

## INFLUENCE OF PARENTING STYLES ON SELF-REGULATED LEARNING BEHAVIOR MEDIATED BY SELF-EFFICACY AND INTRINSIC VALUE

Piangruthai Jittaseno<sup>1</sup>

Parvathy Varma S.<sup>2</sup>

**Abstract:** The main objective of the current study was to investigate the direct and indirect influences of parenting styles on self-regulated learning behavior, being mediated by self-efficacy and intrinsic value. In order to meet this objective, a quantitative study with correlational research design via path analysis was utilized to establish statistical associations between the core variables. The participants of the study consisted of 206 male and female high school students from a selected international school in Bangkok, Thailand. The Parental Authority Questionnaire (PAQ) was employed as the research instrument to test parenting styles while the Motivated Strategies for Learning Questionnaire (MSLQ) was the research instrument chosen to measure intrinsic value, self-efficacy, and self-regulation.

The results revealed the following major findings: (1) authoritative parenting style had a significant direct influence on self-regulated learning behavior; (2) permissive and authoritarian parenting styles did not have a significant direct influence on self-regulated learning behavior; (3) authoritative parenting has a significant indirect influence on self-regulated learning, being mediated by self-efficacy and intrinsic value; (4) permissive and authoritarian parenting styles did not have a significant indirect influence on self-regulated learning, being mediated by self-efficacy; (5) permissive parenting style did not have a significant indirect influence on self-regulated learning behavior, being mediated by intrinsic value; and (6) authoritarian parenting has a significant indirect influence on self-regulated learning behavior, being mediated by intrinsic value.

**Keywords:** Parenting styles, Self-regulated learning behavior, Self-efficacy, Intrinsic value.

### Introduction

Baumrind (1971) proposed a theoretical model which categorized *parenting styles* into three types: authoritarian, authoritative, and permissive. Based on Baumrind's early studies, researchers continued to explore the emotional relationship between parent and child and its influence on the child's overall development (Buri, 1989; Baumrind, 1989, 1991, 1996). Studies on the connection between home and school

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<sup>1</sup> M.S. Candidate in Counseling Psychology, Graduate School of Psychology, Assumption University, Thailand  
piangruthai@hotmail.com

<sup>2</sup> Ph. D., Graduate School of Psychology, Assumption University, Thailand  
parvathyvarma@hotmail.com

found correlations between parenting styles and the outcome of children's education. More specifically, a number of studies have demonstrated associations between parenting characteristics, specific parenting practices, and self-regulated learning behavior of children (Baumrind, 1991; 1996; Cooper, Lindsay, & Nye, 2000; Grolnick & Ryan, 1989).

The need to self-regulate is apparent worldwide. A research on high school students showed that few students are prepared to use self-regulatory processes independently and, as a result, most are unable to take full control and accountability for their learning (Battin-Pearson et al., 2000). Students' inability to self-regulate learning behaviors is related to academic learning difficulties and low motivation (Zimmerman & Schunk, 2007). In 2003, the United States National Research Council's report on motivation showed that 40% of American high school students are chronically disengaged from school. In China, although Chinese students consistently outperform their counterpart in other countries, their learning method stresses memorization and largely ignores critical thinking (Chan & Rao, 2009). By the same token, one of the major weaknesses highlighted in Thai education is lack of student involvement in the teaching and learning process (Office of the Education Council, Ministry of Education, Thailand, 2009).

There is evidence that general parenting styles and specific parenting practices shape children's competence, especially in the area of educational achievement (Glasgow et al., 1997, as cited in Erden & Uredi, 2008). Additionally, because parents are an influential factor in forming character and behavior in children during their younger years, parenting styles relate to the instilling of the sense of self-efficacy and the forming of intrinsic value in children (Baumrind, 1973; Baumrind & Black, 1967; Ryan, Connell, & Grolnick, 1992; Ryan & Deci, 2000; Schunk & Meece, 2005). In this context, parenting styles indirectly influence self-regulated behavior through forming self-efficacy and intrinsic value in children (Bong, 2008; Eccles & Harold, 1993; Jacobs & Eccles, 2000; Tenenbaum & Leaper, 2003; Zimmerman, Bandura, & Martinez-Pons, 1992). The aforementioned statement served as the impetus of the current study.

## **Objectives**

The current study aimed to investigate the following:

1. The direct influences of parenting styles on self-regulated learning behavior among youths from a selected high school.
2. The indirect influences of parenting styles on the self-regulated learning behavior of the targeted youths, being mediated by their levels of self-efficacy and intrinsic value.

