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Impact of self regulation skills on students academic grades

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Impact of Self-Regulation Skills on Academic Performance of Young Children in Private Schools of Karachi

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Impact of Self-Regulation Skills on Academic Performance of Young Children in Private Schools of Karachi

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Abstract

This research aimed to explore if self-regulation skills had any effect on the academic outcomes of young children in private schools of Karachi, Pakistan. Quantitative research method was used to determine the impact of self-regulation upon the academic outcome of young children by utilizing Early School Self-Regulation Scale-Care Giver Version (Bhamani, 2012). The sample size consisted of randomly chosen 210 children, studying in grades 1 and 2 from seven different private schools in Karachi. The results of the research show that self-regulation skills had a significant impact on the academic outcome of young children in private schools of Karachi, b = -6.3, t (198) = 0.693, p < .01. Self-regulation skills also explained a significant proportion of variance in students grades, $R^2 = .397$, $F (1, 198) = 130.536$, $p < .01$.

Keywords: academic outcome, children, emotional regulation, private schools, self-regulation

Introduction

Self-regulation in young children is of vital importance and is given a high regard in all human developmental researches. This is because early childhood in terms of development; be it physical, cognitive, psycho-social or self-development is widely accepted as the most crucial period in the life span of a human being. Early
childhood refers to the time from conception to the age of eight years (Markham, 2013). These years are the most rigorous and essential for human beings in terms of brain development as compared to the rest of their life (Galinsky, 2010; Shonkoff & Phillips, 2000; WHO, 2009), because this is when emotional, physical, and psychological traits are developed and ingrained in their personalities (Perry, 2013). Self-regulation is a division of social intelligence and relates to an individual’s ability (Lemberger & Clemens, 2012) to scrutinize and judge one’s own feelings and emotions as well as those of others and then to use these judgments to make intelligent decision (Salovey & Mayer, 1990).

Children are very keen observers and their brains are like sponges that absorb and retain almost everything that is observed (Anselmo & Franz, 1995) and they are extremely perceptive and susceptible to the aspects of their surroundings. During their early years, if they receive proper care and motivation, their brain develops rapidly, resulting in healthy, intellectual, and emotional growth (Brotherson, 2009); however, if their environment is not supportive, it leads to delayed growth (WHO, 2009) and such children are prone to stress-related diseases as they are not equipped to deal with difficult situations (Harris, 1998). They then learn and adapt by replicating the actions that they have learnt through observations. Thereby, people are seen to respond to different situations in unique ways because of how they, as young children have observed those situations being handled by their parents, teachers, friends, and family (Galinsky, 2010).

One of the most significant factors determining a person’s personality is their self-regulation skills which are basically a person’s ability to handle their emotions, coping with high stress situations and regulating their social behavior in a positive manner (Chandler, Lourie, & Peters, 2008). The ability to regulate emotions in a high stress situation plays a fundamental role in our daily lives and is crucial to our success not only in relationships (Brandstatter & Baltez-Gotz, 1993), but also in academic settings and work environments (Scarr & McCartney, 1983).
Children need to have a high emotional intelligence (EI) quotient and strong self-regulation skills as it helps them in academic settings (Calkins & Leerkes, 2011). However, in order to understand how a high emotional intelligence quotient and self-regulation scores can be beneficial, it is important to understand this phenomenon in depth. It can be said that emotional self-awareness and control, positive thinking, empathy, and compassion towards others are all skill related to emotional intelligence (Brotherson, 2009). Simply, it means one’s ability to recognize, control, and understand one’s own emotions as well as of others. Self-regulation and emotional competence comprises four major skills; firstly, self-awareness, which is an aspect of EI that describes the knowledge a person has of one’s own capabilities, strengths and weaknesses, goals and ambitions, values and norms, but in an emotional context; secondly, emotional regulation, which refers to an individual’s control over his or her emotions in various circumstances and their ability to adapt to any situation (Perry, 2013); thirdly, social awareness, which is the capacity to understand the problems that exist in a society and one’s sensitivity to those issues and finally, psycho-social development, which describes one’s aptitude towards understanding their relationships and how to manage these relations in a positive way, so that it helps everyone achieve their desired goals (Finkel & Fitzsimons, 2011).

