



## Family Environment and Temperament as Predictors of Emotion Regulation

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### Abstract

Emotion regulation refers to the processes by which we influence which emotions we have, when we have them, and how we experience and express them. It is critical to understand how dynamic processes occurring at different developmental moments alter the developmental trajectory of emotion regulation and related capacities. This study examined the role of family environment and temperament as predictors of emotion dysregulation. Results indicate temperamental factors such as Effortful Control has got significant negative correlation with emotion regulation difficulties. Significant high positive correlation was found between emotion regulation difficulties and surgency, negative affect, and affiliation. Multiple regression analysis shows that negative affect, effortful control, affiliativeness, relationship dimension of family environment and surgency acts as contributors for emotion regulation difficulties. The findings suggest more integrative approach to effective management of ER difficulties focusing to temperament and care giving environment.

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Emotions permeate human life in almost every instant. The way we approach, think and act in each of these contexts may depend on how we regulate emotions. Emotion regulation (ER) refers to the ability of modulating one or a set of emotions, i.e., the capacity to control and influence which emotions we feel, when we feel them, and how we experience and express those (Gross, 1998).

Historically, effective regulation of emotions has been viewed as a developmental achievement that serves as a prerequisite for numerous other developmental tasks. Specifically, because powerful emotions have the potential to disorganize and/or disrupt multiple psychological processes, modulation of their experience and expression (through both intrapsychic and interpersonal processes) has been considered essential for basic state regulation, behavioral exploration, cognitive processing, and social competence (Diamond, 2003).

Emotional regulation (ER) has been related to a wide variety of domains of functioning, including social competence, peer acceptance as well as academic competence. On the other hand, problems in ER are often related to behavioral problems and psychopathology. In particular, problems in regulating negative emotions in early childhood have been found to be associated with both internalizing and externalizing problems at school age and beyond. Children who have difficulty in regulating negative emotions appear to be at increased risk for emotional and behavioral problems (Dagne & Snyder, 2011).

Many factors influence the development of ER. Child temperament, neurophysiology and cognitive development all play important roles. Also emotions are recognized as both products and processes of social relationships (Cole, Martin, & Dennis, 2004).

### Temperament

Temperament has been defined as “constitutionally based individual differences” in how one responds in various domains, including attention, activity, and affect/emotion

(Rothbart & Bates, 2006). Temperament is an individual's innate style of responding to the environment in both behavioral and emotional ways. All children have a temperament that will influence their emotions and how they adapt to change in their environments.

Calkins (1994) has specified two critical domains in the process of acquiring ER skills: internal elements, including biological reactivity and behavioral traits, and external elements including parental care giving styles and the training they provide. Temperament, representing innate individual differences in emotional, behavioral, and biological reactivity to changes in environment, has been hypothesized to directly shape the display and development of ER strategies. There is also considerable evidence that external support from caregivers is crucial in the development of ER skills during early childhood. Child temperament and adjustment also organize and influence children's emotion expression and regulation (Zahn-Waxler, Klimes-Dugan, & Slattery, 2000).

Children with difficult temperaments face a higher risk for adjustment problems under unfavorable family conditions or poor parenting (Lengua, 2008).

### **Family Environment**

There is a long tradition of studying how parenting and family environment are related to child development. Recent theorizing has concentrated particularly on the difference between normal or "good-enough parenting" versus pathological variation in the rearing environment. The adverse effects of severe environmental deprivation and parental maltreatment on abnormal child development have been demonstrated

Morris, Silk, Steinberg, Myres and Robinson (2007) argue that the family context affects the development of ER in three important ways. Firstly, children learn about ER through 'observation'. Secondly, specific 'parenting practices and behaviors' related to the socialization of emotion affect ER. Thirdly, ER is affected by the 'emotional climate of the family', as reflected in the quality of the attachment relationship, styles of parenting, family expressiveness and the emotional quality of the marital relationship.

Family socialization shapes children's expression and regulation of emotion in two ways. The first involves parents' immediate responses toward their children. The second source of emotion socialization in the family involves the more general emotional climate to which the child is exposed (Morris et al., 2007).

