may not (Soysa & Weiss, 2014).

Some empirical studies have linked parenting styles to test anxiety. For instance, Putwain, Woods, and Symes (2010) found a positive association between parental pressure and test anxiety in high-school students, and Greenberger, Lessard, Chen, and Farruggia (2008) found an inverse relationship between parental warmth and achievement anxiety among college students. Among Iranian students, Nejad and Asadzade (2014) found that a positive relationship between authocratic parenting style and the test anxiety. There was an inverse relationship between authoritative style and test anxiety, but the relationship between permissive style and test anxiety was not significant. Butnaru (2016) tested the relationship between perceived authoritative, authoritarian and permissive parenting styles and school anxiety (anxiety about aggression, about social evaluation and about school failure) among Romanian secondary school students. The highest mean score in school anxiety was in school failure. In general, students whose parents expressed prevailing authoritarian and permissive styles had higher levels of school anxiety. Recently, in Nigeria, Nwosu, Nwanguma and Onyebuchi (2016) reported that permissive and authoritative parenting styles had a negative relationship with test anxiety, while authoritarian parenting had a positive relationship with test anxiety among secondary school students. As observed by Fletcher, Serena Shim, and Wang (2012) the social-cognitive dimensions of environmental context (e.g., parenting styles) and personal factors (e.g., emotion regulation) are rarely investigated together regarding students' academic outcomes. Thus our study addressed this theoretical gap in the literature.

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The ability to regulate how emotions are experienced in everyday life is crucial for social adjustment and well-being (e.g., Aldao, Nolen-Hoeksema, & Schweizer, 2010; Rawana, Flett, McPhie, Nguyen, & Norwood, 2014). The concept of emotion regulation has appeal in developmental research on young people because of its role in integrating an understanding of typical and atypical development (Keenan, 2000). Coping with test anxiety may be regarded as a process of emotional regulation (Schutz & Davis, 2000), and anxiety is only one of many emotions that may be experienced in the context of tests and examinations.

Emotion regulation refers to "processes by which we influence which emotions we have, when we have them, and how we experience and express them" (Gross, 2002, p.282). Despite the large volume of literature on test anxiety, there are a few studies addressing students' emotion regulation strategies in relation to. Yet the ability in controlling one's emotions is an important characteristic one should possess. The purpose of emotion regulation is neither to repress emotions nor only to have an individual always in a calm state of emotional arousal. Instead, emotion regulation includes processes of monitoring, evaluating and changing one's emotional experiences (Thompson, 1994). As a dynamic process, emotion regulation is shaped by the efforts of individuals to maintain, modulate, or transform the nature, intensity, and duration of feeling states (Thompson, 1994).

Several theoretical perspectives of emotion regulation exist, but the process model of emotion regulation (Gross, 1998a) unifies the common features in many different approaches to emotion (Barrett, Ochsner, & Gross, 2007; Sheppes, Suri, & Gross, 2015), and it has been applied to several psychological disorders (see Gross & Jazaieri, 2014; Sheppes et al., 2015). Empirically, the model addresses two major emotion regulation strategies, which are cognitive reappraisal and expressive suppression. There are notable differences between cognitive reappraisal and suppression as a result of their distinctive nature, besides the effects they have on psychological, behavioral and environmental domains differ. Cognitive reappraisal is defined as the emotion regulation strategy in which the individual aims to change the way he/she views a situation that evokes emotion for the purpose of altering the emotional impact it has (Evers, Stok, & Ridder, 2010). It refers to re-evaluating and subsequently changing the meaning which is attributed to the situation so as to alter its emotional impact (Gross, 1999; Gross, 2002; Gross & Thompson, 2007; Evers, Stok, & Ridder, 2010). Since cognitive reappraisal distances the individual from

the unpleasant feeling that the situation triggers, it is also defined as a "cooling" strategy (Mischel & Ayduk, 2004). Suppression, on the other hand, is a response strategy which is used to reduce or inhibit the overt expression of emotion (Gross & John, 2003; Gross et al., 2009).

