Literature Review: Gender, Parenting Style and Temperament influence the Development of Emotional Intelligence

Mary Rachelle Reyes-Wapano, PhD Xavier University – Ateneo de Cagayan

Abstract: The aim of this review paper is to show through review of literature that emotional intelligence development is influenced by one's gender, temperament and the parenting styles of one's parents. This review paper maintains that gender, temperament and parenting styles are linked in development of emotional intelligence and is explained from the context of multivel investment model. The multilevel investment model of emotional intelligence development (Zeidner, Roberts, and Matthew, 2009) relates temperament and parenting style as determinants of adolescent emotional intelligence. This paper discusses: the definition of emotional intelligence is first established using the Mayer and Salovey model of emotional intelligence (Mayer & Salovey, 1999); gender influences on the development of emotional intelligence are presented (Brody & Hall, 2008); and Third, The influence of temperament and parenting styles on the development with will then be discussed as factors in the development of emotional intelligence using the Multilevel Investment model of emotional intelligence (Zeidner, Roberts, & Matthews, 2009); In conclusion, this review of literature demonstrated (1) some degree of relationship between gender and emotional intelligence; (2) the reviewed literature suggest that temperament influences an individual's emotional state as well as his or her strategies for emotional regulation: (3) the literature also showed that that parenting style significantly related to the development of emotional intelligence of their children and that that authoritative parenting facilitate the development of emotional competencies and social skills of children and promote positive life adjustment.

Key words: emotional intelligence, gender, parenting style, temperament

I. INTRODUCTION

The aim of this review paper is to show through literature review that emotional intelligence development is influenced by one's gender, temperament and the parenting styles of one's parents.

In this review, emotional intelligence is defined as within the Mayer, Salovey and Caruso EI model (1999) which defines emotional intelligence as ability to "perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional meanings, and to reflectively regulate emotions to promote both better emotion and thought" (Mayer & Salovey, 1997, p. 5).

Also, in this review, temperament is defined as "individuals' differences in reactivity and self-regulation

assumed to have a constitutional basis" (Rothbart, 1981, p.40). This study maintains that temperament is linked to emotional intelligence.

Parenting style is defined in this review as parental attempts to control and socialize their children (Baumrind, 1991). This review maintains that certain kind of parenting style, that is authoritative parenting style, is positively related to emotional intelligence of adolescents.

This review paper maintains that gender, temperament and parenting styles are linked in development of emotional intelligence and is explained from the context of multivel investment model.

The multilevel investment model of emotional intelligence development (Zeidner, Roberts, and Matthew, 2009) relates temperament and parenting style as determinants of adolescent emotional intelligence. This model of EI development represents some probable causal influences on EI, such as biological and social-learning factors. In this review, temperament is identified as a probable biological factor and parenting practices is identified as social-learning factor.

As an outline of this review paper:

- 1. First, the definition of emotional intelligence is first established using the Mayer and Salovey model of emotional intelligence (Mayer & Salovey, 1999)
- 2. Second, gender influences on the development of emotional intelligence are presented (Brody & Hall, 2008).
- 3. Third, The influence of temperament and parenting styles on the development with will then be discussed as factors in the development of emotional intelligence using the Multilevel Investment model of emotional intelligence (Zeidner, Roberts, & Matthews, 2009);

Emotional Intelligence definition in Mayer and Salovey EI model

In this review paper, emotional intelligence is defined as within the Mayer, Salovey and Caruso EI model (1999) which defines emotional intelligence as ability to "perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional meanings, and to reflectively regulate emotions to promote both better emotion and thought" (Mayer & Salovey, 1997, p. 5).

The Mayer and Salovey EI model (Salovey & Mayer, 1990) integrates key concepts from the theories of intelligence and emotion. The notion that intelligence involves the capacity to carry out abstract reasoning comes from intelligence theory while the notions that emotions are indicators that communicate general and understandable meaning about relationships and that certain emotion research (Mayer, Salovey, & Caruso, 2002). The Mayer and Salovey model proposed that there are individual differences in how people process emotion-laden information and how they relate emotional processing to general cognition.

Based on the model of intelligence, the Mayer and Salovey EI model attempts to define emotional intelligence within the context of the standard criteria for intelligence (Mayer, Salovey, Caruso, & Sitarenios, 2003). This model proposes that emotional intelligence is composed of two areas: (a) experiential ability, which is the ability to perceive, respond and, regulate emotion without the necessity of understanding; and (b) strategic ability, which relates to the ability to understand and manage emotions without the necessity of adequate perception of feelings. In turn, each area is segregated into two branches, hence, the term "four branch model." The four branch model of EI then refers to the four areas of competencies that collectively illustrate the divisions of emotional intelligence. This model describes EI as divided into four areas: (a) emotional perception, (b) emotional assimilation, (c) emotional understanding, and (d) emotional management (Mayer, Salovey & Caruso, 2004). This model is illustrated in Figure 1.

Branch 1, emotional perception, the initial and basic area, and involves the capacity to identify emotion in others' facial and postural expressions. This includes the nonverbal perception and reception of emotions expressed via the face. voice, and other related communication (Ekman & Friesen, 1975, as cited in Mayer et al., 2004). The accurate perception of emotion is the basis of the processing of emotional information. This first area of EI then, which relates to the capacity to correctly perceive emotions through nonverbal channels, provides an essential basis for more advanced understanding of emotions. The abilities involved in this first branch include: the ability to identify emotion in one's bodily states, feelings and thought; the ability to express emotions accurately, and to express needs related to those feelings; and the ability to distinguish between accurate and inaccurate, honest or dishonest feeling expressions.

Branch 2, emotional assimilation, involves the capacity of emotions to guide the cognitive system and promote thinking. After emotion is perceived, emotion may facilitate thinking at the basic levels of processing. This branch, also referred to as "emotional integration" focuses on

the contribution of emotion to logic and reasoning (Mayer, Salovey & Caruso, 2000). This model demonstrates how emotions facilitate cognition in several ways: First, emotions may present cues and prioritizations of problems directing thinking toward matters that are considered as most critical. Emotions act as an interrupt or cue when it allows the individual to respond to the most pressing needs in real time (Maes, 1996). Emotions, too, can allow the perceiver to prioritize cues such that the most effective cues are entered into the problem-directed thinking (Matthews, 1997). Second, emotions also aid cognition by functioning as a second memory store about the emotion itself. Third, emotions aid intelligence through the act of mood changing or cycling. Lastly, mood can facilitate thought by representing implied information about past experiences.