## **Literature Review**

### *Parenting Styles*

Baumrind (1996) explained that parental behaviors and attitudes are exhibited in two dimensions: demandingness and responsiveness. *Demandingness* refers to the amount of parental control exerted over children's activities and behavior. *Responsiveness* refers to the amount of warmth and nurturance displayed by parents

toward their children. Baumrind (1996) then used the demandingness and responsiveness dimensions to identify three distinct categories of parenting styles, namely: authoritarian, authoritative, and permissive.

Authoritarian parenting style is characterized by low levels of responsiveness and support and a high amount of demandingness and control. Generally, authoritarian parents have a standard of conduct, and the parents attempt to shape, control, and evaluate child behaviors and their attitudes through punitive punishment in accordance to this standard of conduct (Baumrind, 1971). Authoritarian parenting values unquestioning obedience while two-way communication between parents and children as in verbal give-and-take is discouraged. This form of parenting style tends to produce children who are withdrawn, distrustful, and discontented. Their children tend to be anxious, socially withdrawn, and unhappy (Baumrind, 1973). Moreover, they tend to have lower levels of self-reliance, independence, responsibility, and achievement motivation (Baumrind, 1971).

Authoritative parenting style is characterized by exhibiting a balance between responsiveness and demandingness. Parents are controlling and demanding, but also warm, rational, and receptive to the child (Baumrind, 1971). Discipline by these parents is characterized by warmth, reason, flexibility, and verbal give-and-take (Buri, 1991). While authoritative parents are strict and employ appropriate levels of discipline and behavior, they are willing to explain the reasons behind rules and punishments. Authoritative parents know and understand children's independence, allow children to participate in decision-making processes of the family, and want the children to progressively undertake more responsibilities for reacting to the needs of other people in the family, within their ability (Maccoby, 1992). Their children tend to be independent, assertive, cooperative with adults, friendly with peers, successful, and motivated toward achievement. Holmbeck (1996) wrote that children of authoritative parents have better self-esteem, self-reliance, self-control, more explorative and content.

Permissive parenting style refers to high levels of responsiveness and low levels of demandingness (Baumrind, 1971). Parents make few demands, leaving children to regulate their own behavior. They barely use power to gain control over the children's behaviors. Instead, parents encourage their children to be independent without demanding a mature behavior (Baumrind, 1989). Permissive parenting tends to produce children who are less self-reliant, less explorative, and less self-controlled. While these children tend to have positive moods, their behavior is less mature due to their low impulse control and self-reliance (Hetherington & Parke, 2002).

### *Self-regulated learning (SRL)*

SRL theories assume that everyone is capable of self-regulation to an extent; what really differs between people is the quality and quantity of their self-regulatory processes (Zimmerman, 2000a). Path analysis showed that SRL had a positive and significant effect on achievement, as measured by the English or Mathematics domain of the American College Testing (ACT) practice test (Miller, 2000). Tuckman (2003) provided metacognitive training skills to college students. His analysis of covariance showed significantly higher grades for the treatment group during the term the training took place and in subsequent terms. Lovett, Meyer, and Thille (2008)

compared student performance and found that self-regulated learning enabled accelerated learning while maintaining long-term retention rates. In another study, Dweck and Master (2008) explained that students who practice self-regulation ask questions, take notes, allocate their time effectively, and use resources available to them. Moreover, self-regulated learners usually exhibit a high sense of self-efficacy, high self-attributions, and intrinsic task interest (Zimmerman, 1995; Schunk, Pintrich & Meece, 2008).

### *Self-Efficacy*

*Self-efficacy*, described by Bandura as perceived capability (Zimmerman, 2000b), plays an essential role in affecting task choice, effort persistence, resilience, and achievement (Bandura, 1994; Schunk, 1991; Schunk & Meece, 2005). In general, self-efficacy affects the self-monitoring and cognitive processing of student performance and their outcomes (Bandura, 1991). Self-efficacy functions as a determinant of human self-regulation. Its characteristic is found in self-regulated behavior and is a predictor linked to academic success (Corno, 1994). To test a theory on self-efficacy, Multon, Brown, and Lent (1991) conducted a meta-analysis of the correlations between self-efficacy beliefs and the outcomes of academic performance and perseverance in learning. Results revealed positive and statistically significant relationships among self-efficacy beliefs, academic performance outcomes, and persistence outcomes across a wide variety of subjects. The findings supported Bandura's theory which posited significant and positive associations among these variables (Bandura, 1997).