Evidences indicating that measures of emotion regulation explain incremental variance in measures of anxiety disorder symptoms were substantial, but majority of existing research have focused on Generalised Anxiety Disorder, panic disorder, and posttraumatic stress disorder severity (see Cisler & Olatunji, 2012; Chukwuorji, Ifeagwazi, & Eze, 2017, for reviews). A recent meta-analysis showed that less use of regulatory fronto-parietal network involved in cognitive reappraisal among individuals with anxiety disorders (Picó-Pérez, Radua, Steward, Menchón, & Soriano-Mas, 2017). The anxiety students feel about a test may be related to how the test is evaluated. The cumulative histories and individuals beliefs about their performances affect the way they appraise the test and hence this appraisal may lead to test anxiety for some (Davis, Stefano, & Schutz, 2008). When the individual manages to alter his/her appraisal of the test performance, especially self-efficacy beliefs, test-anxiety will be more likely to be eliminated. Besides, the emotion regulation strategy that is utilized acts upon the test anxiety that one experiences. In general, those who regulate their emotions by reappraising the situation are found to be experiencing low level of test anxiety compared to those who do not regulate or those who tend to suppress their emotions (Dora, 2012; Spielberger & Vagg, 1995; Schutz & Davis, 2000; Davis, DiStefano, & Schutz, 2008). Excessive suppression may entail the adoption of avoidance strategies in managing anxiety-provoking situations such as examinations. Previous research suggests that expressive suppression was higher for anxiety group than healthy group indicating the possible effects of over-use for expressive suppression in the aetiology of anxiety (Werner et al., 2011).

From the foregoing review, studies abound on parenting styles and test anxiety but they were mostly conducted in foreign cultures. Except a few studies (e.g. Nwosu et al., 2016), little research have examined the relationship between parenting styles and students' test anxiety in non-western cultures. Studies also exist on emotion regulation and several forms of anxiety psychopathology but we did much research on emotion regulation and test anxiety. Hence, this study is considered necessary in order to fill an important gap in existing knowledge in the field. The simultaneous investigation of parenting styles and emotion regulation in relation to test anxiety is also important for the much-needed progress in exploring the propositions of social cognitive theory across diverse issues of interest in behavioural research. Based on related literature, the

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researchers hypothesised that authoritative parenting style will negatively predict test anxiety, but permissive parenting style and authoritarian parenting style will positively predict test anxiety. It is also expected that cognitive reappraisal will negatively predict test anxiety, but expressive suppression will positively predict test anxiety.

Method

Participants and Procedure

Participants were two hundred and two (202) students drawn from senior secondary one (SS1) and senior secondary two (SS11) classes in Model Secondary School, Nsukka. Their age ranges from (12-20) years with an average age of 15.79 years (*SD* = 1.58). Permission to conduct of the study was granted by the by the Principal of the school. Data was collected with the assistance of two trained research assistants (school teachers) who, in the company of the second author, approached the students in their classrooms for the completion of the questionnaires. Informed consent was obtained from the participants. Of 220 questionnaires that were completed and returned, 202 copies (91.82%) were properly completed and used for the study. No financial reward was given to the students for participating in the research.

Instruments

Three measures were used for the data collection: Parenting Style Inventory - II, Test Anxiety Inventory, and Emotion Regulation Questionnaire.

Parenting Style Inventory-11

Parenting Styles Inventory- II (PSI –II) was developed by Darling and Steinberg (1993). The scale contains 15 items designed to measure the three dimensions of parenting styles namely: authoritative, authoritarian and permissive. Such that items 1-5 measure authoritative parenting; items 6-10 measure permissive parenting, and items 11-15 measure authoritarian parenting. There is no sub-scale for studying the fourth parenting style which is uninvolved or neglectful parenting styles .The instrument is a five (5) point likert scale with the response format of Strongly Disgree to strongly agree. Darling and Steinberg (1993) reported a predictive validity PSI –II with outcome variables such as intrinsic motivation (r = .15 - .25), Grade Point Average (r = .07 - .28), bonding with teachers (r = .21 - .44), attitude towards school (r = .33 - .44), and parental involvement (r = .26 - .28). They also reported the reliability co-efficient alpha values for the three dimensions of parenting styles as follows: authoritarian .74; authoritative .75 and permissive .72. This indicated that each set of items is

internally consistent, measuring a common construct. The scale has been validated among Nigerian secondary school students in a previous study (Nwufo, Ifeagwazi, Eze, Chukwuorji, & Orjiakor, revised submission)