The Branch 3, emotional understanding, represents the ability to analyze emotions, understand their probable patterns over time, and recognize their outcomes. The development of this branch corresponds with the development of language and propositional thought (Mayer, Salovey, & Caruso, 2004). This is the branch that most resembles conventional intelligence (Mayer, 2000). As is conventional intelligence, this third branch involves processing which specific functions include understanding, abstracting, and reasoning about emotional information. This mental processing involves naming feelings, understanding the connections and combinations they reflect, and the transitions that they undergo.

The Branch 4, emotional regulation, represents emotional management to promote emotional and intellectual growth. Openness to emotions is the initial point of emotional regulation (Mayer, 2001). Openness to emotional information will allow one to understand one's emotional world. When one is open to feelings of anger, he is able to see personal injustices done; or when one is open to sadness, he is able to appreciate personal losses. Openness is not the end of emotional management: An individual who is open to his or her own feelings uses the information from the perception (the first branch), integration (the second branch), and understanding of emotion (the third branch) to best manage his or her emotions.

The hierarchy of the Branches, from perception to management, represents the extent to which the competency is integrated within the individual's personality. This model proposes that Branch 1, perception and expression of emotion, and Branch 2, the capacity of emotion to facilitate thought, are considered to be distinct areas of information processing that are expected to be organized within the emotion system. Branch 3 involves the ability to understand and analyze emotions, including those that are complex and simultaneous; and Branch 4 involves openness to emotions, and the ability to manage emotions reflectively. There is also a developmental progression of emotional competencies within each branch, from the basic to the more advanced (Mayer et al., 2004). From within this model, emotional intelligence is defined as:

The capacity to reason about emotions, and of emotions to enhance thinking. It includes the abilities to accurately perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth (p. 197).

The mental ability model of Mayer and Salovey (2000) conceives of emotional intelligence as similar to other intelligences such as cognitive intelligence to the extent that it meets three empirical requirements. Mayer, Salovey and Caruso EI model (2000) enumerates these criteria: First, mental problems have definite correct and incorrect answers assessed by systematic scoring method; second, EI correlates with other measures of mental ability; and third, ability increases with age.

The definition of emotional intelligence, based on the mental ability model, is used in this review paper.

Multilevel Investment Model of Emotional Intelligence

The investment model conceptualizes the development of EI as depending on multiple levels of emotion-regulation process. It named temperament, rule-based skill acquisition, and self-aware emotion regulation as possible causes of individual differences in EI. With age, an individual's level of emotional competency progresses as the control of adaptation moves from biologically-based temperament to socially-learned self-directed emotion regulation. The model proposed three levels of control of behavior:

- 1. biology and temperament which is the first level of the model consisting of biologically based temperamental qualities and is thought to provide the foundation and structure of subsequent emotional development;
- 2. rule-based learning of emotional competencies is the second level of the model which involves the learning of emotional skills acquired through behavioral socialization strategies such as modelling of affective behaviors; and,
- 3. strategic emotion regulation development, the third level of the model which centers on the development of self-awareness and strategic regulation of emotional behaviors.

Figure 1 illustrates the multilevel investment model of emotional intelligence development. Investment moves from left to right: temperamental qualities influence the learning of rules such as emotional display and coping rules. As the child develops self-insight and awareness, it will allow him or her more effective emotion regulation competencies. This figure also shows possible causal influences on EI such as biological and social learning factors. The figure also shows the relationship of care-giver and infant as bidirectional, suggesting that the infant's temperament influences the kind of childcare the parents' provide which may lead to cycle of conflict or to a mutually rewarding relationship.

The same figure also includes the collective "familial genes," those that belong to parents, siblings and other family members indirectly influence the manner of care giving. In the latter stages, feedback, modeling and reinforcement and emotional discourse become increasingly important for higher levels of EI. As in care-giving, these processes are bidirectional in that the child's reaction to parental feedback affects

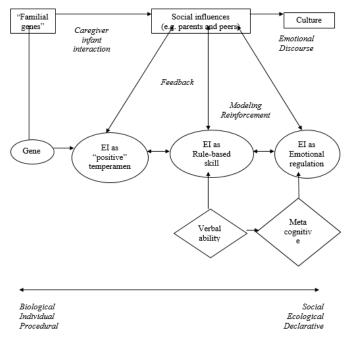


Figure 1. Investment model of emotional development.

parental behavior which in turn influences EI development. Later in childhood, the parents' influence decreases as peers' ncreases.

Temperament and the biology of emotional intelligence

The investment model posits that emotional competencies are largely determined by the manner in which environmental factors interact with a person's biological constitution. Zeidner et al. (2009) proposed that the relationship between human biology and human behavior has been shown to be that of reciprocal determinism. Recent research by Halberstadt (as cited in Zeidner et al., 2009, p. 146) suggests that certain temperamental qualities may influence the development of major components of emotional intelligence. Two temperamental qualities were specified to be significant determinants of emotional regulation: emotional intensity which involves latency, threshold, and rise time of emotions; and attentional process.

Rule-based learning

The second level of the investment EI development model includes rule-based learning which involves caregiver socialization procedures that influence the child's social knowledge, attitudes and skills and aids in the strengthening of a child's emotional competence. Lewis and Saarni (as cited in Zeidner et al., 2009, p. 149) suggest that caregiver influences may also be indirect as in the form of observation and modeling of emotional behavior and competencies.

In the same vein, Izard (2001) suggests that EI is based on learned adaptive skills influenced by temperament, and is discrete from the biological level. That is, it is possible for EI to be not only a representation of a general, inherent temperament but is a set of specific ability for learning emotion-regulation skills. For example, Zeidner et al. (2009) suggests that the ability to label emotions involve interpretative processes dependent on cognitive development; that the learning of display and coping rules depend on language development, concluding that conventional intelligence may affect the development of emotional competencies.

Zeidner et al. (2009) proposed that the basic, rulebound skills are influenced by socialization processes and by the family environment. These socialization processes and nature of family environment are presented below:

Child-adult attachment. The investment model posits that the quality of the caregiver-child attachment is a major requirement for developing emotional competencies. This relationship provides a basis for the child's creating a positive working model of both self and personal relationships. That is, the experiences with the caregiver serve as the foundation for sense of security, self-esteem and emotional competencies.

Emotional climate of family and caregiver expressiveness. Zeidner et al. (2009) suggest that the family is the "primary context in which children learn various facets of emotions" (p. 150). The model posits that emotional climate in the home is due largely to two factors: the manner in which the caregiver expresses positive and negative emotions; and the caregiver's response to the child's emotional expressiveness. Thus, familial socialization of emotional competencies is carried out, to a large extent, by the caregiver's attitude toward a child's emotional expressiveness and his or her ability to manage child's emotions.