### *Intrinsic Value*

*Intrinsic value* reflects the immediate enjoyment one gains from doing a task. In their study, Battle and Wigfield (2003) demonstrated that students' values are important precursors to their efforts to self-regulated learning. Learners who are interested in a particular topic devote more attention to it and become more cognitively engaged in it. They incorporate self-regulated strategies to learn in a more meaningful, organized, and elaborative fashion by relating it to prior knowledge, interrelating ideas, drawing inferences, forming visual images, generating examples, and identifying potential applications (Pintrich & Schrauben, 1992). Students tend to pursue learning in topics of their personal interest. They find that acquiring more knowledge and skills in particular areas enhance their sense of self-efficacy, thereby, enhancing intrinsic motivation and intrinsic value (Alexander, 1997).

### *Parenting styles and self-regulated learning behavior*

To understand the influence of parenting styles on the SRL behavior of adolescents, Strage (1998) conducted a study in which the results revealed a high correlation between authoritative parenting style (characterized by high but reasonable maturity demands, good communication, and mutual respect) and the development of academic SRL, regardless of whether students live with their parents or on their own. The implication of the study is that the influence of parenting styles on SRL behavior is carried forward as children become more mature (Strage, 1998). Further study by Grolnick and Ryan (1989) established that parenting styles which provide structure

and support autonomy are associated with higher levels of self-regulation and achievement. Using Baumrind's typology, Hoang (2007) suggested that authoritative parenting style is a significant predictor of student autonomy. In addition, Nader-Grosbois, Normandeau, Ricard-Cossette, and Quintal (2008) demonstrated the progression from parent regulation of learning activities to student self-regulation. Parents reduced their level of monitoring control as the study progressed. Students were observed to continue exhibiting self-regulation. The aforementioned studies established relationship between parenting styles and self-regulated behaviors in their children.

#### *Parenting styles and self-efficacy*

Researchers asserted that parents serve as an important factor of competence beliefs (Eccles et al., 1998; Jacobs & Eccles, 1992; Jacobs et al., 2002). Furthermore, Lord, Eccles, and McCarthy (1994) reported that the relationship and interaction between parents and adolescents negatively or positively play an important part in the development of self-efficacy in adolescents. Schunk and Meece (2005) demonstrated that self-efficacy increases with parenting styles that motivate children to achieve when they are exposed to positive academic and social models and when they are taught strategies that they can use to overcome challenges.

In general, parents with an authoritative approach produce adolescents with high self-efficacy, compared to those who adopt the authoritarian and permissive parenting types. Baumrind indicated in her studies that children of authoritative parents have stronger beliefs in their own efficacy when faced with the challenges of academic tasks (Baumrind & Black, 1967; Baumrind, 1973). Other studies reported similar results in that children from authoritative families demonstrated greater confidence and, as a consequence, showed significantly higher academic self-efficacy, compared to those from authoritarian families (e.g., Kek, Darmawan, & Chen, 2007; Turner, Chandler, & Heffer, 2009).

#### *Parenting styles and intrinsic value*

Parents have an important role and influence in fostering values which children internalize and eventually integrate. Their acceptance of certain values as their own reflects the fact that they fully accept the desirability of certain behaviors and integrate them into an overall system of their own values (Ormrod, 2006; Ryan & Deci, 2000). Eccles et al. (1983) found a significant positive association between the value children attach to math and their perceptions of their parents' aspirations for them and their parents' confidence in their ability. Parsons, Kaczala, and Meece (1982) explained that the kinds of messages parents provide to their children about the importance of different activities and how their own engagement in activities influence their children's participation and interest in related activities. Simpkins, Fredricks, Davis-Kean, and Eccles (2004) found consistent result in their study.

#### *Parenting styles, self-efficacy, and self-regulated learning (SRL) behavior*

Self-efficacy beliefs have been found to be related to academic goals and motivation, as well as parental expectations for students' achievement (Zimmerman et al., 1992). It allows adolescents to engage in tasks that they believe they can succeed in. From a

social cognitive perspective, self-regulated learners report high self-efficacy, self-attributions, and intrinsic task interest (Zimmerman, 1995). As an example, self-efficacy was found to be the strongest positive predictor of mathematics test scores related to active parent action, followed by reactive parent action style of involvement. The study established authoritative parenting as a factor in explaining math self-efficacy and effort regulation (Nordstrom, 2012). Another study by Bong (2008) found significant associations between parent-child relationships and aspects of independent learning, specifically, self-efficacy, adaptive help-seeking, and motivational beliefs among Korean high school students. The aforementioned studies clearly established links among parenting styles, self-efficacy, and self-regulated learning behavior which generally shine through to academic accomplishment.