Dysfunctional family environments do not provide children many of the experiences that are necessary for normal development and adaptation. Repeated developmental disruptions caused by unsupportive environment can lead to relatively enduring vulnerability that increases the probability of further developmental disruptions. Children growing up in an environment failing to provide consistent and appropriate opportunities for development are more likely to internalize negative self-perceptions or self-schemas which, in turn, increase the risk of adult psychopathology, especially that of anxiety and depression.

Childhood temperament and family environment have been shown to predict internalizing and externalizing behavior. Childhood fear, shyness, and emotional reactivity/inhibition to novelty have been shown to reliably predict concurrent and later internalizing problems at clinical and symptom levels.

McLaughlin (2011), emotion dysregulation appears to serve as a risk factor for, rather than a consequence of psychopathology in adolescents. These findings have important implications for preventive interventions targeting adolescents and suggest that techniques that promote emotional understanding and the adaptive expression and modulation of negative emotions should be incorporated into existing interventions.

Adolescent emotion regulation functions as a mechanism through which temperament and family processes interact to increase vulnerability to developing depression (Yap, 2007). Fox and Calkins (2003) point out that it is critical to understand not only what children "bring" to emotion-regulation situations in the way of temperament differences, but how the child's

caregivers and peers respond to these temperamental factors, and how dynamic processes occurring at different developmental moments alter the developmental trajectory of emotion regulation and related capacities. There is ample empirical evidence that emotion-regulation skills are involved in the development, maintenance, and treatment of mental disorders. Thus, the enhancement of skills that are applicable to more than one emotion can target the essence of a patient's problems. Especially with patients high in comorbidity, a focus on general emotion-regulation skills as adjunctive to disorder-specific interventions may enhance efficacy and efficiency of these interventions.

## Method

### Participants

The participants for this study consist of 2041 adolescent females, aged 13 to 17yrs (Mean= 14.47, SD =1.313). The participants are belongs to high school and higher secondary schools from different parts of Kerala. Informed consent was collected from all the students. Instruments were distributed among students and instructions were given. Clarifications were also given.

### Instruments

1. Difficulties in Emotion Regulation Scale (DERS): Developed by Gratz, and Roemer (2004). This measure is meant to assess emotional dysregulation in children, adolescents, and adults. Original scale contains 36 self report items. Lack of Emotional Awareness, Lack of Emotional Clarity, Difficulties Controlling Impulsive Behaviors When Distressed, Difficulties Engaging in Goal-Directed Behaviors When Distressed, Non-acceptance of Negative Emotional Responses, Limited Access to ER Strategies are the major areas assessed by this scale. The authors report internal consistency reliabilities (alphas) of 0.80-0.93, and test-retest reliabilities of 0.57-0.89. Further studies reported alphas of 0.72-0.95, a split-half reliability of 0.95, and test-retest reliabilities of 0.46-0.87. The authors report evidence of minimal convergent, divergent, and concurrent validities, as well as evidence of moderate predictive validity. Further studies have found evidence of discriminative validity, predictive validity, extensive convergent validity, and moderate divergent validity.
2. Family Environment Scale (FES): The Family Environment Scale (FES) is used to measure the social-environmental characteristics of family. It was developed by Moos & Moos (1986) to measure social and environmental characteristics of all families. The scale is a 90-item inventory that has a 10 subscales measuring interpersonal Relationship dimension (RD), the Personal Growth (PG), and the System Maintenance (SM). The Relationship dimension includes measurements of cohesion, expressiveness, and conflict. Cohesion is the degree of commitment and support family members provide for one another, expressiveness is the extent to family members are encouraged to express their feelings directly, and conflict is the amount of openly expressed anger and conflict among family members. Internal consistencies and intercorrelations were in acceptable range for all the sub tests. Test-retest reliabilities were also high for each sub test.
3. The Early Adolescent Temperament Questionnaire-Revised (EATQ-R): The 65-item short form of the Early Adolescent Temperament Questionnaire-Revised (EATQ-R; Ellis & Rothbart, 2001) was a revision of a measure developed by Capaldi and Rothbart (1992). The revised questionnaire assessed 10 aspects of temperament related to self-regulation in adolescents, including activation control, affiliation, attention, fear, frustration, high-intensity pleasure, inhibitory control, perceptual sensitivity, pleasure sensitivity, and shyness, which comprised four subscales: Effortful Control, Surgency, Negative Affect, Affiliativeness. Items were rated on a 5-point scale ranging from 1

“almost always untrue of you” to 5 “almost always true of you”. Alpha reliabilities ranged from .79 to .84 for the 10 temperament scales. The correlation coefficients between the subscales and the total scale were more than .90. Convergence with parent report was high for most scales, but poor for shyness and inhibitory control for males. In summary, EATQ was a reliable tool for the measurement of temperament in adolescents.