Our emotions are not only related to the people in our lives, but our environment as a whole generates various feelings and emotional responses. All human beings are born with a temperament (Ayoub, Vallotton, & Mastergeorge, 2011) that is unique to them (Pekrun, Goetz, Titz, & Perry, 2010). As young children, these emotions are in their rawest forms (WHO, 2009); which are refined over the years through observation of people around them and they reproduce the same behavior when put in similar situations (Eisenberg, Smith & Spinrad, 2011). Hence, if children are to reach their full potential, then their environment needs to be free from unnecessary disapproval or punishment (Bijou & Baer, 1961). It then becomes extremely critical that parents provide a nurturing environment, which hones the child’s emotional and self-regulation skills, giving them the ability to positively deal with various situations (Calkins & Leerkes,
2011). Therefore, it is imperative to understand that students who possess a high level of self-worth, emotional stability, good relations with others, and a good command of self-regulation skills, coupled with a nurturing environment, achieve better academic outcomes as they are better able to deal with the pressures of today’s world. The focus of this research paper is specifically young children and their self-regulation skills in academic settings and its impact on their academic outcomes. The purpose of the study is to explore the impact of young children’s self-regulation skills on their learning outcomes. Keeping the above findings in mind, the following hypothesis was proposed.

Hypothesis

There is a significant impact of emotional self-regulation skills of young children on their grades in private schools of Karachi.

Literature Review

There has been a widespread research regarding the variables that help predict a child’s academic performance. Researchers have identified a range of these indicators which include social behavior, socio-economic status, academic self-concept, and parenting styles (Baumrid, 1991; Steele & Aronson, 1995; Taylor, Casten, Flickinger, Roberts, & Fulmore, 1994). Although it is agreed that environmental factors have a strong effect on the academic outcome of its students, there are many researchers who believe that a major portion of a student’s academic performance depends on their own personality. It has been discovered that a child’s self-identity and self-perception can affect their academic performance (Aremu & Oluwole, 2001). Other researchers who have worked in this area of expertise also agree that there exists a positive relationship between emotional intelligence and academic performance of students. It is also agreed that teachers and parents alike play the most important role in helping a child to develop their self-regulation skills (Ayoub, Vallotton, & Mastergeorge, 2011). The two are primary caregivers in children’s lives; therefore, initially the children take their emotional and social
behavioral cues from their parents (Baumrind, 1991), but once they start going to school, their teachers take up a partnership role with the parents to raise children. Teachers who keep a positive and optimistic attitude by motivating and remaining calm during stressful times train their students to adopt similar attitudes (Pintrich & de Groot, 1990). On the other hand, teachers who are extremely strict and reprimand students on a regular basis, display anger and frustration at them, foster students who lack positivity, self-confidence, and motivation (Jennings & Greenberg, 2009). Teachers must therefore, adopt various classroom management plans and pedagogies in order to give their students emotional, social and academic skills that they need to lead a successful and healthy life (Webster-Stratton, 1999). Often, the environment at home changes and becomes unstable because of death, divorce, financial and other issues, leaving primary caregivers emotionally unstable and leaving children without emotional and social support. In such circumstances, the role of teachers takes precedence and children look to them for support and comfort. If the teachers are effective, they will always ensure that the students are emotionally stable and all their needs of comfort and support are met so that they can attain maximum benefit from their academics (Coetzee & Jansen, 2007). It is, therefore, established that the role of the teachers is not just that of enhancing their learners’ intellect and knowledge, but that of emotional growth as well, so that they develop into functional, resourceful, and productive members of the society.

