The Influence of Parenting Styles on Academic Adjustment and Psychological Well-Being Among Thai University Students Mediated by Internet Addiction and Self-Regulation: A Path Model

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ABSTRACT

The major purpose of this study is to investigate the direct and indirect influences of parenting styles (authoritarian, authoritative and permissive) on educational adjustment and psychological well-being mediated by self-regulation and Internet addiction among university students in Thailand. Self-Regulation Questionnaire (SRQ), the Internet Addiction Scale (IAT), the Parental Authority Questionnaire (PAQ), Educational Adjustment Scale (EAS) and the Satisfaction with Life Scale were the instruments used to collect data from 794 university students from 10 universities in Thailand.

The results indicated a direct positive relationship between authoritarian parenting style and life satisfaction and educational adjustment. Permissive parenting style also has a positive relation on educational adjustment. The result also indicates an indirect influence of authoritative parenting styles on education adjustment mediated by self-regulation and Internet addiction. The more authoritative their parents are, the better students state are their self-regulatory skills and educational adjustment. Also, the more authoritative the parents were the lower were their students’ addiction to the Internet and the better were their students’ educational adjustment. The general parenting style in the Thai setting tends to be authoritarian and Thai students report experiencing higher life satisfaction with this style.

INTRODUCTION

In the present digital world, the Internet has undoubtedly become a huge part of our life. There is a greater importance for the Internet in our lives both personally and professionally. It is a versatile facility that helps one to accomplish various tasks in our lives easily. Internet addiction has become a significant concern in the present digital world where a youngster engages this technology from the time one wakes up until one goes to sleep. However, the scientific research on this field started picking up a decade ago and problems associated with excessive use of the Internet were identified among the general population (Brenner, 1997; Greenfield, 1999). Crimes related to Internet use in Asia have caught the media attention widely. For example, a Chinese gamer was sentenced to life for killing a fellow gamer, when he found out he had sold his virtual sword for 7,200 Yuan (£473) (“Chinese Gamer Sentenced to Life”, 2005).

Research has been conducted on the nature and the consequences of Internet addiction in the West. However, the prevalence and antecedents of Internet addiction in Thailand or its impacts has not been scientifically documented due to the discrepancies seen in literature as to what exactly is Internet addiction and how the problem can be diagnosed. As university administrators, it is very important to address this issue and take adequate measures or create strategies to alleviate the problems. There is a dearth of systematic research on the antecedents of Internet addiction among university students in the Thai context.

Internet Addiction

The term Internet addiction was first introduced by Goldberg and defined as the excessive use of Internet that disrupts the day-to-day activities (1996). To differentiate the use of Internet and addiction, it is easier to observe the behavioral changes when the access is withdrawn. Normal users use Internet as a technology for their day-to-day needs and act normal when their access is denied (Young, 1998; Davis, 2001). On the other hand, problematic or pathological users use Internet extensively and spend excessive time that affects their normal life such as family, school, work and friends and they do not act normal when the access is denied (Lee & Shin, 2004). Kandell (1998) defined Internet addiction as “a psychological dependence on the Internet, regardless of the type of activity once logged on” (p. 12).

Based on the conceptualization of Baumrind’s theory, researchers over the past two and a half decades emphasized the role of parenting on the instrumental competence of children by balancing their societal and individual needs and responsibilities. The most significant indicators that directly predict their competence are responsible independence, cooperation and maturity (Darling & Steingberg, 1993). In universities, some students face psychosocial problems due to excessive use of the Internet as reported by instructors.
These problems include being isolated from peers, lack of interest or involvement in academic activities and projects, and failure to develop meaningful peer relationships resulting in lowered educational adjustment and well-being. There is a lack of empirical support if excessive Internet use by university students predicts poor adjustment in their educational settings. More in-depth research into the antecedents and impacts of excessive Internet use on academic adjustment and student well-being seems warranted at this time.

LITERATURE REVIEW

Impulse control disorder model

The Impulse Control Disorder model was developed by Young (1998) when he was trying to relate the symptoms of individuals who were problematic Internet users to the symptoms of pathological gamblers and alcohol or drug dependents. He identified that the symptoms were more or less similar. Since pathological gambling is classified as one of the impulse control disorders in the DSM-IV, Young was able to conceptualize Internet addiction as a type of impulse-control disorder and developed a measure, based on the criteria of pathological gambling in the DSM-IV, and used it as a diagnostic measure to identify Internet addiction.