Test Anxiety Inventory (TAI)

Test Anxiety Inventory (TAI) was developed by Spielberger (1980) to measure anxiety proneness in tests, examinations and evaluative situations. It is a twenty item inventory designed to assess the overall cognitive, affective and behavioural reactions to test or examination situations. The TAI has been adopted in Nigeria by Omulabi (1993), who correlated TAI with State-Trait Anxiety Inventory and attained a concurrent validity of .19 for the STAI-X-1 and a concurrent validity of .62 for STAI-X-2. A previous study (Chukwuorji & Nwonyi, 2015) has also found the measure to be reliable and valid for Nigerian secondary school students.

Emotion Regulation Questionnaire (ERQ)

The 10-item Emotion Regulation Questionnaire (ERQ) was developed by Gross and John (2003) to measure the habitual use of two emotion regulation strategies: cognitive reappraisal (6 items) and expressive suppression (4 items). Each subscale's scoring is kept separate. Items were scored on a 5-point likert scale of: strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, and strongly agree = 5. Both the cognitive reappraisal subscale (Cronbach's alpha coefficient values ranging from .75 to .82) and emotional suppression subscale (Cronbach's alpha coefficient values ranging from .68 to .76) have shown very good internal consistency and three-month test-retest reliability (r =.69) (Kulkami, 2010). Several studies using student samples have provided evidence of the two-factor structure of the ERQ with exceptional model fit (e.g; Spaapen, Waters, Brummer, Stopa & Bucks, 2014). Since the ERQ have not been validated among Nigerian adolescents, a pilot study was conducted by the present researchers using (89) eight-nine students who were not part of the main study. The Kaizer-Meyer Olkin (KMO) value was .64 and the Bartlett's Test of Sphericity was 97.071 ($p < 001$), indicating that the data can be tested for factorial validity. The items loaded on the two dimensions of the ERQ with values above .30, explaining 24.31% of the variance in the scale. The internal consistency reliability (Cronbach's, α) of the Cognitive reappraisal scale was .79 while the α of the expressive suppression scale was .76.

Design/ Statistics

A cross sectional survey design was used. Pearson's correlation was used to determine the relationship between the dependent variables and independent variable. Hierarchical multiple regression was used to test the hypotheses.

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Results

The mean, standard deviations and correlations of the demographic variables and study variables are shown in Table 1, while findings of the regression analysis is in Table 2.

Table 1: Mean, standard deviations (SD) and correlations of the demographic variables, parenting styles, emotion regulation and test anxiety

Variable		Mean	SD	1	2	3	4	5	6	7
1	Age	15.79	1.58	1						
2	Gender	-	-	-.08	-					
3	Authoritative PS	19.04	3.07	-.04	.01	-				
4	Permissive PS	15.67	3.07	-.12	-.05	.15*	-			
5	Authoritarian PS	20.02	3.48	.04	-.05	.35***	.07	-		
7	Cognitive Reappraisal	18.05	4.60	.08	-.07	-.05	.06	.10	-	
8	Expressive Suppression	12.52	3.60	-.02	-.01	-.04	.02	.16*	.45***	-
9	Test anxiety	44.59	9.54	.06	-.10	-.17*	-.09	-.12	-.34***	.06

Note: ***p < .001; **p < .01; *p < .05; Gender (male = 0, female = 1); PS = Parenting style

In Table 1, age was not significantly related to test anxiety (r = .06). Gender was not significantly related to test anxiety (r = -.10). Authoritative parenting style had a negatively significant relationship with test anxiety (r = -.17, p<.05), showing that those who had more authoritative parenting style also reported lower test anxiety. Permissive parenting style and authoritarian parenting styles were not significantly associated with test anxiety (r = -.09, and -.12, respectively). Cognitive reappraisal had a negative relationship with test anxiety (r = -.34, p<.001), which showed that greater use of cognitive reappraisal strategy was associated with lower test anxiety. Expressive suppression did not have a significant relationship with test anxiety (r = .06).