Self-regulation skills also help children to gel easily in social settings. These skills depend heavily upon self-perception, which affects the way they interact with their peers and how their friendships and relationships are developed. Peer pressure is a serious component of academic life and often children end up with psychological issues and social ineptness when faced with intense pressure from their classmates and comrades (Hay & Ashman, 2003). In one research it was found that children with high self-regulation skills exhibited high pro-social traits such as effective leadership and collaboration with peers; whereas, in cases where students had low self-regulation skills and low self-esteem were both aggressive and bullied their peers or were the victims of bullying themselves (Petrides,
Impact of Self-Regulation Skills

Sangareau, Furnham, & Frederickson, 2006). In a similar research, it was found that children who had a very high self-perception and felt confident about themselves did not feel the need to thrive for social acceptance (Mostow, Izard, Fine, & Trentacosta, 2002). They were better able to handle bullying and peer pressure and remained focused on their goals and activities. The study concluded that prevention programs in school that focused on the development of socio-emotional competence of children resulted in students being better accepted by their peers and their ability to regulate emotions and behavior in social settings (McCraty, Atkinson, Tomasino, Goelitz, & Mayrovitz, 1999).

In Pakistani context, there have been relatively few studies regarding the academic performance of students and its relationship with their emotional intelligence levels (ASER, 2012). The focus has been more on their social behavior, not specifically classroom performance and the sample has been restricted to either secondary school children or undergraduate students. A study was conducted in a public university of Rawalpindi, Pakistan where 100 undergraduate students were selected from a variety of disciplines to try and detect if a relationship existed between their emotional intelligence and academic progress and to see how different emotional attributes affect their academic. The findings showed that there is a positive link of emotional intelligence with academic aptitude (Fatima, Shah, & Kiani, 2011).

Another research was undertaken in Pakistan to study the association between emotional intelligence and social awareness skills on the behavior of 11th grade top achievers as well as underachievers. The results showed that emotional intelligence had a high correlation with positive social behavior. The research suggested that students should be trained to understand and regulate their emotions so as to improve social behavior to help them lead more productive lives (Majid, 2012).

Another correlation research was done to study the affiliation between emotional intelligence with the academic performance of students studying in a university in Islamabad. The variables for
this study were emotional intelligence and the students’ cumulative grade point average (CGPA). Test results showed a significant correlation between the two variables, that is, emotional intelligence could be used as a predictor for academic performance (Nasir & Masrur, 2010). The literature review, therefore, suggests that high emotional intelligence in students affects their academic performance in a positive manner (ASER, 2012). Students who have a greater awareness of their emotional strengths and weaknesses are more skilled in regulating these emotions in a positive manner, seem to achieve better scores in schools and display traits that suggest healthier social life (Brotherson, 2009).

Policy makers, teachers and other significant individuals in Pakistan fail to realize the importance of a healthy emotional bearing on successful life (Ibrahim, 2012). It is important to remember that according to some experts, emotional development can start as early as infancy (Huntington & Bender, 1993) and the process of developing self-regulation skills in children begins from the point when they are babies. The kind of environment they grow up in, the behavior of their parents, siblings and other family members will determine their own emotional psyche, so it is safe to suggest that children who receive encouraging and nurturing care from their guardians grow up with a higher sense of self-esteem and are more academically and socially self-assured.

The education system of Pakistan has a very traditional outlook towards the students’ emotional state (Sufi, 2004). To make students skillful is a skill in itself and teachers must act as a mentor in teaching students various skills (Gul, 2014). All students are treated the same way with the same level of expectations, regardless of the student’s abilities, social background, family environment, and personality traits. Instead of encouragement, students are plagued by constant reprimand and threats in case of failure and this is apparent even in the primary years (Sayeed, 2011). These situations lead to unhealthy emotional development and students start to judge their self worth solely on the basis of how well they are doing in their courses. If they are unable to reach the desired standards, they feel worthless and at a later stage, they start to take extreme mea-
sures, one of them being suicide (ASER, 2012). In a document published by the World Health Organization in 2002, it was estimated that over 15,000 suicides were committed in Pakistan of which 25% were young teens (Ibrahim, 2012), mostly having academic grade related issues. However, there are very few investigations in Pakistan that have looked into the connection between emotional intelligence, specifically self-regulation skills, and academic achievement of young students at the pre-primary and primary level of education in private schools of Karachi. This research will try to bridge the gap in this category of available literature.