Researchers who support this impulse control disorder model often employ the term ‘pathological Internet use’ to indicate that, to some extent, their perspective on problematic Internet use is based on the same criteria used to define pathological gambling. Many researchers tried to relate the problematic Internet use with obsessive-compulsive disorder and they believed that this is a pathological repetitive behavior. They explained problematic Internet use as an inability to control time-consuming behaviors that result in social, occupational and financial difficulties (Shapira, Goldsmith, Keck, Khosla, & McElroy, 2000). Young (1998) concluded that problematic Internet use could best be characterized as an unspecified impulse control disorder rather than as an obsessive-compulsive disorder. Baumrind and Thompson (2002) emphasize the role of parents on children's growth and development and one can posit the question of a relationship among parenting styles and Internet addiction.

Parenting Styles

Parenting styles can be explained as the set of behaviors and attitudes of the parents expressed to their children, which would influence their development differently. Each style explains the degree to which parents respond to the demands and needs of the children and the way they monitor, mold and control their behavior (Darling, 1999; Darling & Steinberg, 1993).

Baumrind (1967) has described three different styles of parenting and those are authoritative, permissive, and authoritarian. Authoritative parenting is considered to be an ideal one which involves good nurturance of children and is characterized by a lot of involvement, sensitivity, good reasoning, and some autonomy for the child. Conversely, if a parent lets a child make one’s own decisions and does not interfere at all with any behavior nor offers punishment for misbehavior or clear directives, such a parent can be referred to as a permissive parent. Parents who have authoritarian parenting styles are very strict and have high restrictions and high exertion of power on their children.

Darling and Steinberg (1993) stated that Baumrind’s parenting style model has a positive remarkable influence on the socialization of the children in the United States. Parental involvement influences children's academic activities and their performance. Other research indicated that parents who actively engage themselves in the school activities and homework of the children have students with better performance in school (Hoover-Dempsey, Battiato, Walker, Reed, DeJong, & Jones, 2001; Epstein, 1987; Spera, 2005).

Educational Adjustment

Earlier researchers mainly emphasized academic ability as a significant predictor of student retention, but later a broader concept of academic adjustment was explored and many factors like scholarly potential, motivation to learn, and general satisfaction with the learning environment were considered as significant predictors of academic adjustment (Gerdes & Mallinckrodt, 1994).

Self-regulation

Self-regulation is the efforts one puts in to regulate or guide one’s actions. Regulation is not limited to guiding one’s behavior by one’s personal goals. Self-regulation is also associated with changing one’s dispositions or behavior to be in line with social and cultural norms (Baumeister & Alquist, 2009). Self-regulation could be explained as one’s beliefs or motives, and not a specific trait or ability of a person (Zimmerman, 2000). In Bandura’s view, self-regulation was explained in terms of the relationship between an individual, his behavior and the environment (Bandura, 1991). Cohen (2012) states the importance of self-regulation as its impact on interpersonal success, academic achievement and emotional adjustment.

Parenting Styles, Self-regulation and Academic Adjustment

One of the most important outcomes of positive parenting has been better family and academic adjustment of children. Self-regulation also plays a significant role in academic adjustment. Parental control has an influence on their children’s self-regulation (Grolnick & Ryan, 1989). Grolnick & Ryan (1989) stated that parental autonomy positively influences self-regulation of the children and in turn leads to better academic performance and adjustment. Parents, by fostering autonomy in their parenting styles, prepare their children for better adjustment in an educational environment.
Turner et al. (2009) stated that authoritative parenting influences academic performance, but self-efficacy and student motivation also have a significant role in their success. The self-determination theory explains that intrinsic and extrinsic goal pursuits can have a significant impact on one's psychological well-being. Each parenting style creates a different family environment which influences a child's sense of self-efficacy. Self-efficacy plays a significant role in the success of people in areas like work life and academics, overcoming hardships and difficulties, and academic success and adjustment (Bandura, 1986; Chemers, HU, & Garcia, 2001; Turner et al., 2009).

Research done in eastern culture by Vansteenkiste, Lens, and Deci (2006) stated that autonomy is not valued in the eastern culture and they argued that the experience of autonomy does not correspond well with the collectivistic values of the eastern culture. The eastern culture does not actually promote autonomy, personal freedom or self-direction (Olsen, Yang, Hart, Robinson, Wu, Nelson, & Wo, 2002; Markus & Kitayama, 2003; Iyengar & DeVoe, 2003).

**Parenting Styles, Internet Addiction and Academic Adjustment**

There is a plethora of research that indicates parental warmth, parental control and the style of parenting have an influence on the Internet addiction of children (Chou & Peng, 2007; Heim et al., 2007; Kalaitzaki & Birtchnell, 2014; Yao et al., 2013). If parental bonding does not happen positively during the early life of a child, there is a tendency to predispose one for 'negative relating to others' in a later life. When the negative relating to others develops in young adults, they are more likely to experience loneliness and withdraw from social interaction. The use of Internet can help young adults to widen and strengthen their network and gain pleasure and entertainment by spending time on interactive games, and social networking. Once they taste the fun, they have higher chances of getting into Internet addiction, which leads to significant distress and impairments in their life. Their priority becomes to be online and they neglect other day-to-day activities, like their classes, assignments, and studying for an exam. Thus, they lag in their academic activities and educational adjustment becomes difficult (Smahel et al., 2012; Kalaitzaki & Birtchnell, 2014).