*Parenting styles, intrinsic value, and self-regulated learning behavior*

Parents may influence children's innate curiosity, interests, and aspirations particularly with regard to future educational and vocational options, through explicit and implicit messages. LaGuardia (2009) posited that behaviors of parents may serve to encourage the adolescent's interest in an activity, and then adolescent's own interest in an activity may be intrinsically valued, as he or she may enjoy engaging in something specific such as a sport at school. Other research found that parents' beliefs about the role of the family and developmentally appropriate expectations of values placed on children were related to children's academic competence (Smith, Prinz, Dumas, & Laughlin, 2001; Huang and Prochner, 2003). Authoritative parents, in particular, provide counseling to their children or work with them on different academic activities (Eccles & Harold, 1993; Jacobs & Eccles, 2000; Tenenbaum & Leaper, 2003).

**Conceptual Framework**

Based on theoretical perspectives and findings of related studies, a conceptual framework was developed (Figure 1).

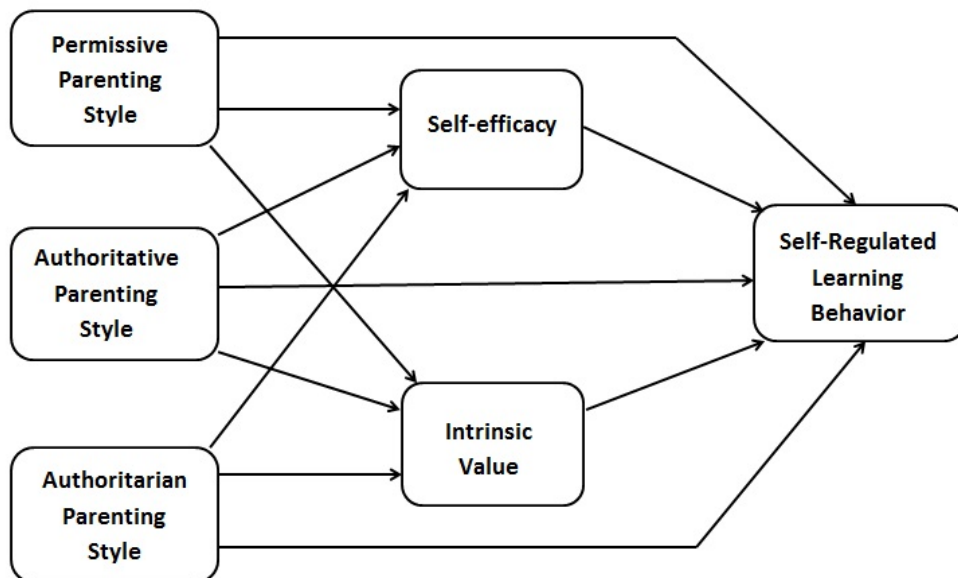
(See Figure 1 on the next page)

The following hypotheses were generated for testing:

*H1:* Authoritative parenting style has a direct positive influence on the self-regulated learning behavior of high school students such that the more authoritative their perceived parenting style, the higher is their level of self-regulated learning behavior.

*H2:* Permissive and authoritarian parenting styles have a direct negative influence on the self-regulated learning behavior of high school students such that the more permissive and authoritarian their perceived parenting style, the lower is their level of self-regulated learning behavior.

*H3:* Authoritative parenting style has an indirect positive influence on the self-regulated learning behavior of high school students being mediated by self-efficacy and intrinsic value such that the more authoritative their perceived parenting style, and the higher their levels of self-efficacy and intrinsic value, the higher is their level of self-regulated learning behavior.



**Figure 1: Path Model of the Hypothesized Direct and Indirect Influences of Parenting Styles on Self-Regulated Learning Behavior, Being Mediated By Self-Efficacy and Intrinsic Value**

*H4:* Permissive and authoritarian parenting styles have an indirect negative influence on the self-regulated learning behavior of high school students being mediated by self-efficacy and intrinsic value such that the more permissive and authoritarian their perceived parenting style and the lower their levels of self-efficacy and intrinsic value, the lower is their level of self-regulated learning behavior.