Reinforcement of emotionally competent behaviors. Social learning theories suggest children's emotional behaviours and skills are contingent upon reinforcements and punishments. By rewarding certain behaviors, intentionally or inadvertently, parents reinforce certain emotional expressions while extinguishing others. A certain set of parenting techniques, referred to as "rewarding socialization of emotion," contributes to social competencies of children (Denham, 1998, as cited in Zeidner et al., 2009). In fact, parental support and

encouragement were found to predict of children's ability to regulate their emotions (Grolnick & Ryan, 1989).

By contrast, another set of parental behaviors, labelled as "punitive socialization," negatively affects children's social abilities. Parents' punitive responses are shown to be positively linked to increased incidence of negative emotions (Eisenberg, Fabes, Murphy, Shepard, Guthrie, Mazsk, Poulin, & Jones, 1999). Zeidner et al. (2009) then proposed that parental child-rearing styles and practices relate to the development of children's emotional competencies.

Socialization and child-rearing practices. Zeidner et al. (2009) propose that parental warmth is linked to the development of emotional competence in children. The model predicts that when parents are responsive and warm, children are better at social adjustment. When parents are skilled at regulating their own emotions, children also learn emotional skills that are protective against the stress and overwhelming demands.

Positive and negative affect. This EI development model further suggests that a positive affect, such as happiness, signals an enduring pattern of emotional well-being. Positive affect appears to be critical in the beginnings of social interaction and sharing of positive feelings. Negative affect, such as sadness or anger, when inappropriately displayed, has been shown to be detrimental to the development of emotional competence.

Socialization of emotions through behavioral techniques. Mayer and Salovey (2000) suggest that children learn from role models how to process and manage emotional information and experiences. The model predicts that individuals high in EI have learned from ideal role models how to process and regulate emotional information to maintain workable relationship with others. It is assumed that a child whose care-giver shows high EI-related behaviours in regular interactions is likely to imitate these behaviours such that they become part of his or her behaviour repertoire.

Strategic self-regulatory behavior

The development of strategic self-regulatory behavior is the third level in the investment model of EI. This level is related to the development of intelligent self-regulation of emotion. The investment model assumes that by selfregulating techniques, children will learn to initiate and maintain real emotional states, which may be positive or negative. Children also learn to communicate their emotions in ways that allow them to meet emotion-regulation goals, such as maintaining social interaction. The model identifies emotions that need to be regulated: those which are aversive, those which are overpowering, and those emotions that need to be enhanced, such as happiness.

Socialization of self-regulatory behavior. The investment model predicts that parental instruction and communication on emotion is the most direct aspect of emotion socialization contributing to the development of strategic emotion regulation. Parental coaching consists of verbally explaining a difficult situation; directing the child's attention to significant emotional cues; showing the relationship between an observed event and its emotional consequences; helping the child understand and manage her or his behavior; and dividing social interactions into manageable components.

The basic principle of the investment model of EI then is that an individual possesses a range of emotional responses from temperament through rule-based competencies, to more advanced emotional competencies as intelligence. This model proposes that the varied repertoire of emotionally intelligent behaviors is learned over time and involves biological, informational, and meta-cognitive aspects of emotion, dependent on temperament, socialization and selfregulatory processes respectively.

In the above, the multilevel investment model describes the distinct levels of emotional functioning influenced by biological and socialization processes.

II. GENDER AND EMOTIONAL INTELLIGENCE

The current study also attempted to examine how gender affects emotional intelligence. Literature has also extensively documented gender differences in emotional functioning. For example, Mayer, Salovey, and Caruso (2000) found that women score higher in all EI components; Gohm and Lore (as cited in Brody & Hall, 2008) found that women reported a stronger tendency to attend to their emotions. Other researchers such as Ciarrochi, Hynes, and Crittenden (2005) also found that women and girls show more complex emotional knowledge than do men and boys when asked about their emotional reactions to self and others in theoretical situations.

Brody and Hall (2008) propose that there are multiple, interrelated factors that account for gender differences in emotion that include cultural, biological, societal, intrapersonal and interpersonal levels of analysis. Two etiological models have been proposed which include proximal and distal factors, interpersonal and intrapersonal response processes, and the complex interlink of situational, sociocultural, biological, personality and cognitive features.

Developmental perspective. The first model includes distal factors which, in turn, involve gender differences in moods, history of family socialization, gender-differentiated play patterns, and cultural values. Brody and Hall (2008) proposed that the integration of these elements involves a feedback loop: distinct temperamental qualities of male and female infants evoke different responses from caretakers and other significant relations. In the model, differing temperamental qualities include higher levels of activity and arousal in males and faster maturation rates for effortful control process in females (Brody & Hall, 2008) The second model proposed by Brody and Hall (2008) posit that the distal factors, which includes gender differences in social roles and cultural values, social aptitude and developmental history are integrated with proximal factors, which include qualities of a situation, which in turn, includes the quality of emotion and expectations and treatment of significant others, account for gender differences in emotional expression.

A key feature in the developmental model of Brody and Hall (2008) is the set of feedback processes: when individuals behave according to gender-related motives or traits, this will most likely produce positive affect as it is consistent with a gender-relevant value, which in turn produces more positive affect. The experience of positive affect may be observed and reciprocated by others and thus, reinforces gender-specific emotional expression. Thus, this positive feedback cycle, which involves one's behavior, beliefs and values, cognitions, others' behaviors and immediate social interactions sum to create gender-specific emotional expression (Brody & Hall, 2008). This second model, then, highlights the quality of immediate social interaction is related to and predicts long-term emotional styles.

In sum, Brody and Hall (2008) proposed a developmental etiological model that integrated an array of variables and including temperament and socialization factors in which, proximal factors, such as motivation, personality, cognitive determinants and feedback cycles are considered important factor to differential emotional experiences. Brody and Hall (2008) concluded that "differential expression of emotions for the two sexes is adaptive for the successful fulfillment of gender roles" (p. 405).

Gender differences in emotional intelligence. There is currently conflicting evidence on whether or not males or females differ significantly in levels of emotional intelligence. For example, Goleman (1995) advanced that there is no gender difference in EI, stating that men and women have different levels of strengths and weaknesses in different areas of EI, and suggesting that their EI levels are, in general, equivalent. However, Mayer and Geher (1996), and Mayer, Caruso and Salovey (1999) found that women tended to have higher emotional intelligence scores than men, both in professional and personal situations.