**Parenting Styles, Self-regulation and Psychological Well-being**

Self-regulation can be influenced by parental warmth and control. Parents play a significant role instilling autonomy to make decisions in their children. A self-regulated person is able to set targets or attainable goals and take appropriate actions to achieve the targets. A self-regulated individual will be aware of his own limitations (Abar et al., 2009).

Two domains that the self-regulation theory examined are academic achievement and risk behavior. Individuals with self-regulatory skills in the academic settings activate and sustain their thoughts, emotions and actions in a systematic way to achieve their targets or goals. When faced with stress and challenges, if their self-regulatory skills are better, they tend to know what strategies they should rely on to enhance their persistence and performance that leads to their set goal.

Research on socialization of parent child found that authoritative parenting builds clear boundaries for their children's behavior with reasonable and rational negotiation. Authoritative parents are strict with the children when required and they show responsiveness and warmth and
foster autonomy and independence in children. These parental behaviors and dispositions enhance their children's self-regulatory skills and help them adapt well in the university environment with its many challenges (Maccoby & Martin, 1983; Abar et al., 2009).

Overall, the results provided by a multitude of research clearly support that parenting styles influence the educational adjustment and well-being of students. The present research explores not only direct influences, but also the indirect influences that parenting styles have on the educational adjustment and well-being of university students mediated by self-regulation and Internet addiction as given in the conceptual model in Figure 1.

**Research Hypotheses**

Hypothesis 1: Parenting styles (authoritarian, authoritative and permissive) have a direct influence on educational adjustment and psychological well-being of University students in Thailand, such that the more authoritative the parents are, the higher will be their students' educational adjustment and psychological well-being. Similarly the more permissive and authoritarian styles the parents employ, the lower will be the students' educational adjustment and psychological well-being.

Hypothesis 2: Parenting styles (authoritarian, authoritative and permissive) have an indirect influence on educational adjustment and psychological well-being of University students in Thailand mediated by Internet addiction and self-regulation, such that the more positive their parenting styles (more authoritative) are, the higher their self-regulation will be, the lower their Internet addiction will be, and the higher their educational adjustment and psychological well-being will be. Similarly, the more negative their parenting styles (authoritarian and permissive) are, the lower their self-regulation will be, the higher their Internet addiction will be, and the lower their educational adjustment and psychological well-being will be.

**METHOD**

**Research design**

This study utilized a correlation research design in which the relationship between the key variables of parenting styles, educational adjustment, well-being, self-regulation and Internet addiction of university students in Thailand were determined using a path model.

**Participants**

The participants were comprised of 794 university students doing their undergraduate courses in 6 private and 6 public universities in Thailand. The sampling criterion employed is convenient sampling. The proposed path model was tested using SEM; a large sample size is required (Hair, Anderson, Tatham, & Black, 1997).

**Research Instrumentation**

Part I - comprised of Parent Authority Questionnaire constructed by Buri (1991) based on Baumrind's (1971) typology of parenting styles, which are authoritarian, authoritative and permissive. The PAQ is appropriate for young adults. The scale consists of 30 items asking the respondents to rate parenting behavior of their parents on a scale of one (strongly disagree) to five (strongly agree), with ten items for each parenting type subscale. The PAQ consists of three subscales, which are permissive (1, 6, 10, 13, 14, 17, 19, 21, 24 and 28), authoritarian (2, 3, 7, 9, 12, 16, 18, 25, 26 and 29) and authoritative (4, 5, 8, 11, 15, 20, 22, 23, 27, and 30). Reliability of the question items was tested. Internal consistency alpha coefficients were 0.70, 0.86 and 0.721 respectively based on the six scales.

Part II - comprised of Self-Regulation Questionnaire (SRQ), developed by Brown, Miller, & Lawendowski (1999). The Self-regulation Questionnaire (SRQ) was developed as a self-report measure to assess the self-regulatory processes (Brown et al., 1999). The SRQ scale consists of 63 items and each of the items is scored on a 5-point Likert scale with high scores indicating high (intact) self-regulation capacity and low scores indicating low (impaired) self-regulation capacity. The items that are reversed scored are 2, 3, 4, 5, 6, 8, 10, 12, 13, 15, 19, 20, 21, 24, 26, 29, 31, 33, 37, 40, 43, 45, 50, 55, 62 and 63. The reliability of the SRQ is excellent, according to a study by Aubrey, Brown, and Miller (1994) reported as high (r = .94, p < .0001). Furthermore, the internal consistency of the scale was also quite high (α = .91). The validity of SRQ is also strong with concomitant measures.