### Method and Instrumentation

This quantitative study utilized the correlational research design to investigate the hypothesized sequential direct and indirect influences of parenting styles on self-regulated learning behavior, being mediated by self-efficacy and intrinsic value. The participants consisted of 206 male or female high school students' grades 9 -12 of any nationality from an international School in Bangkok. The statistical program G\*Power 3 (Faul, Erdfelder, Lang, & Buchner, 2009) was employed to determine the required sample size. The self-administered survey questionnaire (in English) was divided into three parts: (1) demographic information; (2) The *Parental Authority Questionnaire (PAQ)* (Buri, 1991) to measure parenting styles; and (3) The *Motivated Strategies for Learning Questionnaire (MSLQ)* (Pintrich et al., 1991) to measure intrinsic value, self-efficacy, and self-regulation.

### Results

The analyses conducted and the results obtained are presented in the following sequence:

### 1. Demographic Profile of Respondents

There were total of 206 respondents; 54.4% ( $n=112$ ) were males and 45.6% ( $n=94$ ) were females. Their ages ranged from 14 to 19 years; 21.4% ( $n=44$ ) were aged 15 years, 18.4% ( $n=38$ ) were aged 16, 22.8% ( $n=47$ ) were aged 17, 28.6% ( $n=59$ ) were aged 18, and 8.7% ( $n=18$ ) of which 13 were aged 14 years and 5 were aged 19 years. Of the respondents, majority were Thai comprising 58.3% ( $n=120$ ), 11.2% ( $n=23$ ) were Koreans, 1% ( $n=2$ ) were Indians, 2.9% ( $n=6$ ) were Chinese, 2.9% ( $n=6$ ) were Japanese, and 23.8% ( $n=49$ ) were of mixed nationalities. The sample consisted of students from Grade 9 ( $n=62$ , 30.2%), Grade 10 ( $n=25$ , 12.1%), Grade 11 ( $n=59$ , 28.6%), and Grade 12 ( $n=60$ , 29.1%). The majority of the students have a GPA of 3.5 and above ( $n=85$ , 41.3%), 34.5% students have a GPA of 3.00-3.49, 15% have a GPA of 2.5-2.99, 6.3% have a GPA of 2-2.49, and the least number of students have a GPA of 1.99 and below ( $n=6$ , 2.9%).

### 2. Reliability Analysis of Scales Employed

Reliability analysis was conducted on the items that represent the six scales to maximize the internal consistency of the six measures by identifying those items that are internally consistent (i.e., reliable), and to discard those items that are not. The criteria employed for retaining items are: (1) any item with 'Corrected Item-Total Correlation' (I-T)  $\geq .33$  would be retained (.33<sup>2</sup> represents approximately 10% of the variance of the total scale accounted for), and (2) deletion of an item would not lower the scale's Cronbach's alpha. It was found that the computed Cronbach's alpha coefficients for all six scales were adequate and ranged from .70 to .95. Each of the factors of permissive parenting styles, authoritative parenting styles, authoritarian parenting styles, self-efficacy, intrinsic value, and self-regulated learning was, then, computed by summing across the items that make up that factor, and their means and standard deviations calculated.

### 3. Means and Standard Deviations for the Six Computed Factors

**Table 1: Means and Standard Deviations for the Six Computed Factors**

	Mean	S.D.	Mid-point
Permissive parenting	3.22	0.58	3.00
Authoritative parenting	3.64	0.60	3.00
Authoritarian parenting	2.87	0.77	3.00
Intrinsic value	4.81	0.90	4.00
Self-efficacy	4.73	0.92	4.00
Self-regulated learning	4.29	0.77	4.00

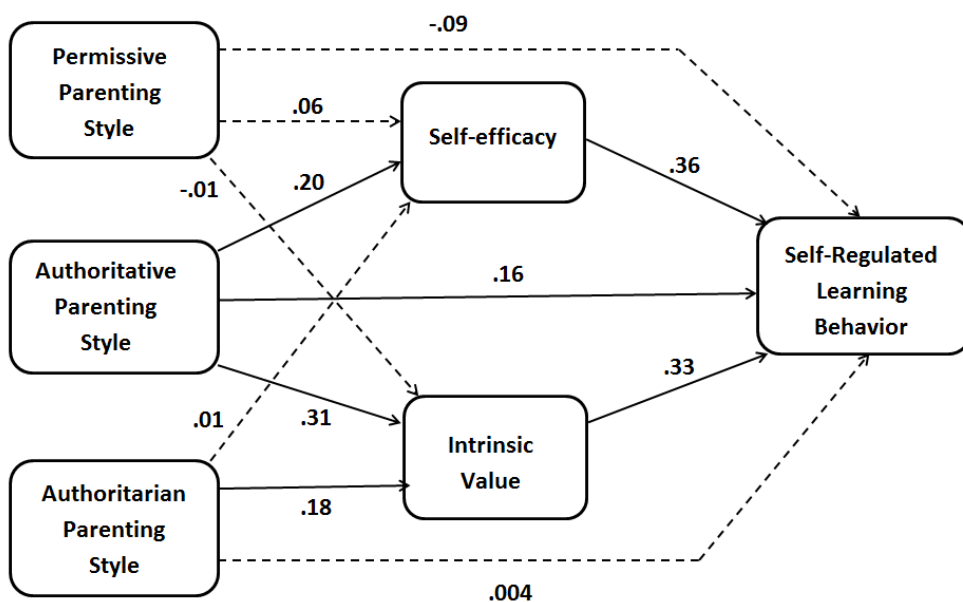
Table 1 presents the means and standard deviations for the six computed factors and the midpoint. It is clear that the participants of the research reported high scores on authoritative parenting and permissive parenting, as the mean scores were above the mid-point. At the same time, the participants reported low authoritarian parenting style as their mean score was below the mid-point. In addition, the respondents also