### Procedure

All the participants were met at their school, with a prior appointment and permission from concerned authorities of the schools. After a brief introduction about the purpose of the study all the instruments were distributed. Informed consent was collected from all the subjects.

### Results and Discussion

The final data obtained in the present study was analysed using correlation and step wise regression analysis. Findings were presented in tables. As was expected the Emotion Regulation Difficulties in adolescent girls has got significant relation with variables such as family environment and temperament.

Table 1

*Correlation between Difficulties in Emotion Regulation and temperament and family environment*

Family environment and temperament variables	Difficulties in Emotion Regulation
Relationship Dimension	-.181**
Personal Growth dimension	-.077**
System Maintenance Dimension	-.065**
Effortful Control	-.288**
Surgency	.487**
Negative Affect	.200**
Affiliativeness	.512**

\*\*p < .01

As shown in table 1, emotion regulation difficulties shows significantly high negative correlation with 3 dimensions of family environment scale, Relationship Dimension ( $r = -0.181$ ,  $p < .01$ ), Personal growth Dimension ( $r = -0.077$ ,  $p < .01$ ) and System maintenance Dimension ( $r = -0.065$ ,  $p < .01$ ).

The findings are supported by both theoretical and empirical findings. According to Andrian, (2009) Parents create a unique affective family environment that affords children rich sources of information through parents' own expression of emotion and, consequently, provides children with a distinct emotion history. Children raised in a home with little emotional expressiveness have difficulties reading emotion cues during conversations and exhibit less effective emotion expression.

Girls tend to be more relationally oriented, so that they are more affected by both family discord and unity (Grych et al., 2003) and girls with internalizing difficulties may be particularly sensitive to family cohesion variables. This is consistent with the theoretical tenet that adaptive ER processes are developed and shaped by an individual's interactions within close relationships such as the family (Saarni, 1999), girls with low levels of positive emotion and negative experience of the parent-child relationship may be less able to engage in positive, rewarding social interactions outside of the family, which may further exacerbate their vulnerability for depression (Feng, 2009).

Temperamental factors such as Effortful Control has got significant negative correlation with emotion regulation difficulties ( $r = -0.288, p < .01$ ). Significant high positive correlation was found between emotion regulation difficulties and surgency ( $r = 0.487, p < .01$ ), negative affect ( $r = 0.200, p < .01$ ) and affiliation ( $r = 0.512, p < .01$ ).

Rothbart and her colleagues have argued that the primary components of temperament involve emotionality and emotion regulation (Rothbart & Bates, 2006). Temperament, representing innate individual differences in emotional, behavioral, and biological reactivity to changes in environment (Rothbart & Bates, 1998), has been hypothesized to directly shape the display and development of ER strategies (Feng, Shaw, Kovacs, Flannery, O'Rourke, & Alarcon, 2007).

Children with inhibited or irritable temperaments may be considered to be more at risk for developing poor emotion regulation. The development of ER is partly shaped by temperamental predispositions (Gross & John, 2003).

Table 2

Step- wise Regression Analysis with Difficulties in Emotion Regulation as dependent variable (N=2041)

Independent variables	Multiple Regression(R)	F-value for R	R <sup>2</sup>	S.E for R	Partial Regression Coefficient(b)	constant	$\beta$
Negative Affect	.487	634.967	.237	17.717	.976	22.808	.487
Effortful Control	.498	336.257	.248	17.597	.887 -.289	42.476	.443 -.112
Affiliativeness	.511	239.582	.261	17.452	.803 -.369 .301	35.555	.401 -.144 .120
Relationship Dimension	.519	188.069	.270	17.350	.765 -.333 .353 -.784	42.623	.382 -.130 .141 -.100
Surgency	.522	152.767	.273	17.317	.735 -.336 .355 -.804 -.130	51.016	.367 -.131 .142 -.103 -.058

Recent studies have shown that emotion regulation difficulties in adolescents are influenced mostly by the temperamental factors and family environment. In order to understand the contributing effects of these variables on emotion regulation regression analysis was carried out keeping Difficulties in emotion regulation as dependent variable and Family environment and temperament variables as independent variables.