Table 2: Hierarchical multiple regression predicting test anxiety by parenting styles and emotion regulation

Predictors	Step 1			Step 2		
	B	**Beta (*β*)**	***T***	***B***	**Beta (*β*)**	***t***
Authoritative PS	-.36	-.14	-1.83	-.28	-.11	-1.81*
Permissive PS	-.19	-.06	-.84	-.25	-.08	-1.23

Authoritarian PS	-.18	-.07	-.89	-.27	-.10	-1.38
Cognitive reappraisal				-.82	-.40	-5.38**
Expressive suppression				-.28	-.11	-1.43
R^2	.04			.16		
ΔR^2	.04			.12		
F	2.49* (3, 198)			7.71 (5, 196)		
ΔF	2.49* (3, 198)			15.01** (5, 196)		

Note: **p < .001; *p < .01; PS = Parenting style; ΔR^2 = Change in R2; ΔF = Change in F

In Table 2, step 1 showed that authoritative parenting style was a negatively significant predictor of test anxiety (β = -.14, p < .05), indicating that students who reported more authoritative parenting style had lower test anxiety. The unstandardized regression coefficient (B) of -.36, showed that for every one unit rise in authoritative parenting style, test anxiety reduces by .36 units. Permissive parenting style did not significantly predict test anxiety (β = -.06). Authoritarian parenting style did not significantly predict test anxiety (β = -.07). All the parenting styles explained 4% of the entire variance in test anxiety (ΔR^2 = .04). The F change associated with the parenting styles in relation to test anxiety was 2.49 (3, 198), p < .05.

In step 2 of the regression results, cognitive reappraisal was found to be a negatively significant predictor of test anxiety (β = -.40, p < .001), indicating that students who reported greater use of cognitive reappraisal had lower test anxiety. The unstandardized regression coefficient (B) of -.82, showed that for every one unit rise in cognitive reappraisal, test anxiety reduces by .82 units. Expressive suppression did not significantly predict test anxiety (β = -.11). The two emotion regulation strategies explained 12% of the entire variance in test anxiety (ΔR^2 = .12). The F change associated with emotion regulation in relation to test anxiety was 15.01 (5, 196), p < .001.

Discussion

This study investigated the role of parenting styles and emotion regulation in test anxiety in a sample of secondary school students in Nigeria. The findings of this study showed that among the three parenting styles, only authoritative parenting style was negatively predicted test anxiety. This indicates that students who reported more authoritative parenting style had lower test anxiety. Cognitive reappraisal was a negatively significant predictor of test anxiety but expressive suppression did not significantly predict test anxiety.

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The current finding on parenting styles and test anxiety is consistent with findings of previous researchers (e.g., Nejad & Asadzade, 2014; Nwosu et al., 2016) who found a negative association between authoritative style and test anxiety, and some others (e.g., Nejad & Asadzade, 2014), which reported that the relationship between permissive style and test anxiety was not significant. Therefore, the hypothesis which stated that authoritative parenting style would negatively predict test anxiety was supported. The result may imply that when children are directed to exercise some level of autonomy in their academic pursuit, that they are likely to exhibit lower level of test anxiety. This is because there is a level of democratic practice in which the child has a say and may likely choose a part under the guidance of the parents. Authoritative parents exhibit appropriate emotional response to their children. They are kind, supportive, and sensitive toward the interests and needs of their children yet, at the same time, they are restrictive, too, but they explain the reasons for these restrictions in a reasonable way to the kids. They exercise parental control with compassion, democracy, and open interaction (Nejad & Asadzade, 2014). In this atmosphere, the children imbibe the characteristics of freedom with responsibility which enables them to function optimally in their academic pursuits. When students feel more emotional warmth from their parents, their test anxiety level may be reduced. Conversely, the lacking of parental care, understanding and emotional warmth will result in lowered self-worth, incapability and a sense of insecurity, which can increase test anxiety. Although, it was assumed that permissive parenting style and authoritarian parenting style parental warmth would positively predict test anxiety in this study, the results did not reveal such an association. There was no support for the hypotheses that these parenting styles would positively predict test anxiety. It is possible that in the present study, most of the participants had more perceptions of authoritative parenting styles than permissive and authoritarian parenting styles.