have high levels of intrinsic values, self-efficacy, and self-regulated learning as their mean scores were above the mid-point.

*Path Analysis to Test the Hypothesized Path Model*

In order to test the hypothesized direct and indirect relationships represented by the path model (Figure 1), path analysis via regression analysis was conducted. The analysis involved: (1) regressing the dependent variable of self-regulated learning on the predictor variables permissive parenting style, authoritative parenting style, authoritarian parenting style, self-efficacy, and intrinsic value; (2) regressing the mediator variable of self-efficacy on the predictor variable of parenting styles (i.e., permissive, authoritative, and authoritarian); and (3) regressing the mediator variable of intrinsic value on the predictor variable of parenting styles (permissive, authoritative, and authoritarian). The results of path analyses are presented in the following Figure 2.



**Figure 2: Path Model of Self-Regulated Learning as a Function of the Direct and Indirect Influences of Parenting Styles (Permissive, Authoritative, and Authoritarian), Being Mediated by Self-Efficacy and Intrinsic Value**

The results showed that the respondents' perceived authoritative parenting style has a direct influence on their self-regulated learning (Beta=.16). That is, the more their parents employed authoritative parenting style, the higher is the respondents' level of self-regulated learning. On the other hand, permissive and authoritarian parenting styles did not have a significant direct influence on self-regulated learning. Furthermore, authoritative parenting style has an indirect influence on self-regulated learning, being mediated by self-efficacy and intrinsic value. This means that when the students' parents employ more authoritative parenting style, the higher will be the

students' level of self-efficacy ( $\beta=.19$ ) and, subsequently, the higher will be their self-regulated learning ( $\beta=.36$ ). Similarly, when parents employ more authoritative parenting style, the higher will be the students' level of intrinsic value ( $\beta=.31$ ), and that the higher their intrinsic value, the higher will be their level of self-regulated learning. ( $\beta=.33$ ). Results also revealed that there was an indirect influence of authoritarian parenting style on self-regulated learning, being mediated by intrinsic value. This means that when parents employ more authoritarian parenting style, the higher will be the students' level of intrinsic value ( $\beta=.18$ ), and that the higher their intrinsic value, the higher will be the level of their self-regulated learning ( $\beta=.33$ ).

## **Discussion**

As predicted, path analyses revealed that authoritative parenting style has a direct influence on students' usage of self-regulated learning strategies. The predicted results were found to be due to several factors. Authoritative parenting demonstrated a balance between responsiveness and demandingness. While parents demand and have control over their children's behavior to some extent, they remain warm, rational, and flexible at the same time (Buri, 1991). They become involved in their children's education through supporting their children's school-related behavior. They create the home environment which supports self-regulation. Moreover, authoritative parents foster autonomy and self-regulation in children. The behaviors include setting boundaries and limits, talking with children about the reasons for their decisions, and encouraging independent decision making (Bronstein, Ginsburg, & Herrera, 2005). Research found that parenting practices linked with children's ability to regulate their behavior (Brody, Flor, & Gibson 1999). Cooper (2000) endorsed this type of parenting style to be ideal in motivating students toward achievement and supporting self-regulation.