Methodology

The design of the research involved a quantitative exploratory study to obtain the researchers’ aim of exploring the impact of self regulation skills in young children’s academic grades.

Population and sample

The sample was chosen using convenient and purposive sampling strategies. Convenient sampling was done in two stages; in the first stage, private schools for the study were identified and in the second stage, students from these schools were identified who were participants of the study. The participants were between the age of 6-8 years (grades 1 and 2). The selected students had studied in the current grade for at least six months and had at least 80% attendance. The sample included 210 children studying in seven different private schools. These students were then divided into three groups: underachievers, average students and above average students.

Research instruments

The tool used for the quantitative data collection was a modified version of Early School Self-Regulation Scale – Care-Giver Version (Bhamani, 2012). This scale has 15 items with a Likert response that is designed to identify student behavior ranging from traits that students exhibit rarely, often or never. The demographic section of the scale included age of the child, gender and average grades in
English and mathematics as allotted by their teacher. The questionnaires were filled out by the students’ teachers after they had been taught by the same teacher for at least 6 months so that they were aware of their students’ self-regulation skills, as well as their overall performance in English and mathematics.

**Ethical consideration**

As per the requirements of any research, undertaking was ensured and the strictest ethical procedures were employed, especially considering the fact that the subjects of this research were very young children. The data collection was done in a stringent manner, keeping in mind the international standards to protect the identity and situation of the various participants and to ensure the validity and reliability of the research findings.

**Findings and Discussion**

The hypothesis tested that self-regulation significantly impacts grades, $b = -6.3$, $t (198) = 0.693$, $p < .01$. Self regulation skills also explained a significant proportion of variance in students grades, $R^2 = .397$, $F (1, 198) = 130.536$, $p < .01$.

Table 1 Regression analysis

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>51.009</td>
<td>1</td>
<td>51.009</td>
<td>130.536</td>
<td>.000*</td>
</tr>
</tbody>
</table>

**COEFFICIENTS**

<table>
<thead>
<tr>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Unstandardized Coefficients</td>
<td>Standardized Coefficients</td>
</tr>
<tr>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>3.992</td>
<td>.187</td>
</tr>
<tr>
<td>-.065</td>
<td>.006</td>
</tr>
</tbody>
</table>

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The hypothesis stated that there would be a significant impact of emotional self-regulation skills of young children on their academic outcomes in private schools of Karachi. This hypothesis has been accepted as true as far as the sample population for this research is concerned. Self-regulation skills have a significant impact on the academic performance of young children in private schools of Karachi, $b = -6.3$, $t (198) = 0.693$, $p < .01$. Self regulation skills also explained a significant proportion of variance in students grades, $R^2 = .397$, $F (1, 198) = 130.536$, $p < .01$. Similar results have been found in researches conducted on related topics of self-regulation skills in young children (Adeyemo & Ogundokun, 2010; Anselmo & Franz, 1995; BoeKaerts, Pintrich, & Zeidner, 2005; Brotherson, 2009; Denham, Mithcell-Copeland, Strandberg, Auerbach, & Blair, 1997). These findings can be linked to behavioral traits in the children, such as self-confidence, focused and goal oriented approach, social awareness and an overall positive attitude towards life in general. These results are also linked to such phenomena as parental support (Baumrind, 1991) and emotional investment in raising the child, support and care given by teachers, and their relationships with their peers and classmates. Emotional self-regulation skills are an asset in children. Self-regulation and emotional intelligence are divided into such counterparts as self-awareness, emotional regulation, relationship management, and psycho-social development. Children who exhibit control over these traits generally tend to be more successful in life because they have a greater awareness about themselves, their environment, and social settings (Hay & Ashman, 2003). This awareness helps them to stay in control of different situations such as managing their goals and expectations as well as not be pressurized or disheartened when things do not go as planned.