The inconsistency of results in gender-difference EI studies may be due to the kind of measure used, which may either be a self-report measure or a performance measure. On the one hand, scales or self-report measures refer to information that the subject provides related to his or her own perception of their own EI by responding to a series of questions. On the other hand, performance measures or ability tests are similar to conventional cognitive performance or intelligence tests in which subjects are asked to determine emotional problems. Their responses are then compared to predetermined objective scoring criteria (Mayer, 2001).

EI studies that used self-report measures such as Bar-On Emotion Quotient Inventory (EQ-i) and the Self-Report Emotional Intelligence Test (SREIT) found no evidence for gender differences. However, in some cases where ability measures of emotional intelligence were used, women showed more skill in recognizing and regulating emotions than do men (Adeyemo, 2008; Alkhadner, 2007; Alumran & Punamaki, 2008; Harrod, 2005). In others, women are shown to have higher scores in emotional attention and empathy, and men are revealed to have higher scores at regulating emotions (Bindu & Thomas, 2006; Fernandez-Berrocal, Extremera, & Ramos, 2000; Harrod & Scheer, 2005). The differing results may be attributed to the sample's demographic characteristics or the kind of measure being used.

In other self-report scales such as the Trait-Meta Mood Scale-48 (TMMS-48), the differences found tend to favor women, who are shown to be more attentive to their emotions than do men. Women tended to be more skillful in dealing with, and understanding their emotions, and men are better at directing impulses and enduring stress (Fernandez-Berrocal, Alcaide & Ramos, 1999; Fernandez & Extremera, 2003). However, when performance measures were used, such as the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), there were clear differences in EI with women scoring higher than men (Brackett & Mayer, 2003).

Studies on gender differences on EI using self-report and performance measures reveal significant results: men tended to report a higher EI compared to how they subsequently perform; while women tended to report a lower EI than they show in performance tests (Bracket & Mayer, 2003). Even with evidence showing that women in general have higher EI scores than men, their self-perception tended to be lower than that of men. Research has shown that there is a link between low self-reported EI levels and poor mental health, indicated by depression, anxiety, and emotional adjustment scales, among women (Fernandez-Berrocal, Alcaide, Extremera, & Pizzaro, 2006). With these poor mental health indices, women tended to develop more mental health disorders than do men (Caro Gabalda, 2001).

In general, then, it appears that women tend to show greater emotional knowledge, provide more detailed emotional descriptions, and use more emotional words than men. These results reflect gender differences related to efficiency of and accessibility to emotional knowledge, and motivation to use emotional knowledge. Although the review presented gender difference in emotional competencies, it is also possible that these gender stereotypes are beginning to change from what is considered conventional (Baron-Cohen, 2005).

Popular literature presents conflicting results. Some studies demonstrate significant gender difference while others do not. The reviewed literature has, thus, demonstrated some degree of relationship between gender and emotional intelligence. However, this relationship has not been clearly established in an adolescent, Filipino sample. In the light of the literature reviewed, there is then a need for further research in this area.

III. TEMPERAMENT AND EMOTIONAL INTELLIGENCE

Temperament is defined as "individuals' differences in reactivity and self-regulation assumed to have a constitutional basis" (Rothbart, 1981, p.40). The term "constitutional" in this definition, is understood to refer to the biological structure of an individual that is considered relatively permanent, and is influenced over time by heredity, maturation and experience. The term "reactivity," relates to qualities of excitability, responsivity, and arousability with which an individual responds to events in the environment. The term "self-regulation" encompasses the neural and behavioral process that moderates reactivity, which in turn, include attentional and behavioral processes of approachavoidance.

In the following section, evidence that temperament is linked to emotional intelligence is reviewed, as well as the evidence that emotional intelligence can be measured reliably separate from measures of temperament.

Current thinking holds that biological and constitutional factors contribute to emotional intelligence development (Zeidner et al., 2009). Temperamental characteristics are thought to be related to particular brain systems that control emotion, motivation, and attention.

This theory posits that a temperament is related to brain systems, and is beyond the scope of this review. However, this review argues that emotional competencies are influenced mostly by environmental forces that interact with an individual's biological constitution.

Infants have been observed to perceive, distinguish, and respond to emotional signals (Izard, 2001). This suggests that there are emotional competencies that are independent of learning or experience. Eisenberg, Fabes and Losoya (1997) found that infants differ in temperamental factors such as emotional intensity. Kagan, Reznick, and Snidman (1987) also found difference in expression of inhibition among infants, while Rothbart (1989) found infants to differ in emotionality. It is highly likely that these factors influence perception, expression of basic emotions, and primitive strategies to control emotion.

Zeidner et al. (2009) suggest that temperament influences not only the intensity of emotional experience but also strategies for emotional regulation. For example, individuals with distress-prone temperament are likely to be resistant, angry, argumentative, and clingy which Kochanska and Coy (2002) described as a dysregulative style.

However, Zeidner et al. (2009) added that temperament, along with environmental forces, can hinder or help EI development through several processes: First, individuals who are in harsh environments may express more negative emotions, and secondly, children predisposed to experience negative affect may be more prone to emotional ill-health.

Lochman and Lenhart (1993) reported that problems that may arise from unpleasant environmental conditions and temperament include difficulty in emotion regulation, in forming connections between strong emotions, and the language that can articulate them. Emotional intelligence resides, in part, on learned adaptive skills influenced by temperament. Therefore, it reflects temperamental qualities as well as specific emotion-regulation skills.

Moreover, reviews of EI self-report measures have repeatedly shown that EI relates to two broad components of temperament: negative affectivity and positive affectivity. Negative affectivity, also referred to as neuroticism or NA, is described as trait sensitivity to negative events. Individuals with high scores in negative affectivity experience a wide range of negative moods such as anxiety, sadness, guilt, hostility and self-dissatisfaction, and tend to have low trait self-esteem. On the other hand, "positive affectivity," or extroversion, is defined as trait sensitivity to positive situations. High scorers tend to feel happy, excited, energetic, sociable, bold, self-assured, proud, and confident. Low scorers in extraversion tend to feel bored, flat, disinterested, and indifferent (Ciarrochi, Forgas & Mayer, 2001).

Ciarrochi, Forgas, and Mayer (2001) offered three possible explanations for the relationship between temperament and emotional intelligence: First, individuals who experience a wide range of negative emotions will require more skill to control these emotions. For example, an individual who finds difficulty in controlling anger is most likely to have an "angry" temperament and may lack skill to control his temperament. Second, people high in negative affectivity tend to have less stable affective experiences. These fluctuations of moods make it difficult for them to understand the nature and source of their emotions. Third, individuals with good temperament, that is, low NA (negative affectivity) and high PA (high affectivity), tend to be confident about their abilities in general.