The results of this present study indicate that the permissive and authoritarian parenting styles do not have significant influence on self-regulated learning behavior of the students. Studies show the complexity of child's self-regulatory development. Firstly, person's inborn characteristics need to be considered. Pintrich & Zusho (2002) wrote that self-regulated learning is guided and constrained by personal characteristics and children's innate characteristics are different from each other. Researchers suggested that temperament and genetic characteristics play an important role in development of self-regulatory behavior (Eisenberg et al. 2004; Kochanska et al. 1997). The results of this present study are supported by biological perspective. Secondly, it was suggested that the direction of parents-child regulation is not a one-way exclusively from parents to their children. Drawing from this, children are not passive recipient of parent behavior. Children may or may not respond to parenting styles in regard to self-regulation. Thirdly, although self-regulation theory emphasized that all students can learn to self-regulate regardless of prior knowledge or having different background (Pintrich, 1995). The results of Studenska's (2011) study revealed that parenting style did not prove to have significant value in predicting self-regulation in foreign language learning. Lastly, it was proven that self-regulation can be taught (Duckworth & Carlson, 2013). Children spend more of their learning time in school than in home environment. Modern schools develop school-

based interventions to teach children meta-cognitive strategies, such as goal setting and planning (Duckworth & Carlson, 2013). This fact implies that school environment may contribute a greater weight than parenting styles in building self-regulated learning strategies employed by students.

Path analyses revealed that authoritative parenting style has an indirect influence on self-regulated learning, being mediated by self-efficacy. Home environment is an important factor in developing self-efficacy. Children from authoritative homes have a lot of advantages from family support. Bandura (1993) identified verbal persuasion, mastery experience, and vicarious experience to be primary sources to appraise self-efficacy. Authoritative parents are high in responsiveness. They are quick to give verbal positive feedback to praise effort. Children who regularly receive positive reinforcement are more explorative (LaGuardia, 2009). Authoritative parents promote interest in their children by providing opportunities for their children to pursue activities. Bandura's social cognitive theory of self-efficacy implied that the more the children engage in useful activities, the more success and the more mastery experience they gain. The more they join social activities, the more opportunities they have to observe others, thus gaining vicarious experience through observing modeling (Bandura, 1993). It is most likely that the aforementioned opportunities reinforce the children in their perceived capabilities and, finally, increase their self-efficacy which, in turn, increases self-regulated behavior.

In this present study, authoritative parenting style is proven to have an indirect influence on self-regulated learning, being mediated by intrinsic value. Family is the first and immediate social unit where children belong. Authoritative families engage in activities and share experiences, and through this means, parents may influence children's innate curiosity, interest, and aspiration, especially in terms of future study and career paths (LaGuardia, 2009). Authoritative parents have an important role in fostering intrinsic value which children internalize and eventually integrate to form their own values. They allow a certain degree of autonomy so that children can form a sense of self-determination as they make choices and decisions to pursue further studies of their own interest which they are bound to enjoy (Friendly & Grolnick, 2009). Children who enjoy learning devote more attention to learning and become more cognitively engaged in it and are motivated to incorporate various self-regulated strategies in their learning (Ormrod, 2006). The results of the current study implied that the more the parents employed authoritative parenting style, the higher the level of intrinsic value the children possess and, subsequently, the more were the self-regulated learning strategies employed by the children.

Path analyses revealed that there is no significant relationship between permissive parenting style and self-regulated learning behavior mediated by self-efficacy. It also revealed that there is no significant relationship between authoritarian parenting style and self-regulated learning behavior mediated by self-efficacy. According to the self-determination theory, the motivation behind choices people make does not require external influence or interference (Deci & Ryan, 2002). It is possible that these children from permissive and authoritarian households may be driven by their own personal characteristics and innate psychological needs to be successful despite their household environment. Although several researchers such as Bandura (1991) Strage and Brandt (1999) have found that students' GPA and self-

efficacy in performing academically were positively related, other study concluded different results (Joshi, Ferris, Otto, & Reagan, 2003). Instead of finding relationship between parenting styles and self-efficacy, some other researchers found that academic self-efficacy was significantly correlated with amount of time students spend in study (Turner, Chandler, & Heffer, 2009). Then, the studies suggest that when students study more, they are more likely to be confident in their knowledge of the material, which may also increase their academic success. Another perspective on self-efficacy with regard to self-regulation can be explained through developmental stage. Although parents contribute to feeling of self-efficacy and autonomy, periods of transition become highly significant that it can cause changes in self-efficacy during adolescence years (Schunk & Pajares, 2002). Students perceive their learning environment as less focused on mastery the learning materials but more focused on competition and ability differences. With the focus on social comparisons with peers, regardless to parenting styles, adolescents can experience a decline in their self-efficacy (Schunk & Meece, 2005). In conclusion, the aforementioned provide explanation why parenting styles, for example permissive and authoritarian parenting, may not be significant factors in self-regulated learning behavior mediated by self-efficacy.