### Table 2. Model summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.630*</td>
<td>.397</td>
<td>.394</td>
<td>.625</td>
</tr>
</tbody>
</table>

*a. Predictors (Constant), SELF REGULATION*
Parental behavior plays a crucial role in the growth of the child’s self-regulation skills, especially when it comes to instilling confidence and self-assuredness. Parents who counsel their children regularly, providing them emotional support as well as academic guidance, raise confident children who are well aware of their abilities and are trained to mobilize those strengths towards achieving their goals. This confidence and self-awareness helps them to perform well in school because they know that they have the guidance of their parents and are not threatened by punishments in case they do not perform as expected (Rubin, Burgess, & Hastings, 2002). Pakistani parents tend to generally have a more negative reinforcement method of raising children with a focus on using physical punishment and oral reprimand in order to make sure that the children perform well. However, this parenting style has more negative repercussions because children do not feel that their parents are supportive and are afraid of making mistakes. They lack self-confidence that is necessary for a child to be able to perform at the level of a high achiever (Rubin, Nelson, Hastings, & Asendorpf, 1999).

Confident children are sure about their own knowledge and their capabilities. They know what their weaknesses are and what areas they need to improve upon; they also feel safer reaching out to their parents when they feel excessive pressure as their parents counsel them instead of reprimanding them (Landry, Smith, Swank, Assel, & Vellet, 2001). Secondly, children with high self-regulation skills generally have more emotionally stable parents who display a greater sense of control in different situations. Their behavior demonstrates regulation over such traits as anger, misconduct, depression, and helplessness. This self-regulatory behavior is observed by their children and is imitated by them (Laroze & Boivin, 1998). Parents who are short-tempered raise children with similar emotional sensitivities; therefore, children of such parents are prone to stubbornness, exhibiting temper tantrums and are unable to deal with academic and social pressures (Coleman & Hagell, 2007). They tend to get frustrated easily when their performance is not up to the mark.
and hence are more likely to give up on themselves at an early stage (Bornstein, 2002).

The burden of teaching children to be emotionally resilient as well as developing self-awareness and maintaining strong, healthy social relationships does not fall on parents alone. Teachers and other care givers play an equally important, if not a greater role, in this arena. Children spend a great deal of time with their teachers and just as they develop skills through observing their parents, similarly they also learn behavioral traits through observing their teachers. Not only should the teachers exhibit resilience skills so that students can learn from them, but they must also keep a check on the stronger personalities, who tend to bully their weaker classmates. This bullying can cause great psychological trauma in weaker students if not controlled at an early stage (Hamre & Pianta, 2005). Students with greater social awareness tend to ignore peer pressure and do not make social acceptance a priority. They do not adopt behavior to please their friends and companions and if they believe their friendship to stand in the way of their goals, they are generally able to detach themselves from such obligations and stay focused towards achieving those aims. It was found in researches that children who exhibited traits of social efficacy and believed in themselves were capable of managing peer pressure and had higher academic attainments (Boyatzis, Baloff, & Durieux, 1998; Brown, Mounts, Lamborn, & Steinberg, 1993).

On the other hand, children who are unable to regulate their emotions cannot handle negative behavior of their peers and tend to become more emotionally and socially unstable (Bishop, 2006). Peer pressure and the academic competition have an extremely negative impact on such students because they are unable to deal with any rejection that might follow if they disregard their peers or do not perform well in their courses. Children should therefore be taught to adopt and foster healthy relationships with each other. Their sense of self-worth should be so much that when faced with instances of bullying or even unintentionally demanding friendships, they are able to regulate themselves and are not deterred from their goals (Fergus & Zimmerman, 2005).
Conclusion

The research thus concludes that self-regulation skills have significant influence on the academic performance of young children in private schools of Karachi, as far as the sample population is concerned. The findings of this study have highlighted traits such as self-awareness, social awareness, emotional regulation, and psychosocial development to be the most dominant ones that a child should possess and become proficient in if he or she is to succeed academically. The findings of this study suggest that parents, teachers, school leaders, and curriculum designers should give greater importance to developing emotional self-regulation skills in children from an early age because the study has clearly identified that children perform better if they are emotionally stable. Curriculum designers should also consider developing curricula with an emotional development focus so that schools aim for the holistic growth of children and not just their academic advancement.

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