Concerns have been raised on the overlapping effects of EI and temperament on psychological functioning. Ciarrochi et al. (2001) found from self-report EI measures that there is a strong overlap between EI and temperament: For example, people with high EI tend to have good mental health. With that as a given, it can then be said that that EI leads to improved mental health. However, it is just as logical to argue that people with high EI have good temperament, (i.e. low NA and high PA), and it is good temperament that predicts superior mental health.

Zeidner, Matthews, Roberts, and MacCann (2003) suggest that temperament influences an individual's emotional state as well as his or her strategies for emotional regulation.

For example, Kochanska and Coy (2002) found that individuals with distress-prone temperament, those whose negative affectivity is high, may engage in "dysregulative" style of emotional regulation such as being offensive, opposing and angry when placed in threatening settings.

Additionally, two temperament dimensions, namely, fearfulness and effortful control, were found to be predictors of children's compliance to their mother's requests, where compliance is considered as a form of self-regulation as the child must adjust his or her behavior to parental demands. Zeidner et al. (2003) then propose that it is possible that emotional intelligence reside in a profile of temperaments: "low negative affectivity, moderate extraversion, and high effortful control" (p. 79).

It is also necessary to distinguish the effects of EI and temperament. This has been addressed by two methods: The first is by a number of performance measures that were designed to minimize the EI and temperament overlap. The second method involved examining the effect of EI on psychological functioning while statistically controlling for temperament. This second method has been used with some measure of success: emotional clarity successfully predicted ruminative thinking after controlling for aspects of temperament.

Adolescents with high EI were found to have better social support, better at recognizing facial expressions, and at engaging in behavior that maintains positive moods, after controlling for the effects of NA and PA (Ciarrochi et al., 2001). This study demonstrated that self-reported EI has predictive power separate from that of temperament. It can then be said that EI can be measured reliably, is distinct from measures of temperament, and can predict important behaviors

IV. PARENTING STYLE AND EMOTIONAL INTELLIGENCE

In this paper, the construct parenting style is understood from the standpoint of Baumrind's (1991) concept of parenting style. From this perspective, parenting style is described as the manner at which parents control and socialize their children. In this definition two important points are noteworthy: first, that this description only seeks to include normal variations in parenting and thus excludes dysfunctional parenting patterns as in abusive families; and second, that parenting styles centers around the issues of control.

Baumrind (1991) identifies two elements of parenting: responsiveness and demandingness. Parental responsiveness, or parental warmth or supportiveness, relates "the extent to which parents intentionally foster individuality, self-regulation, and self-assertion by being attuned, supportive, and acquiescent to children's special needs and demands" (Baumrind, 1991, p. 62). Parental demandingness or behavioral control relates to "the claims parents make on children to become integrated into the family whole, by their maturity demands, supervision, disciplinary efforts and willingness to confront the child who disobeys" (Baumrind, 1991, pp. 61-62).

Classifying parents as either high or low in demandingness or high or low in responsiveness generates a typology of four parenting styles reflective of distinct parental values, practices and behaviors: Indulgent parents also called "permissive" or "non directive" are "more responsive than they are demanding. They are nontraditional and lenient, do not require mature behavior, allow considerable selfregulation, and avoid confrontation" (Baumrind, 1991, p. 62). Indulgent parents may be further classified as falling into either one of two subtypes: democratic parents, who although indulgent, are more diligent, involved, and committed to the child, than their nondirective counterparts.

Authoritarian parents are characterized with high demandingness and low responsiveness. They are obedienceand status-oriented, and expect their orders to be obeyed without explanation" (Baumrind, 1991, p. 62). These are the parents whose family rules are plainly stated and whose homes are ordered and structured. Its two subtypes are nonauthoritarian-directive, who are directive yet democratic, and authoritarian-nondirective who tend to be demanding and exacting.

Authoritative parents "monitor and impart clear standards for their children's conduct. They are assertive, but not intrusive and restrictive. Their disciplinary methods are supportive, rather than punitive. They want their children to be assertive as well as socially responsible, and self-regulated as well as cooperative." (Baumrind, 1991, p. 62). Similar to their authoritarian counterparts, authoritative parents also sets rules that children are expected to follow but are more democratic and are not punitive.

The uninvolved parents are described to be low in both dimensions of responsiveness and demandingness. They may meet the child's basic needs, but are disengaged from their child's life.

Parenting styles also differ on a third dimension, psychological control. This refers to "control attempts that intrude into the psychological and emotional development of the child" (Barber, 1996, p. 3296) through parental practices as inducing guilt, withdrawing love, or through humiliation. Authoritarian parents differ from authoritative parents on this dimension in that while both expect obedience to parental rules and place high demands on their children, authoritarian parents expect unquestioning acceptance of their values and judgments, whereas authoritative parents are more likely to explain theirs.

Although both parenting styles are characterized with high behavioral control, authoritarian parents tend to be high on psychological control while authoritative parents are, in contrast, low on this dimension. This paper maintains that parenting style influences the children's well-being. Specifically, it maintains that authoritative parenting facilitate the development of emotional competencies and social skills of children and promote positive life adjustment.

Evidence has consistently shown that parenting style is significantly related to emotional intelligence. For example, authoritative parenting style is significantly associated with better emotional intelligence in children, (Fonte, 2009), and who tended to be more socially skilled (Weiss & Schwarz, 1996). On the other hand, authoritarian parenting style which involves high demandingness and low responsiveness, is found to be associated with low selfesteem, poor social competence, and increased level of depression (Darling, 2010). Children with indulgent parents, those who are considered to be high in responsiveness and low in demandingness, are found to have better self-esteem, are more socially adept, are less depressed, and perform poorly in school (Baumrind, 1991). In view of the strong influence of parenting style on the emotional characteristics of children, it is logical to assume that they also have an influence on the development of children's emotions.

Other more specific factors of parenting patterns, such as child-adult attachment, parenting practices, and family environment, are hereafter reviewed.

Child-adult attachment. Zeidner, Matthews, and Roberts (2009) posited that the quality of child-adult attachment is a major prerequisite for building emotional competencies, which serves as the foundation for the child's creating a positive working model of self and personal relationships. Experiences with caregivers provide children with the basic elements with which to build an internal model of self. Children with an internal model of self, those with a strong sense of self-esteem and security, feel secure and use this secure space to explore the world. The absence of a secure relationship led a child to perceive emotions as irrelevant or even threatening. Securely attached children are found to have developed the capacity to respond ethically to others as they themselves had been responded to with empathic care giving (Denham, 2003).