The present study also found out that cognitive reappraisal was negatively and significantly predicts test anxiety. This showed that greater use of cognitive reappraisal strategy was associated with lower test anxiety. Therefore, the hypotheses which stated that cognitive reappraisal would negatively predict test anxiety was supported. The result is in line with Dora's (2012) finding that cognitive reappraisal was correlated with test anxiety. Cognitive appraising processes are the judgments students' make about the test and their ability to cope with the problems that occur during the test (Frijda, 1993; Smith, 1991). Appraisals emanate from students' beliefs about the world and are directed towards making comparisons among their goals and where they are in relation to those goals (Schutz, Davis, & Schwanenflugel, 2002). Positively appraising the

emotions that may arise in test-taking situations improves an individual's capability of doing what it takes to perform well in the test. By implication, efforts should be made to make test-anxious students change their cognitve schema towards having the right thoughts patterns about about academic tasks in general, and test taking situations in particular. Expressive suppression did not significantly predict test anxiety. Therefore, the hypothesis which stated that expressive suppression would negatively predict test anxiety was not supported. Although previous research (e.g., Werner et al., 2011) suggests that expressive suppression was higher for anxiety group than healthy controls, it is possible that the negative impact of expressive suppression on anxiety is not equivocal. For some forms of anxiety such as testing situations, expressive suppression may have no clear impact on the symptom manifestations.

This study has some limitations which should be noted. The reliance on only self-report measures from the students themselves may have some subjective bias. Future research should obtain data from multiple reporters such as children, parents, and teachers in order to enhance the functional utility of the information. The participants in this study were drawn from one secondary school in South-eastern Nigeria and we did not have data on demographic factors such as family socio-economic status and educational/occupational status of the parents. Hence, the demographic factors were not added as control variables in the analysis. The use of a larger sample of students especially in other regions of Nigeria is worthwhile in order to generalize the findings. Since there may be intervening variables in the associations of the variables examined in this study, mediation and moderation mechanisms of association between parenting styles and test anxiety is important to further advance the current state of knowledge. Lastly, longitudinal research is needed in this area of research in order to further understand the developmental trajectories of parental and emotion regulation influences on test anxiety.

In conclusion, it is possible that parents who are warmer, less rejecting and less likely to resort to punishment may raise children who are able to properly focus on their academic tasks and cope with the challenges of academic testing situations. The current research suggests that to improvement of parents' rearing styles to incorporate more authoritative practices will lead to positive educational outcomes in terms of less experiences of test anxiety. Public education programmes and mental healthcare services in schools should enlighten parents on the consequences of parental behaviour educational and mental health outcomes of their wards. Students would also benefit from psychosocial interventions aimed at inculcating cognitive appraisal skills in them.

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References

Aka, B. T., & Gencoz, T. (2014). Perceived parenting styles, emotion recognition andregulation in relation to psychological well-being. *Procedia - Social and Behavioral Sciences 159,* 529 – 533.

Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*, *2*, 217-37.

Anli, I., & Karsli, T. A. (2010). Perceived parenting style, depression and anxiety levels in a Turkish late-adolescent population. *Procedia Social and Behavioral Sciences, 2,* 724–727.