The variable Negative affect which is the most important variable in the prediction of emotional dysregulation, the multiple regression variable (R) of this variable is 0.487 and the value is significant at .01 level. The strength of the interaction between dependent variable and independent variable is 48.7% at this stage. The R<sup>2</sup> value shows that 23.7% of variance in emotion dysregulation can be contributed by the variable negative affect.

The relationship between emotion dysregulation and temperamental factor negative affect is well established. Rothbart et al. (2000) found that infant temperamental reactions of fear predicted later childhood expressions of fear, sadness, and shyness. One of the study conducted by Feng et al (2007) proposed that Behaviorally inhibited children are thought to be



predisposed to be highly reactive to unfamiliar stimuli as infants and unusually fearful, shy, and withdrawn in the preschool and school-age years (Kagan et al., 1988). Because of their propensity for high reactivity in stressful situations, inhibited children are expected to become over-aroused easily and in response, use a narrow range of ER strategies. Over time, inhibited children would be expected to have limited opportunities to acquire and develop a large repertoire of effective ER strategies.

The second important variable contributing to the prediction dyregulated emotion was the temperamental factor Effortful Control. The R value was found to be 0.498, significant at .01 level. The strength of interaction between the two independent variable is 49.8%. The value of  $R^2$  .248 predicts the variance accounted by Negative Affect and Effortful Control together to emotion dysregulation to be 24.8%. The negative value of b (-0.289) value suggests that for every unit of increment in Effortful Control there will be 0.289 unit decrease in emotion dysregulation.

Effortful control, as part of executive attention, has been shown to be involved in the voluntary control of thoughts and feelings, in resolving conflict in regard to discrepant information, correcting errors and planning new actions. Individual differences in effortful control, although due partly to heredity, are also associated with the quality of mother-child interactions. Warm, supportive parenting, rather than cold, directive parenting, appears to predict higher levels of effortful control. Individual differences in effortful control that emerge during the first five years of life have been linked to higher levels of adjustment, social competence, committed compliance and conscience, concurrently and in the future (Eisenberg, 2005)

The third important variables which predict the emotion dysregulation was Affiliativeness of temperament measure. The R value was found to be .511, significant at .01 level. The strength of interaction between the three independent variable is 51.1%. The value of  $R^2$  0.261 predicts the variance accounted by Negative Affect, Effortful Control and Affiliativeness together to emotion dysregulation to be 26.1%. The positive value of b (0.301) suggests that for every unit of increment in Affiliativeness there will be .301 unit increase in emotion dysregulation. Our findings are in consistent with earlier studies proving that intense emotional situations sometimes decrease the likeliness of affiliation but in most of the cases, increase it (Gump & Kulik, 1997)

The fourth variable which is important dimension of family environment known as Relationship Dimension (RD) predicted the emotion dysregulation. The R value was found to be 0.519, significant at .01 level. The strength of interaction between the four independent variable is 51.9%. The value of  $R^2$  .270 predicts the variance accounted by Negative Affect, Effortful Control, Affiliativeness and Relationship Dimension together to emotion dysregulation to be 27%. The negative value of b (-0.784) value suggests that for every unit of increment in Relationship Dimension there will be 0.784 unit decrease in emotion dysregulation.

ER is affected by the emotional climate of the family via parenting style, the attachment relationship, family expressiveness and the marital relationship. One mechanism through which families influence ER is via children and adolescents learning about emotions and ER by observing parents' emotional displays and interactions (Parke, 1994).

In a study conducted by Eisenberg, Gershoff, Fabes, Shepard, Cumberland, Losoya, Guthrie, and Murphy, (2001) concluded that positive and negative expressed family emotion was associated with children's ER in expected directions. Further, ER mediated the link between parental expressiveness and children's adjustment and social competence, suggesting regulation is an important link to consider when examining the effects of parenting on children's development. (Morris et al, 2007). Children exhibited more adaptive emotion regulation when their mothers and fathers expressed greater warmth and sensitivity to their affect, and their family emotional climate was more cohesive and positive. In contrast, children



exposed to more hostile, frequent interparental conflict tended to exhibit less adaptive emotion regulation as did those in negative, critical family environments (Fosco & Grych, 2012).