Parenting practices. Martinez-Pons (1999) examined how adolescents perceive their parents' parenting practices and their effect on their emotional intelligence. His findings revealed that children who reported that their parents modelled, supported, and rewarded emotionally intelligent behaviors have higher levels of emotional intelligence. These findings are supported by Martinez-Pons (1998) who revealed that parent- models with methods such as encouraging, giving rewards, and guiding have a substantial effect on emotional intelligence, social activities, and symptoms of depression.

Alegre and Benson (2010) investigated the impact of parenting practices and parenting styles on adolescents' emotional intelligence. He found that the mothers who spend more time interacting with their children, and interact with them with educational activities have more emotionally intelligent children than those with less interaction. His findings also revealed that parenting styles affect EI development: controlling parenting style and disciplinarian style negatively influenced the development of EI of children. In contrast, democratic parenting styles positively predicted higher levels of adaptability. The same study also showed that mothers who behave responsibly and demand responsibility from their children also positively affected the children's ability to understand other people's emotions, to establish positive interpersonal relationships, and to take responsibility in social situations. Silick and Schutte (2006) found similar results which showed that greater perceived parental love was related to higher emotional intelligence in children.

Zahn-Waxler (1979) indicated that parental controls have a nonlinear relation with children's emotional competence. For example, with preschool aged children, moderate degrees of control is linked with high levels of emotional competence, while both low and high degrees of control have been associated with lower emotional competence.

Early parental love is associated with development of higher emotional intelligence. Studies on emotional competencies and attachment orientations suggest that secure attachment is positively related to facilitation, understanding, management of emotions, and to total emotional intelligence (Kafetsios, 2004). Adolescents with higher emotional intelligence reported that their parents show more warmth (Mayer, Caruso, & Salovey, 1999). O'Neil and Parke (2000) also suggested that parents who are responsive and warm have more socially adjusted children who are popular among their friends.

Specific parenting practices are believed to have strong effects on children's emotional development. Sanchez-Nunez, Fernandez-Berrocal, Montanes, and Latorre (2004) found that parenting practices influence children's coping strategies (Mester, 2012); their symptoms of depression (Lempers, Clark-Lempers & Simons, 1989); optimism (Seligman, 1995); social competence (Kuczyinski & Kochanska, 1995); and self-control (Baumrind, 1966).

Family environment. Related family studies have shown a relationship between family environment and development of emotional competencies. Nixon (1999) showed that there is a relationship between family experiences and children's ability to understand their negative emotions. Nakao (2000) found that family environment has significant effects on children's personal traits such as social skills, emotional control, aggressiveness, anxiety and cognitive intelligence. These studies emphasize that positive family environment is essential to the child's emotional and social development, and that the child's emotional processes are affected by family environment. Martinez-Pons (1998) examined the effects of parents on emotional intelligence of children with ages between 11 and 15 found that parent models with methods

such as encouraging, giving rewards, and guiding have central effects on matters of emotional intelligence, social activities, and symptoms of depression.

Additionally, Martinez-Pons (1999) surveyed adolescent perception of parents influence on their own emotional intelligence and their task orientation, social functioning, and symptoms of depression. Through path analysis, this study revealed a significant effect of parental modeling, facilitation and encouragement on adolescents' emotional intelligence.

Research has consistently revealed that parents and care givers who are high in warmth and positive emotions and low in the expression of disapproval, hostility or other negative affect, tended to have children who are socially skilled and well-adjusted (Eisenberg & Valiente, 2003).

Parenting style studies focused on its relationship with children's educational attainment. For example, the study of Hindin (2005) revealed girls in disturbed households are less likely to finish elementary school and completed fewer grades; while boys who reported closeness with their mother had higher education, and those who considered their mothers as authoritative have completed secondary school. This study, thus, suggests that parenting style is essential for understanding adolescent educational attainment among Filipino youth.

Additionally, the cross cultural parenting study of Alampay, Cumsille, Darling, Lanz, Marta and Ranieri (2002) concluded that the consistent association between maternal responsiveness and their effort to be familiar with their children has effects on their adolescent children's adjustment. The authors emphasized the significance and potential universality of these maternal behaviors.

V. CONCLUSION

The aim of this review paper is to show through review of literature that emotional intelligence development is influenced by one's gender, temperament and the parenting styles of one's parents.

In sum, the review of literature demonstrated (1) some degree of relationship between gender and emotional intelligence; (2) the reviewed literature suggest that temperament influences an individual's emotional state as well as his or her strategies for emotional regulation; (3) the literature also showed that that parenting style significantly related to the development of emotional intelligence of their children and that that authoritative parenting facilitate the development of emotional competencies and social skills of children and promote positive life adjustment.

REFERENCES

[1] Adeyemo, D. (2007). Moderating influence of emotional intelligence on the link between academic self-efficacy and achievement of university students. *Psychology and Developing Societies*, *19*(2), 199-213. doi:10.1177/097133360701900204.