Bakhla, A. K., Sinha, P., Sharan, R., Binay, Y., Verma, V., & Chaudhury, S. (2013). Anxiety in school students: Role of parenting and gender. *Industrial Psychiatry Journal, 22*(2), 131–137. doi: 10.4103/0972-6748.132927

Barrett, L. F., Ochsner, K. N., & Gross, J. J. (2007). On the automaticity of emotion. In J. Bargh (Ed.), *Social psychology and the unconscious: The automaticity of higher mental processes* (pp. 173–217). New York, NY: Psychology Press.

Baumrind, D. (1967). Child care practices interceding three patterns of preschool behavior. *Genetic Psychology Monographs, 75*, 43–88.

Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*, 11(1), 56-95.

Besharat, M., Azizi, K., & Poursharifi, H. (2011). The relationship between parenting styles and children's perfectionism in a sample of Iranian families. *Procedia Social and Behavioral Sciences,* 15, 1276-1279.

Birenbaum, M., & Nasser, F. (1994). On the relationship between test anxiety and test performance. *Measurement & Evaluation in Counseling & Development*, 27, 293-302.

Butnaru, S. (2016). *Perceived parenting styles and school anxiety in preadolescents.* CBU International Conference on Innovations in Science and Education, March 23-25, 2016, Prague, Czech Republic. doi: 10.12955/cbup.v4.801

Cisler, J. M., & Olatunji, B. O. (2012). Emotion regulation and anxiety disorders. *Current Psychiatry Reports, 14*(3), 182–187. doi:10.1007/s11920-012-0262-2.

Chukwuorji, J. C., Ifeagwazi, C. M., & Eze J. E. (2017). Role of event centrality and emotion regulation in posttraumatic stress disorder symptoms among internally displaced persons. *Anxiety, Stress, & Coping, 30*(6), 702-715. doi: 10.1080/10615806.2017.1361936

Chukwuorji, J. C., & Nwonyi, S. K. (2015). Test anxiety: Contributions of gender, parent's educational level and self-esteem among secondary school students. *Journal of Psychology in Africa, 25*(2), 60–64. doi: 10.1080/14330237.2015.1007600

Clark, C. M., Dahlem, E. R., & Nicholson, B. C. (2015). The role of parenting in relational aggression and prosocial behavior among emerging adults. *Journal of Aggression, Maltreatment & Trauma, 24*(2),185-202. DOI:10.1080/10926771.2015.1002653

Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin*, *113*, 487–496. doi:10.1037/0033-2909.113.3.487

Davis, H. A., DiStefano, C., & Schutz, P. A. (2008). Identifying patterns of appraising tests in first-year college students: Implications for anxiety and emotion regulation during test taking. *Journal of Educational Psychology, 100*(4), 942-960.

Dora, A. G. (2012). *The contribution of self-control, emotion regulation, rumination, and gender to test anxiety of university students*. Unpublished thesis. Middle East Technical University.

Erikson, E. H. (1968). *Identity: Youth and crisis.* New York: Norton.

Erzen, E. (2017). The effect of anxiety on student achievement. In E. Karadag (Ed.), *The factors affecting student achievement* (pp 75-94). Cham: Springer.

Evers, C., Stok, F. M., & Ridder, D. T. D. (2010). Feeding your feelings: Emotion regulation strategies and emotional eating. *Personality and Social Psychology Bulletin, 36 (6),* 792-804.

Fletcher, K. L., Serena Shim, S., & Wang, C. (2012). Perfectionistic concerns mediate the relationship between psychologically controlling parenting and achievement goal orientations. *Personality and Individual Differences, 52*, 876–881. doi: 10. 1016/j.paid.2012.02.001.

Frijda, N. H. (1993). The place of appraisal in emotion. *Cognition and Emotion, 7,* 357-387.

Greenberger, E., Lessard, J., Chen, C., & Farruggia, S. P. (2008). Self-entitled college students: Contributions of personality, parenting, and

motivational factors. *Journal ofYouth and Adolescence, 37,* 1193–1204. doi: 10.1007/s10964-008-9284-9

Gross, J. J. (1999). Emotion regulation: Past, present, future. *Cognition and Emotion, 13*(5), 551-573. doi: 10.1080/026999399379186

Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology, 39,* 281-291.