Part III - is an Internet Addiction Scale developed by Young in 1999: Young (1998) developed the Diagnostic Questionnaire (YDQ) based on the eight DSM criteria for pathological gambling. Young (1999) revised the YDQ and constructed a Likert scale-based assessment tool called the Internet Addiction Test (IAT). The IAT scale consists of 20 items, which intend to assess the severity of the negative consequences due to excessive use of Internet. These items cover an individual's Internet use habits, his/her thoughts about the Internet, as well as problems related to excessive Internet use.

Part IV - Educational Adjustment Scale: The Educational adjustment scale, which is the adapted form of the First Year Experience Questionnaire (FYEQ), is used in this research and it measures the educational adjustment of the participants (McInnis et al., 1995). FYEQ has good internal consistency ranging from 0.50 to 0.88, while Dalziell & Peat (1998) reported that the reliability of FYEQ ranged from 0.40 to 0.89. In the current research, the following items (item numbers 6, 8, 28, 29, 30, 31, 32, 33, and 34) were reverse-scored so that a high score on the EAS (an adaptation of the FYEQ) indicated greater educational adjustment. Reliability of the question items was tested. Internal consistency alpha coefficients was 0.77 based on the five scales.
Part V - comprised of a 5 item Satisfaction with Life Scale developed by Diener, Emmons, Larsen & Griffin (1985) that measures the cognitive-judgmental aspects of their well-being. The authors of the SWLS stated that the scale was basically developed to examine overall aspect of respondents' life and to assess their general well-being. This is a 7- point Likert scale with a higher score indicating higher life satisfaction. The scale has reported an internal consistency coefficient (cronbach's alpha) of .87 and test-retest reliability correlation of 0.82 for a two month period (Fischer & Corcoran, 2007). For this study, reliability of the question items was tested. Internal consistency alpha coefficients was 0.83 based on the seven scales.

Part VI - constructed by the researcher, comprises personal information, which taps to into participants, age, gender, year of study, faculty of study, and economic status of the family.

Procedure

The researcher selected 6 private and 6 public universities. The original English questionnaire was translated to Thai and then translated back to English by different bilingual experts to maintain the consistency in translation and to reduce bias.

Data Analysis

Path Analysis via Structural Equation Modeling was employed to test the hypothesized direct and indirect influences of parenting styles on educational adjustment, being mediated by Internet addiction and Self-regulation.

RESULT

The reliability coefficients for the five scales ranged from 0.79-0.91. The sample was comprised of 794 university students from 12 universities in Thailand. There were 315 males (39.7%) and 479 females (60.3%). The sample was drawn from 6 private universities and 6 public universities.

Table 1 presents the means and standard deviations for these 7 computed variables. From Table 1 it can be inferred (1) that the respondents have a high level of self-regulation (mean scores are above the scale's mid-point), (2) reported lower level of internet addiction (mean scores are below the scale's mid-point), (3) reported high educational adjustment (mean scores are above the scale's mid-point), (4) reported high levels of authoritative and permissive parenting styles and lower levels of authoritarian style (mean scores are below the scale's mid-point for authoritarian), and (5) reported that they had good life satisfaction (mean scores are above the scales' mid-point).

Path Analysis to Test the Hypothesized Path Model

Current study hypothesized that parenting styles (authoritarian, authoritative and permissive) have a direct influence on the educational adjustment and psychological well being among university students in Thailand. The study also hypothesized that parenting styles (authoritarian, authoritative and permissive) have an indirect influence on educational adjustment and psychological well-being of University students mediated by self-regulation and Internet addiction (See Figure 2).

The chi-square goodness-of-fit value for the path model is statistically significant, $\Sigma^2$ (df = 528) = 1344.74, $p < .001$, suggesting that the co-variance matrix for this posited model does not fit the sample co-variance matrix very well (Table 2). The incremental fit indices (Normed Fit Index - NFI, Incremental Fit Index - IFI, Tucker-Lewis Index - TLI, Comparative Fit Index - CFI) are all in the range of 0.853-0.896 though not above 0.9. However, the RMSEA value of 0.05 which is lower than 0.08 indicates a good fit of the model.