- [2] Alegre, A., & Benson, M. (2010). Parental behaviors and adolescent adjustment: Mediation via adolescent trait emotional intelligence. *Individual Differences Research*, 8(2), 83-96. Retrieved from PsycINFO database.
- [3] Alegre, A. (2011). Parenting styles and children's emotional intelligence: What do we know? *The Family Journal*, 19(1), 56-62. Retrieved from EBSCO*host*.
- [4] Alumran, J., & Punamäki, R. (2008). Relationship between gender, age, academic achievement, emotional intelligence, and coping styles among Bahraini adolescents. *Individual Differences Research*, 6(2), 104-119. Retrieved from PsycINFO database.
- Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development*, 67(6), 3296-3319. Database: PsycINFO
- [6] Barber, N. (2000). Why parents matter: Parental investment and child outcomes. Westport: Greenwood Publishing Group.
- [7] Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *The Journal of Early Adolescence*, 11(1), 56-95. doi:10.1177/0272431691111004.
- [8] Bindu, P., & Thomas, I. (2006). Gender Differences in Emotional Intelligence. *Psychological Studies*, 51(4), 261-268. Retrieved from PsycINFO database.
- [9] Brody, L. R., & Hall, J. A. (2008). Gender and emotion in context. In M. Lewis, J. M. Haviland-Jones, L. Barrett, M. Lewis, J. M. Haviland-Jones, L. Barrett (Eds.) , *Handbook of emotions (3rd ed.)* (pp. 395-408). New York, NY US: Guilford Press. Retrieved from EBSCOhost.
- [10] Ciarrochi, J., Hynes, K., & Crittenden, N. (2005). Can men do better if they try harder: Sex and motivational effects on emotional awareness. *Cognition and Emotion*, 19(1), 133-141. doi: 10.1080/02699930441000102.
- [11] Ciarrochi, J., Chan, A., & Bajgar, J. (2001). Measuring emotional intelligence in adolescents. *Personality and Individual Differences*, 31(7), 1105-1119. doi:10.1016/S0191-8869(00)00207-5.
- [12] Ciarrochi, J. V., Chan, A. C., & Caputi, P. (2000). A critical evaluation of the emotional intelligence construct. *Personality* and Individual Differences, 28(3), 539-561. doi:10.1016/S0191-8869(99)00119-1
- [13] Darling, N. (1999). Parenting style and its correlates. Clearinghouse on elementary and early childhood education. Champaign IL. ERIC Digest. ED427896.
- [14] Darling, N., Cumsille, P., Peña-Alampay, L., & Coatsworth, D. (2009). Individual and issue-specific differences in parental knowledge and adolescent disclosure in Chile, the Philippines, and the United States. *Journal of Research on Adolescence*, 19(4), 715-740. doi:10.1111/j.1532-7795.2009.00608
- [15] Denham, S. A. (1989). Maternal affect and toddlers' socialemotional competence. *American Journal of Orthopsychiatry*, 59(3), 368-376. Retrieved from EBSCOhost.
- [16] Eisenberg, N., Fabes, R., Murphy, B., Shepard, S., Guthrie, I., Mazsk, P., et al. (1999). Prediction of elementary school children's socially appropriate and problem behavior from anger reactions at age 4–6 years. *Journal of Applied Developmental Psychology*, 20(1), 119-142. doi:10.1016/S0193-3973(99)80007-0.
- [17] Eisenberg, N., Fabes, R., Schaller, M., & Carlo, G. (1991). The relations of parental characteristics and practices to children's vicarious emotional responding. *Child Development*, 62(6), 1393-1408. doi:10.2307/1130814.
- [18] Eisenberg, N., & Fabes, R. A. (1995). The relation of young children's vicarious emotional responding to social competence, regulation, and emotionality. *Cognition and Emotion*, 9(2-3), 203-228. doi:10.1080/02699939508409009
- [19] Eisenberg, N., & Fabes, R. A. (1995). The relation of young children's vicarious emotional responding to social competence, regulation, and emotionality. *Cognition and Emotion*, 9(2-3), 203-228. doi:10.1080/02699939508409009
- [20] Eisenberg, N., & Morris, A. (2002). Children's emotion-related regulation. In R. V. Kail, R. V. Kail (Eds.), Advances in child

development and behavior, Vol. 30 (pp. 189-229). San Diego, CA US: Academic Press. Retrieved from EBSCOhost.

- [21] Eisenberg, N., Fabes, R. A., Guthrie, I. K., & Reiser, M. (2000). Dispositional emotionality and regulation: Their role in predicting quality of social functioning. *Journal of Personality and Social Psychology*, 78(1), 136-157. doi:10.1037/0022-3514.78.1.136.
- [22] Fernández-Berrocal, P., Alcaide, R., Extremera, N., & Pizarro, D. (2006). The Role of Emotional Intelligence in Anxiety and Depression Among Adolescents. *Individual Differences Research*, 4(1), 16-27. Retrieved from EBSCOhost.
- [23] Fernández-Berrocal, P., & Extremera, N. (2006). Emotional intelligence and emotional reactivity and recovery in laboratory context. *Psicothema*, 18(Suppl), 72-78. Retrieved from EBSCOhost.
- [24] Fonte, B. (2009). Relationship between parenting style, emotional intelligence and self esteem. Published doctoral dissertation. Washington College, Maryland. Retrieved from http://dspace.nitle.org/handle/10090/7271.
- [25] Gohm, C. (2003). Mood regulation and emotional intelligence: Individual differences. *Journal of Personality and Social Psychology*, 84(3), 594-607. doi:10.1037/0022-3514.84.3.594.
- [26] Gohm, C. L., & Clore, G. L. (2002). Four latent traits of emotional experience and their involvement in well-being, coping, and attributional style. *Cognition and Emotion*, 16(4), 495-518. doi:10.1080/02699930143000374.
- [27] Grolnick, W., & Ryan, R. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology*, 81(2), 143-154. doi:10.1037/0022-0663.81.2.143.
- [28] Halberstadt, A. G., Denham, S. A., & Dunsmore, J. C. (2001). Affective social competence. *Social Development*, 10(1), 79-119. doi:10.1111/1467-9507.00150.
- [29] Harrod, N., & Scheer, S. (2005). An exploration of adolescent emotional intelligence in relation to demographic characteristics. *Adolescence*, 40 (159), 503-512. Retrieved from PsycINFO database
- [30] Hindin, M. (2005). Family dynamics, gender differences and educational attainment in Filipino adolescents. *Journal of Adolescence*, 28(3), 299-316. doi:10.1016/j.adolescence.2004.12.003.
- [31] Izard, C. (2001). Emotional intelligence or adaptive emotions?. *Emotion*, 1(3), 249-257. doi:10.1037/1528-3542.1.3.249.
- [32] Izard, C., Trentacosta, C., King, K., Morgan, J., & Diaz, M. (2007). Emotions, emotionality, and intelligence in the development of adaptive behavior. In G. Matthews, M. Zeidner, R. D. Roberts, G. Matthews, M. Zeidner, R. D. Roberts (Eds.), *The science of emotional intelligence: Knowns and unknowns* (pp. 127-150). New York, NY US: Oxford University Press. Retrieved from EBSCOhost.
- [33] Kafetsios, K. (2004). Attachment and emotional intelligence abilities across the life course. *Personality and Individual Differences*, 37(1), 129-145. doi:10.1016/j.paid.2003.08.006.
- [34] Kagan, J., Reznick, J., & Snidman, N. (1988). The physiology and psychology of behavioral inhibition in children. *Annual Progress* in *Child Psychiatry & Child Development*, 102-127. Retrieved from PsycINFO database.
- [35] Kochanska, G., & Coy, K. (2002). Child emotionality and maternal responsiveness as predictors of reunion behaviors in the Strange Situation: Links mediated and unmediated by separation distress. *Child Development*, 73(1), 228-240. doi:10.1111/1467-8624.00402.
- [36] Kochanska, G., Coy, K., & Murray, K. (2001). The development of self-regulation in the first four years of life. *Child Development*, 72(4), 1091-1111. doi:10.1111/1467-8624.00336.
- [37] Lempers, J., Clark-Lempers, D., & Simons, R. (1989). Economic hardship, parenting, and distress in adolescence. *Child Development*, 60(1), 25-39. doi:10.2307/1131068.
- [38] Lewis, M., Haviland-Jones, J., & Barrett, L. (2008). Handbook of emotions (3rd ed.). New York, NY US: Guilford Press. Retrieved from PsycINFO database.