Gross, J. J., & Jazaieri, H. (2014). Emotion, emotion regulation, and psychopathology: An affective science perspective. *Clinical Psychological Science*, *2*, 387–401.

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology, 85,* 348–362.

Gross, J. J., & Thompson, R. A. (2007). Emotion regulation: Conceptual foundations. In J. J. Gross (Ed.) *Handbook of emotion regulation.* (pp. 3-24). New York: Guilford Press.

Gross, J. J., Srivastava, S., McGonigal, K. M., Tamir, M., & John, O. P. (2009). The social costs of emotional suppression: A prospective study of the transition to college. *Journal of Personality and Social Psychology, 96 (4),* 883-897.

Herzer, F., Wendt, J., & Hamm, A. (2014). Discriminating clinical from non-clinical manifestations of test anxiety: A validation study. *Journal of Behavior Therapy, 45,* 222-231.

Hong, E. (1998). Differential stability of individual differences in state and trait test anxiety. *Learning & Individual Differences, 10*, 51-70.

Huta, V. (2012). Linking peoples' pursuit of eudaimonia and hedonia with characteristics of their parents: Parenting styles, verbally endorsed values, and role modeling. *Journal of Happiness Studies, 13,* 47–61. doi: 10.1007/s10902-011-9249-7

Keenan, K. (2000). Emotion dysregulation as a risk factor for child psychopathology. *Clinical Psychology: Science and Practice, 7,* 418-434.

Kulkarni, M. R. (2010). *Childhood violence exposure on emotion regulation and PTSD in adult survivors.* Ph.D thesis. Department of Psychology, University of Michigan.

Maccoby, E. E, & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P. H. Mussen and E. M. Hetherington (Eds.), *Handbook of child psychology: Vol. 4: Socialization, personality and social development* (pp. 1- 101). Chichester, New York: Wiley

Marmorstein, N. R., & Iacono, W. G. (2004). Major depression and conduct disorder in youth: Associations with parental psychopathology and

parentchild conflict. *Journal of Child Psychology & Psychiatry, 45*(2), 377-386.

McLeod, B.D., Wood, J. J., & Weisz, J. R. (2007). Examining the association between parenting and childhood anxiety: A meta-analysis. *Clinical Psychology Review, 27*, 155–172. doi: 10.1016/j.cpr.2006.09.002.

Mischel, W., & Ayduk, O. (2004). Willpower in a cognitive-affective processing system: The dynamics of delay of gratification. In R. F. Baumeister and K. D. Vohs (Eds.), *Handbook of self-regulation: Research, theory, and* applications (pp. 99–129). New York: Guilford.

Niditch, L. A., & Varela, R. (2012). Perceptions of parenting, emotional self-efficacy, and anxiety in youth: Test of a mediational model. *Child & Youth Care Forum, 41,* 21–35. doi: 10.1007/s10566-011-9150-x

Nejad, M. A. T., & Asadzade, H. N. A. (2014). Study the relationship between parenting styles and exam anxiety: An examination of the moderating role of classroom management styles. *Advances in Environmental Biology*. Retrieved from https://www.thefreelibrary.com/Study+the+relationship+between+parenting+styles+and+exam+anxiety%3A+an...-a0392176452

Nwosu, K. C., Nwanguma, V. C., & Onyebuchi, G. C. (2016). Parenting styles, test anxiety, and self-efficacy of secondary school students in Nigeria: Lessons from Nigerian sociocultural context. *Education Research Journal, 6*(2), 32 – 41.

Nwufo, J. I., Ifeagwazi, C. M., Eze, J. E., Chukwuorji, J. C., & Orjiakor, T. C. (revised submission). Role of parenting styles, age and gender in overt aggression among adolescents in a sub-Saharan sample. *Journal of Interpersonal Violence*.

Omoluabi, P. F. (1993). Validation of Test Anxiety Inventory for Nigerian samples. *Nigerian Journal of Basic and Applied Psychology, 3*(1), 37–47

Picó-Pérez, M., Radua, J., Steward, T., Menchón J. M., & Soriano-Mas, C. (2017). Emotion regulation in mood and anxiety disorders: A meta-analysis of fMRI cognitive reappraisal studies. *Progress in Neuropsychopharmacology and Biological Psychiatry, 3*(79), 96-104. doi: 10.1016/j.pnpbp.2017.06.001.