The study conducted by Feng (2009) examined the prospective relations of preadolescent girls' emotion regulation and parenting style with depressive symptoms, support the hypothesis that the prospective association between vulnerabilities in emotion regulation and depression are moderated by the care giving environment.

The fifth and final variable which predicts emotion regulation was surgency (EATQ2). The R value was found to be 0.522, significant at .01 level. The strength of interaction between the four independent variable is 52.2%. The value of  $R^2$  0.273 predicts the variance accounted by Negative Affect, Effortful Control, Affiliativeness and Relationship Dimension and Surgency together to emotion dysregulation to be 27.3%. The negative value of b (-0.130) value suggests that for every unit of increment in Surgency there will be .130 unit decrease in emotion dysregulation.

Emotion regulatory behaviors were found to moderate the relation between temperamental surgency and aggression, where high-surgent children who showed high levels of social support seeking were less likely to be rated by their mothers as high in aggression. Furthermore, results revealed that low-surgent children who showed high levels of distraction/self-soothing were more likely to show behavioral wariness around unfamiliar peers, whereas high-surgent children who used more distraction/self-soothing behaviors were rated by their mothers as lower in social competence (Dollar & Stifter, 2012)

Research suggests that both child temperament and parenting are important to consider in socio-emotional development and have additive effects on child adjustment over time (Lengua & Kovacs, 2005).

Recent years have witnessed an increasing interest in the role of EC in the development of anxiety, suggesting that anxiety vulnerability is associated with high levels of NA and low levels of EC (Nigg, 2006). More precisely, this implies that – due to its self-regulatory aspects – EC might act as a protective factor, diminishing the risk for anxiety even in individuals with relatively high levels of NA (Tıncaş, 2010)

In a study conducted by Shen and Zhang (2012) showed that at the student level, Effortful Control and Affiliativeness were positively related to adolescents' reappraisal whereas Surgency was inversely correlated with reappraisal after gender, grade level and parent's education were controlled. And Negative Affect (NA) positively predicted suppression.

## Conclusion

The summary of the results point out the need for detail evaluation of the relation between family environment, temperament and emotion regulation difficulties in children and adolescents in order to better manage the future psychological disorders in such individuals. Findings of this study if corroborated with other studies could have implications for prevention of dysregulated emotions and enhancement of active emotion regulation through the evaluation of temperamental factors and family environment.

## References

- Adrian, M., Zeman, J., Erdley, C., Lisa, L., Homan, K., & Sim, L. (2009). Social contextual links to emotion regulation in an adolescent psychiatric inpatient population: do gender and symptomatology matter? *Journal of Child Psychology and Psychiatry*, 50(11), 1428-36.
- Berking, M., Wupperman, P., Reichardt, A., Pejic, T., Dippel, A., & Znoj, H. (2008) Emotion-regulation skills as a treatment target in psychotherapy. *Behaviour Research and Therapy*, 46, 230-1237.

- Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion regulation as a scientific construct: Methodological challenges and directions for child developmental research. *Child Development, 75*, 317-333.
- Dagne, G. A., & Snyder, J. (2011). Relationship of maternal negative moods to child emotion regulation during family interaction. *Development and Psychopathology, 23*, 211-223
- Diamond, L. M., & Aspinwall, L. G. (2003). Emotion Regulation Across the Life Span: An Integrative Perspective Emphasizing Self-Regulation, Positive Affect, and Dyadic Processes. *Motivation and Emotion, 27*, (2)
- Dollar, J. M., & Stifter, C. A. (2012) Temperamental surgency and emotion regulation as predictors of childhood social competence. *Journal of Experimental Child Psychology, 112*(2):178-94
- Eisenberg, N., Gershoff, E.T., Fabes, R.A., Shepard, S.A., Cumberland, A.J., Losoya, S.H., Guthrie, I.K., Murphy, B.C. (2001) Mother's emotional expressivity and children's behavior problems and social competence: Mediation through children's regulation. *Developmental Psychology, 37*:475-490.
- Eisenberg, N. (2005). Temperamental Effortful Control (Self-Regulation). Encyclopedia on Early Childhood Development. Centre of Excellence for Early Childhood Development.
- Feng, X., Keenan, K., Hipwell, A. E., Henneberger, A. K., Rischall, M. S., Butch, J., ....& Babinski, D. (2009). Longitudinal associations between emotion regulation and depression in preadolescent girls: Moderation by the caregiving environment. *Developmental Psychology, 45*, 798-808.
- Feng, X., Shaw, D. S., Kovacs, M., Flannery, T. L., O'Rourke, E., & Alarcon, J. H. (2007) Emotion regulation in preschoolers: the roles of behavioral inhibition, maternal affective behavior, and maternal depression. *Journal of Child Psychology and Psychiatry*.
- Fosco, G. M., & Grych, J. H. (2012). Capturing the Family Context of Emotion Regulation: A Family Systems Model Comparison Approach. *Journal of Family Issues, 20* (10) 1 -22
- Fox, N. A., & Calkins, S. D. (2003). The development of self-control of emotion: Intrinsic and extrinsic influences. *Motivation and Emotion, 27*(1), 7-26.
- Gross, J. J. (1998). The Emerging Field of Emotion Regulation: An Integrative Review. *Review of General Psychology, 2* (3), 271-299.
- 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*, (2), 348-362.
- Gump, B. B., & Kulik, J. A. (1997). Stress, affiliation, and emotional contagion. *Journal of Personality and Social Psychology, 72*.
- Josefsson, K., Jokela, M., Hintsanen, M., Robert Cloninger, C., Pulkki-Råback, L., Merjonen, P., Hutri-Kähönen, N., Keltikangas-Järvinen, L. (2013 ) Parental care-giving and home environment predicting offspring's temperament and character traits after 18 years. *Psychiatry Research*. Retrieved from: doi: 10.1016/j.psychres.2013.01.007. [Epub ahead of print]
- Lengua, L.J., & Kovacs, E. A. (2005). Bidirectional associations between temperament and parenting and the prediction of adjustment problems in middle childhood. *Journal of Applied Developmental Psychology, 26*:21-38.
- Lengua, J. (2008). Anxiousness, frustration, and effortful control as moderators of the relation between parenting and adjustment in middle-childhood. *Social Development, 17*, 554-577. Retrieved from: doi: 10.1111/j.1467- 9507.2007.00438.x
- Leve, L. D., Kim, H. K., & Pears, K. C. (2005). Childhood Temperament and Family Environment as Predictors of Internalizing and Externalizing Trajectories from Age 5 to Age 17. *Journal of Abnormal Child Psychology, 33*(5):505-520.



- McLaughlin, K. A., Hatzenbuehler, M. L., Mennin, D. S., & Nolen-Hoeksema, S. (2011) Emotion dysregulation and adolescent psychopathology: a prospective study. *Behaviour Research and Therapy*, 49(9):544-54
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The Role of the Family Context in the Development of Emotion Regulation. *Social Development*, 16(2): 361-388.
- Nigg, J. T. (2006). Temperament and developmental psychopathology. *Journal of Child Psychology and Psychiatry*, 47(3-4), 395-422.
- Rothbart, M. K., Derryberry, D., & Hershey, K. (2000). Stability of temperament in childhood: Laboratory infant assessment to parent report at seven years. In V. J. Molfese & D. L. Malfese (Eds.), *Temperament and personality development across the lifespan* (pp. 85 - 119). New Jersey: Erlbaum.
- Rothbart, M., & Bates, J. (2006). Temperament. In N. Eisenberg, W. Damon, & R. Lerner (Eds.), *Handbook of child psychology: Vol. 3, Social, emotional, and personality development* (6th ed.) (pp. 99-166). Hoboken, NJ, US: John Wiley & Sons Inc.
- Saarni, C. (1999). *The development of emotional competence*. New York: Guilford Press.
- Suveg, C., & Zeman, J. (2004). Emotion Regulation in Children with Anxiety Disorders. *Journal of Clinical Child and Adolescent Psychology*, 33(4), 750-759.
- Shen, X., & Zhang, W. (2012). The Effect of Temperament on Emotion Regulation among Chinese Adolescents: the Role of Teacher Emotional Empathy. *International Education Studies*, 5(3). Retrieved from: <http://dx.doi.org/10.5539/ies.v5n3p113>.