- [39] Lochman, J., & Lenhart, L. (1993). Anger coping intervention for aggressive children: Conceptual models and outcome effects. *Clinical Psychology Review*, 13(8), 785-805. doi:10.1016/S0272-7358(05)80006-6.
- [40] Martinez-Pons, M. (1997). The relation of emotional intelligence with selected areas of personal functioning. *Imagination*, *Cognition and Personality*, 17(1), 3-13. doi:10.2190/68VD-DFXB-K5AW-PQAY
- [41] Martinez-Pons, M. (1998). Parental inducement of emotional intelligence. *Imagination, Cognition and Personality*, 18(1), 3-23. doi:10.2190/U2LJ-3B8U-M9MG-DMJG.
- [42] Matthews, G. (1997). Cognitive science perspectives on personality and emotion. Amsterdam: Elsevier.
- [43] Matthews, G., & Funke, G. J. (2006). Worry and Informationprocessing. In G. L. Davey, A. Wells, G. L. Davey, & A. Wells (Eds.), Worry and its psychological disorders: Theory, assessment and treatment (pp. 51-67). Hoboken, NJ US: Wiley Publishing. doi:10.1002/9780470713143.ch4.
- [44] Matthews, G. (1997). *Cognitive science perspectives on personality and emotion*. Amsterdam: Elsevier.
- [45] Mayer, J. D., & Gaschke, Y. N. (1988). The experience and metaexperience of mood. *Journal of Personality and Social Psychology*, 55(1), 102-111. doi:10.1037/0022-3514.55.1.102
- [46] Mayer, J., & Geher, G. (1996). Emotional intelligence and the identification of emotion. *Intelligence*, 22(2), 89-114. doi:10.1016/S0160-2896(96)90011-2.
- [47] Mayer, J., & Salovey, P. (1995). Emotional intelligence and the construction and regulation of feelings. *Applied & Preventive Psychology*, 4(3), 197-208. doi:10.1016/S0962-1849(05)80058-7.
- [48] Mayer, J., & Salovey, P. (1995). Emotional intelligence and the construction and regulation of feelings. *Applied & Preventive Psychology*, 4(3), 197-208. doi:10.1016/S0962-1849(05)80058-7
- [49] Mayer, J. & Salovey, P. (1997). Emotional development and emotional intelligence. Cambridge University Press: New York.
- [50] Mayer, J. D., & Ciarrochi, J. (2006). Clarifying concepts related to emotional intelligence: A proposed glossary. In J. Ciarrochi, J. Forgas, & J. D. Mayer (Eds). *Emotional intelligence in everyday life* (2nd ed). New York: Psychological Press.
- [51] Mayer, J., Salovey, P., & Caruso, D. (2004). Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry*, 15(3), 197-215. doi:10.1207/s15327965pli1503_02.
- [52] Mayer, J., Caruso, D., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27(4), 267-298. doi:10.1016/S0160-2896(99)00016-1.
- [53] Mayer, J. D., Perkins, D. M., Caruso, D. R., & Salovey, P. (2001). Emotional intelligence and giftedness.*Roeper Review*, 23(3), 131-137. doi:10.1080/02783190109554084.
- [54] Mayer, J., Salovey, P., & Caruso, D. (2000). Models of emotional intelligence. In R. Sternberg (Ed.), *Handbook of intelligence*. Cambridge, UK: Cambridge University Press.
- [55] Mayer, J., & Salovey, P. (1995). Emotional intelligence and the construction and regulation of feelings. *Applied & Preventive Psychology*, 4(3), 197-208. doi:10.1016/S0962-1849(05)80058-7
- [56] Mayer, J., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. J. Sluyter(Eds.), *Emotional development and emotional intelligence* (pp. 3-31). New York: Basic Books.
- [57] Mayer, J., Salovey, P., Caruso, D., & Sitarenios, G. (2003). Measuring emotional intelligence with MSCEIT V2.0. *Emotion*, *3*, 97-105. DOI: 10.1037/1528-3542.3.1.97
- [58] Mester, D. (2012). Impacts of family socialization on young adults' future-oriented goals. *Transylvanian Journal of Psychology*, 13(2).
- [59] Nakao, K., Takaishi, J., Tatsuta, K., Katayama, H., Iwase, M., Yorifuji, K., et al. (2000). The influences of family environment on personality traits. *Psychiatry and Clinical Neurosciences*, 54(1), 91-95. doi:10.1046/j.1440-1819.2000.00642.
- [60] Rothbart, M., Ahadi, S., & Evans, D. (2000). Temperament and personality: Origins and outcomes. *Journal of Personality and Social Psychology*, 78(1), 122-135. doi:10.1037/0022-3514.78.1.122.

- [61] Rothbart, M. K., Ellis, L. K., & Posner, M. I. (2011). Temperament and self-regulation. In K. D. Vohs, R. F. Baumeister, K. D. Vohs, & R. F. Baumeister (Eds.), *Handbook of self-regulation: Research, theory, and applications* (2nd ed., pp. 441-460). New York, NY US: Guilford Press. Retrieved from EBSCOhost.
- [62] Sánchez-Núñez, M., Fernández-Berrocal, P., Montañés, J., & Latorre, J. (2008). Does emotional intelligence depend on gender? The socialization of emotional competencies in men and women and its implications. *Electronic Journal of Research in Educational Psychology*, 6(2), 455-474. Retrieved from PsycINFO database.
- [63] Sillick, T. J., & Schutte, N. S. (2006). Emotional intelligence and self-esteem mediate between perceived early parental love and adult happiness. *E-Journal of Applied Psychology*, 2(2), pp-3
- [64] Zahn-Waxler, C., Radke-Yarrow, M., & King, R.A. (1979). Child rearing and children's prosocial initiations towards victims of distress. *Child Development*, 50, 319-330.
- [65] Zahn-Waxler, C., Cummings, E., McKnew, D. H., & Radke-Yarrow, M. (1984). Altruism, aggression, and social interactions in young children with a manic-depressive parent. *Child Development*, 55(1), 112-122. doi:10.2307/1129838.
- [66] Zeidner, M., Matthews, G., Roberts, R., & MacCann, C. (2003). Development of emotional intelligence: Towards a multi-level investment model. *Human Development*, 46(2-3), 69-96. doi:10.1159/000068580.
- [67] Zeidner, M., Matthews, G., & Roberts, R. (2009). What we know about emotional intelligence: How it affects learning, work, relationships, and our mental health. Cambridge, MIT Press.