Putwain, D. W., Woods, K. A., & Symes, W. (2010). Personal and situational predictors oftest anxiety of students in post-compulsory education. *British Journal of Educational Psychology, 80,* 137–160. doi: 10.1348/000709909X466082.

Rawana, J. S., Flett, G. L., McPhie, M. L., Nguyen, H. T., & Norwood, S. J. (2014). Emotion regulation: A systematic review with implications for community mental health. *Canadian Journal of Community Mental Health, 33*(1), 31-44. doi:10.7870/cjcmh- 2014-004

Salend, S. J. (2012). Teaching students not to sweat the test. *Phi Delta Kappa, 93*(6), 20-25. doi: 10.1177/003172171209300605.

Schutz, P. A., & Davis, H. A. (2000). Emotions and self-regulation during test taking. *Educational Psychologist, 35*(4), 243-256.

Schutz, P. A., Davis, H. A., & Schwanenflugel, P. J. (2002). Organization of concepts relevant to emotions and their regulation during test taking. *The Journal of Experimental Education, 70,* 316-342.

Sheppes, G., Suri, G., & Gross, J. J. (2015). Emotion regulation and psychopathology. *Annual Review of Clinical Psychology, 11,* 379-405. doi: 10.1146/annurev-clinpsy-032814-112739

Soysa, C. K., & Weiss, A. (2014). Mediating perceived parenting styles – Test anxiety relationships: Academic procrastination and maladaptive perfectionism. *Learning and Individual Differences, 34,* 77–85. doi.: 10.1016/j.lindif.2014.05.004

Spaapen, D. L., Waters, F., Brummer, L., Stopa, L., & Bucks, R. S. (2014). The Emotion Regulation Questionnaire: Validation of the ERQ-9 in two community samples. *Psychological Assessment, 26*(1), 46-54. doi: 10.1037/a0034474

Spera, C. (2005). A review of the relationship among parenting practices, parenting styles, and adolescent school achievement. *Educational Psychology Review, 17*(2), 125-146. doi:10.1007/s10648-005-3950-1

Spielberger, C. D. (1980). *Preliminary Professional Manual for the Test Anxiety Inventory*. Palo Alto, CA: Consulting Psychology Press.

Spielberger, C. A, & Vagg, P. R. (1995). Test anxiety: A transactional process model. In. C. D. Spielberger & P. R. Vagg (Eds.), *Test anxiety: Theory, assessment, and treatment.* (pp. 3-14). Washington D. C.: Taylor & Francis.

Kathleen, S. B. (2011). *The developing person through the life span.* NY: Worth Publishers.

Tahmasebipour, N. (2011). *Test anxiety outcomes and methods for controlling it.* Tehran: Ghatreh Publications.

Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. *Monographs of the Society for Research in Child Development, 59*, 25–52.

Werner, K. H., Goldin, P. R., Ball, T. M., Heimberg, R. G., & Gross, J. J. (2011). Assessing emotion regulation in social anxiety disorder: The Emotion Regulation Interview. *Journal of Psychopathology and Behavioral Assessment*, *33,* 346–354.

Xu, J., Ni, S., Ran, N., & Zhang, C. (2017). The relationship between parenting styles and adolescents' social anxiety in migrant families: A study in Guangdong, China. *Frontiers in Psychology, 8,* 626-631. doi: 10.3389/fpsyg.2017.00626

Yap, M. B. H., Pilkington, P. D., Ryan, S. M., & Jorm, A. F. (2013). Parental factors associated with depression and anxiety in young people: A systematic review and meta-analysis. *Journal of Affective Disorders, 15,* 8-23. doi: 10.1016/j.jad.2013.11.007.

Zeidner, M. (1998). *Test anxiety: The state of the art.* New York, NY: Plenum.

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