### Table 1. Means and Standard Deviations for the five Computed Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Midpoint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Regulation</td>
<td>3.54</td>
<td>.44</td>
<td>3</td>
</tr>
<tr>
<td>Educational adjustment</td>
<td>3.66</td>
<td>.46</td>
<td>3</td>
</tr>
<tr>
<td>Internet Addiction</td>
<td>2.56</td>
<td>.80</td>
<td>3</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>4.45</td>
<td>1.05</td>
<td>4</td>
</tr>
<tr>
<td>Authoritarian style</td>
<td>2.95</td>
<td>.79</td>
<td>3</td>
</tr>
<tr>
<td>Authoritative style</td>
<td>3.55</td>
<td>.58</td>
<td>3</td>
</tr>
<tr>
<td>Permissive style</td>
<td>3.56</td>
<td>.60</td>
<td>3</td>
</tr>
</tbody>
</table>

### Table 2. $\Sigma^2$ Goodness-of-Fit Value, Normed Fit Index (NFI), Incremental Fit Index (IFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA)

<table>
<thead>
<tr>
<th>Model</th>
<th>$\Sigma^2$ (N=528)</th>
<th>df</th>
<th>$p$</th>
<th>NFI</th>
<th>IFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null Model</td>
<td>9137.015</td>
<td>444</td>
<td>&lt; .0010</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.148</td>
</tr>
<tr>
<td>7-Factor Model</td>
<td>1344.738</td>
<td>445</td>
<td>&lt; .001</td>
<td>0.853</td>
<td>0.896</td>
<td>0.884</td>
<td>0.896</td>
<td>0.050</td>
</tr>
</tbody>
</table>
Figure 2. Path model of parenting styles (permissive, authoritarian and authoritative) as a function of the direct and indirect influences of educational adjustment and life satisfaction being mediated by Internet addiction and self-regulation.

PES – permissive
ANS – authoritarian
AES – authoritative
SR – self-regulation
IAT – Internet addiction
LS – life satisfaction
EAS – educational adjustment
Table 3. Standardized regression weights of the relationship of the variables in the model

<table>
<thead>
<tr>
<th>Relationship</th>
<th>β</th>
<th>Critical Ratio (C.R.)</th>
<th>P-Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>PES→SR</td>
<td>-.808</td>
<td>-2.191</td>
<td>.028</td>
<td>Significant</td>
</tr>
<tr>
<td>ANS→SR</td>
<td>-.493</td>
<td>-5.005</td>
<td>***</td>
<td>Significant</td>
</tr>
<tr>
<td>AES→SR</td>
<td>1.120</td>
<td>3.002</td>
<td>.003</td>
<td>Significant</td>
</tr>
<tr>
<td>ANS→IAT</td>
<td>.833</td>
<td>6.847</td>
<td>***</td>
<td>Significant</td>
</tr>
<tr>
<td>PES→IAT</td>
<td>.871</td>
<td>2.694</td>
<td>.007</td>
<td>Significant</td>
</tr>
<tr>
<td>AES→IAT</td>
<td>-.768</td>
<td>-2.423</td>
<td>.015</td>
<td>Significant</td>
</tr>
<tr>
<td>PES→LS</td>
<td>1.016</td>
<td>2.726</td>
<td>.006</td>
<td>Significant</td>
</tr>
<tr>
<td>ANS→LS</td>
<td>.328</td>
<td>2.311</td>
<td>.021</td>
<td>Significant</td>
</tr>
<tr>
<td>AES→LS</td>
<td>-1.798</td>
<td>-1.798</td>
<td>.072</td>
<td>Not significant</td>
</tr>
<tr>
<td>SR→LS</td>
<td>.135</td>
<td>1.943</td>
<td>.052</td>
<td>Not significant</td>
</tr>
<tr>
<td>IAT→LS</td>
<td>.078</td>
<td>.914</td>
<td>.361</td>
<td>Not significant</td>
</tr>
<tr>
<td>PES→EAS</td>
<td>1.366</td>
<td>2.593</td>
<td>.010</td>
<td>Significant</td>
</tr>
<tr>
<td>SR→EAS</td>
<td>.498</td>
<td>5.408</td>
<td>***</td>
<td>Significant</td>
</tr>
<tr>
<td>ANS→EAS</td>
<td>.558</td>
<td>2.928</td>
<td>.003</td>
<td>Significant</td>
</tr>
<tr>
<td>AES→EAS</td>
<td>-.070</td>
<td>.023</td>
<td>.043</td>
<td>Significant</td>
</tr>
<tr>
<td>IAT→EAS</td>
<td>.261</td>
<td>-2.541</td>
<td>.011</td>
<td>Significant</td>
</tr>
</tbody>
</table>

The results revealed that permissive parenting styles influenced the life satisfaction and educational adjustment positively, indicating that the more permissive the parents were, the higher their children's educational adjustment (beta = 1.356) and life satisfaction (beta = 1.01) were. Authoritarian parenting style has a direct positive influence on educational adjustment (beta = .498) and psychological well-being (beta = .328). Authoritative parenting has a significant negative influence on educational adjustment (beta = -1.07). Authoritative parenting style has no significant influence on psychological well-being.