Contrary to the depiction in the conceptual framework, there is no significant relationship between permissive parenting style, intrinsic value, and self-regulated learning behavior. Two explanations justify the results; characteristics of materials and teacher-student interpersonal relationship. For the first part, it was explained that intrinsic value exists in the relation between individuals and activities. However, not all activities are triggered by intrinsic value. People place intrinsic value on some activities and not others, and not everyone is intrinsically enjoying any particular task (Ryan & Deci, 2000b). It is a fact that studying requires discipline and hard work. By nature, the characteristic of studying is not an activity that most people enjoy. Events such as threats, surveillance, evaluation, and deadlines undermine intrinsic value individuals place on a task because people experience them as controllers of their behavior (Deci & Ryan, 2000). It can be reasoned that students calculate the characteristic of materials, in this case studying, and respond regardless of parenting styles. The second part of the result is explained through socialization of the achievement value theory (Ryan & Deci, 2000a). As declared by Duckworth and Carlson (2013) that self-regulated learning can be taught and implemented in school curriculum. Dietrich (2015) emphasized that it is teachers who are the significant persons in students' live in regard to education. Teachers have significant role to instill the sense of intrinsic value in their students. It is important to remember that intrinsic value will occur only for activities that hold intrinsic interest for an individual (Santrock, 2009). Teachers play a crucial role, for example by giving positive performance feedbacks or by encouraging curiosity and the desire for challenge, to help students gain the sense of autonomy enhanced intrinsic value and motivation (Ryan et al., 1992; Deci, 1971; Harackiewicz, 1979; Deci & Ryan 2000). The above mentioned studies explain the impact of teachers to dramatically affect the intrinsic value in their students even more than the influence of parenting style.

Path analyses also found that authoritarian parenting style has an indirect positive influence on self-regulated learning mediated by intrinsic value. Characteristics of authoritarian parents are rather controlling than responding (Baumrind, 1971). Even if the children do not agree with them, authoritarian parents feel that it is for the children's good if they are forced to conform to what parents thought was right. Authoritarian parent particularly Chinese parenting style exerts their control by closely monitoring their children's activities, including their schooling (Huang & Prochner, 2003). Research also indicated that parenting practices linked with children's ability to self-regulate and their behaviors are associated with academic competence (Brody et al., 1999). Studies on the socialization of achievement value explained how parental aspirations relate to their children's own aspirations and how parents' behaviors relate to values children place in their beliefs systems linking to achievement motivation (Parsons et al., 1982). Though parents are hard on them, children know that their parents' actions are well-intended. In order to avoid parent-child conflict, children choose to study hard to please their parents. Ryan and Deci (2000b) explained that as children grow older, they tend to internalize the values of significant people around them. Along their course of study, children may discover subject areas they are especially interested in. Studying, then, becomes increasingly rewarding and interesting. In summary, authoritarian parents with their controlling behavior may indirectly influence self-regulated learning behavior through intrinsic value.

### **Conclusions and Implications of the Study**

The current research investigation revealed that various parenting styles predict usage of self-regulated learning behavior differently in students. In line with the theoretical framework, authoritative parenting style directly influences self-regulated learning behavior. Authoritative parenting style also indirectly influences self-regulated learning behavior through the mediating influence of self-efficacy and intrinsic value. The findings confirm that authoritative is a parenting styles of choice to promote self-regulated learning behavior. On the other hand, permissive and authoritarian parenting styles do not have a direct influence on self-regulated learning behavior. Permissive parenting style also does not show indirect influence on self-regulated learning behavior, being mediated by intrinsic value. The findings imply that permissive and authoritarian parenting styles are not the direct contributing factors to stimulate self-regulated learning behavior of students. Additionally, permissive and authoritarian parenting styles do not show indirect significant influence on self-regulated learning behavior, being mediated by self-efficacy. Literature suggest that the amount of time spend on studying is more likely to correlate the level of self-efficacy students perceived than parenting styles. Moreover, contrary to expectations, authoritarian parenting style indirectly influences self-regulated learning behavior through intrinsic value. The result implies that authoritarian parenting is an influential factor to inspire intrinsic value leading to self-regulated behavior of students. The current research concludes that parenting styles differently influence self-regulated learning behavior. Eventhough the authoritative parenting style may have been found to have the most positive impact on psychological competence leading to self-regulated learning behavior in high school students, authoritarian parenting style is

also found to be influential through mediation of intrinsic value. For this reasons, educators and counselors may be guided by this outcome in facilitating the learning behavior of students through parent-child relationship.

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