Permissive parenting style has an indirect influence on educational adjustment mediated by Internet addiction (beta = 0.871; beta = -0.261). The more permissive style the parents adopt, the higher were their children's Internet addiction. The higher the Internet addiction, the lower were their educational adjustment. Permissive parenting has an indirect influence on educational adjustment mediated by self-regulation (beta = -0.80; beta = 0.498). The more permissive styles the parents adopt, the lower were their students' self-regulation, and the lower their self-regulation, the lower their educational adjustment.

Authoritarian parenting style has an indirect influence on educational adjustment mediated by Internet addiction (beta = 0.83; beta = -0.261). The more authoritarian style the parents adopt, the higher were their students' Internet addiction. The higher the Internet addiction, the lower were their educational adjustment. Authoritarian parenting style has an indirect influence on educational adjustment mediated by self-regulation (beta = -0.49; beta = 0.498). The more authoritarian style that the parents adopt, the lower were their students' self-regulation, and lower their self-regulation; the higher were their educational adjustment.

Table 3 gives the standardized regression weights of the relationship of the variables in the model. (Browne & Cudeck, 1993). These fit indices indicate that the path model provided a fit relative to its null or independence model, and support the hypothesized structure of the path model, which is supportive for further analysis.

Authoritative parenting style has an indirect influence on educational adjustment mediated by Internet addiction (beta = -.768; beta = -0.261). The more authoritative the parents were, the lower was their students' Internet addiction. The lower the Internet addiction, the higher students' scores were for their educational adjustment. Authoritative parenting style has an indirect influence on educational adjustment mediated by self-regulation (beta = 1.12; beta = 0.498). The more authoritative style parents adopt, the higher were their students' self-regulation, and the higher the students' self-regulation scores, the higher were the students' educational adjustment. From the analysis, it was shown that the incorporated variables could explain up to 29.1% (residual was 70.9%) of the educational adjustment and 18.7% (residual was 70.9%) of life-satisfaction. After the path analysis was completed, modification fit indices were considered for improvement. It was found that educational adjustment (EAS) had positive influence over life-satisfaction (LS) such that the percentage of life-satisfaction explained was improved from 18.7 to 19.9.

DISCUSSION

Hypothesis 1: Parenting styles (authoritarian, authoritative and permissive) have a direct influence on educational adjustment and psychological well-being of University students in Thailand, such that the more authoritarian the parents are, the higher their students' educational adjustment and psychological well-being will be. Similarly, the more permissive and authoritative parenting styles
parents employ, the lower will be the students’ educational adjustment and psychological well-being.

The results did not come as proposed and are not in line with the results in the Western culture of the United States. The design and conduct of the present study was based on Diana Baumrind's theory of parenting styles, that was developed within the Western culture and conclusions were derived based on the western sample. Several values overlap between cultures and there is still a distinction between the primary belief system utilized by Eastern and Western cultures. The findings that are deemed relevant within the western culture may not be applied to the Asian context.

The present study indicated that permissive and authoritarian parenting styles have a positive influence on the educational adjustment of the students and permissive style also influenced psychological well-being positively. Contrary to the proposition, authoritative parenting has a significant negative influence on educational adjustment and no influence on psychological wellbeing unless the relationship to intermediate variables of self-regulation and Internet Addiction are included in the path analysis. This is contradictory to the findings of Dornbusch et al. (1987) that indicated that lower grades were associated with more authoritarian, more permissive, and less authoritative parenting.

According to Baumrind (1967, 1971) children of authoritative parents were found to be more self-reliant and independent whereas those of authoritarian parents were more withdrawn and discontented. The western theory might not work in Asian settings. There are similarities and differences in culture, values, and norms across different societies. These are often manifested in the parenting styles that are employed quite differently. More often than not, another may not appreciate some parenting practices that are considered acceptable by a particular culture. For example, when compared to Western practices, traditional Asian families typically appear to show less warmth to their children (Smith, 2009). The parenting style is typically more authoritarian and appears to be driven by the axiom that "to govern is to love". These parents are very strict and usually do not allow their children the freedom to express their opinion.

Thai parents, regardless of their styles tend to impose control on their children's activities, establish rules and guidelines that their children are expected to follow, in the hope that such guidelines will foster the discipline and personal focus necessary for their children to achieve their academic pursuits and, eventually, to succeed in their future life. That could be the reason why authoritarian style parenting fosters better educational adjustment among the respondents in this study of Thai university students. Randolph (1995) stated that authoritarian child-rearing practices can be valued high as parents would think obedience as positive and they would feel it is necessary for their child to go on with their life without difficulties and achieve success in school.

The authoritative parents communicate with their children and explain the reasoning behind their policy and allow their children the freedom to express their opinion. Perhaps in the Thai culture, that kind of autonomy might be quite new and taking responsibility is difficult for them, which could be the reason why it negatively affected the educational adjustment. Recent research reported that higher-income parents tend to use either authoritative or permissive style and they also reported that children under permissive style parenting had higher delinquent behavior. They also reported that parents in Thailand generally use authoritarian style (Rhucharoenpornpanich, Chamratrithirong, Fongkaew, Rosati, Miller, & Cupp, 2010).

In Thai cultural settings, even adolescents probably consider parental control as a support in achieving in academics and those with higher control adapted well academically. But those who were given the freedom to make their decisions were unable to make the educational adjustment efficiently. In the case of permissive styles, however, they were used to being on their own with plenty of freedom and they were able to adapt well academically and had better satisfaction with life.

Asian Americans generally succumb to authoritarian style of parenting (Dornbusch et al., 1987), are more controlling (Chao, 1994), and have higher tendency to value those characteristics that represent the collectivistic orientations (Julian, McKenney, & McKelvey, 1994). Vansteenkiste et al. (2006) also stated that autonomy is not valued in the eastern culture and the experience of autonomy does not correspond well with the collectivistic values of the eastern culture. Based on research with 153 Chinese students, they found that there was no relation between student autonomy and student scores on the ability to focus, time management, positive outlook, and exam anxiety.

The eastern cultures do not actually promote autonomy, personal freedom or self-direction (Olsen et al., 2002, Markus & Kitayama, 2003, Iyengar & DeVoe, 2003). The research was not able to identify a positive relation between autonomy and these variables. Despite the highlight of the negative impacts of authoritarian and permissive styles, there is some research that indicates that despite being exposed to control parenting, Asian American adolescents excel well in their academics (Chao, 1994; Steinberg et al., 1992).

**Hypothesis 2:** Parenting styles (authoritarian, authoritative and permissive) have an indirect influence on educational adjustment and psychological well-being of University students in Thailand mediated by Internet addiction and self-regulation, such that the more positive parenting styles the parents use (more authoritative), the higher will be their children’s self-regulation and the lower their Internet addiction and consequently, higher will be their educational adjustment and psychological wellbeing.
Similarly, the more negative their parenting styles (authoritarian and permissive) are, lower will be their self-regulation and higher will be their internet addiction and consequently, lower will be their educational adjustment and psychological well-being.

The indirect relationship was more or less similar as per the previous research. The authoritarian parenting style had an indirect influence on educational adjustment mediated by self-regulation, but there is no indirect influence of psychological well-being mediated by self-regulation. When the parents were more authoritarian, the children had lower self-regulation and the lower their self-regulation, the lower were their educational adjustment. This is in line with the previous researches. Cohen (2012) stated that higher self-regulation contributes to better interpersonal success and academic achievement.

The results of the present study indicate when the parents employ less control over their kids and they have a tendency to develop higher self-regulatory skills, which in turn enhances their academic adjustment. Authoritarian parents make an attempt to control and shape their children using very strict standards, punitive measures and fixed rules and regulations (Gronlick & Ryan, 1989). The motivation the students have with authoritarian parents might be extrinsic. Their adaptation to the environment will also be restricted. When faced with challenges in the academic settings, the role of self-regulation is important. When they have low self-regulation, adjusting to the new environments becomes difficult.

Authoritarian parenting styles have an indirect influence on academic adjustment mediated by Internet addiction. In a research that was reported earlier by Yao et al. (2013) on college students in China, they indicated that parental behaviors were positively related to Internet addiction. The results indicated that the father’s rejection and over-protection would increase the risk for young adults developing addiction towards the Internet. When parents have very strict control over the children, they tend to be over-protective and interfere with their lives all the time and try to control their lives. This can actually create a tendency among the young adults to spend more time on the Internet and where they seek to experience the freedom and entertainment online. The more time they spend online either browsing or playing games, may reduce their commitments at university to home-work and deadlines for assignments, classes and quizzes. The greater the backlogs of work and assignments students have, the more they are able to cope well with their academics.

Authoritative parenting style has an indirect influence on educational adjustment mediated by self-regulation. The more authoritative style of parenting they employed, higher were their children’s self-regulatory skills, and higher were their educational adjustment. Authoritative parenting style fosters behavior that shows reasonable and rational justification among the children. Authoritative parenting styles can foster higher self-regulation among the youth. (Abá et al., 2009). Tangney, Baumeister, & Boone (2004) explained the benefits of self-control in their research emphasizing on the benefits of self-control. Self-control, which is an important element of regulation, significantly predicted many outcomes such as interpersonal success, school achievement, and adjustment.

The more authoritative the parents are, the lower is their students’ addiction to the Internet and the lower their addiction to Internet, the higher will be their educational adjustment. Simons et al. (2008) reported that children with higher parental care and less overprotection scored lower on Internet addiction. Authoritative parenting reflects very encouraging and positive style of parenting. Parents who employ this parenting style provide clear standards for their children’s behavior and use consistent supportive discipline (Baumrind, 1991).

According to Buri (1991), authoritative parents provide “clear and firm directions for their children, but this disciplinary clarity is moderated by warmth, reason, flexibility, and verbal give-and-take” (p. 111). Rosen, Lafontaine, and Hendrickson (2011) investigated the association amongst parenting styles, limits that were set, and adolescent use of social networking sites. They found that authoritative parenting style is related to teenagers engaging in fewer high-risk behaviors such as disclosing any kind of personal information and low likelihood of meeting online friends in person. These findings corroborate those obtained by Eastin et al. (2006) that showed that authoritative parents are more likely to intervene when it comes to their teenager’s use of various media.

The more clarity and directions given to their children by their parents, the lesser the chances are of being addicted to the Internet. When the university students have lower addiction to Internet, they spend their time on academic activities and will be better adjusted in academic settings.

Permissive parenting has an indirect influence on educational adjustment mediated by Internet addiction. Lenhart, Raine, and Lewis (2001) stated the students would use Internet for their academic purposes and parents may not restrict the use thinking they are working or networking with their friends for academic reason; however this might lead to overuse or Internet addiction with negative impacts. Furthermore, Lenhart et al. (2001) reported that the majority of students prefer to go online for entertainment purposes (e.g., social networking, playing online games, shopping, making friends, etc.). Combining all these, educational and non-educational uses of the Internet may lead to unreasonable dependency. This unreasonable dependency can distract them from doing their day-to-day work at school and they might become stressed and have difficulty in catching up with the lessons and homework, that would in turn make their academic adjustment difficult.
Permissive parenting style has an indirect influence on educational adjustment mediated by self-regulation. Permissive parents tend to use inconsistent discipline, do not emphasize mature behavior, and let their children self-regulate (Baumrind, 1991). Permissive parents do not demand that their children follow strict orders nor punish them for mistakes. Permissive parents have less restrictions and boundaries for the children and as a result, their students’ tend to have difficulty with their self-control (Steinberg, 2001). There is little monitoring of children’s activities and the children are not able to control their timing on their activities, they have a tendency to miss their day-to-day chores at school and then the academic adjustment becomes more difficult.

LIMITATIONS

The findings obtained and conclusions drawn should be treated with caution. The research design employed is cross-sectional and descriptive and no definitive conclusions can be derived from the causal sequential effects (both direct and indirect). The observed path coefficients represent only relationship but not causality. Another limitation is the self-report measure of parenting style, which the university students answered from the memory of their parenting styles and their psychological well-being and educational adjustment. Reliance on the memory per se is clearly subjected to memory lapse/errors which can adversely affect the accuracy of the participants’ true feelings/responses.

The data collected were from a few universities in Bangkok. Although diversity was considered in the selection (private and public universities), the external validity of the findings can still be questionable. The most important limitation is that the related literature and theoretical perspectives used for the research is more from the western perspective than the Thai literature in the field.

IMPLICATIONS

Keeping the limitations mentioned above in our mind, there are many implications for this research. Parenting styles in the Thai setting is different than Western cultural settings and parenting styles relationship to academic adjustment and life satisfaction also is different in the Thai setting. This information is useful for the educators and counselors to note in Thai settings. There is lack of literature in the Thai setting that explores the mediating effect of self-regulation and Internet addiction. The Thai translated questionnaires can be used for future researchers in Thai settings as the psychometric properties are established. The theory based path model employed in the current study can be a knowledge resource for mental health practitioners, university administrators and educators. The Universities can use the information for developing some seminars or workshops for parents emphasizing positive parenting.

CONCLUSION

The results of the study indicated a direct positive relationship between authoritarian parenting style and life satisfaction and educational adjustment. Permissive parenting style also has a positive relation on educational adjustment. These results are different from the western context. The results also indicate an indirect relationship between authoritative parenting styles and education adjustment mediated by self-regulation and Internet addiction. The more positive parenting the students experience, that is, the more authoritative their parents are, the better are their self-regulatory skills and the better are their educational adjustment. Similarly, the more authoritative the parents are, the lower are their Students’ addiction to Internet and the better are their educational adjustment. The general parenting styles used are more moderate authoritarian in Thai settings and students were experiencing higher life satisfaction and educational adjustment with this style.

REFERENCES


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