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Research paper

Towards Dynamic Policy for Early Childhood Development Enhanced the Growth of Self-Regulations

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Abstract

Dynamic education policy and value system can change only with growth and development. This education plays a key role in enhancing about these changes, and the right time to initiate this process of education is better from early childhood. The study explores the issues and challenges of doing early childhood development (ECD) policy for growth of self-regulations along with Sarawakian Primary Schools in Malaysia. Recently the problems of early childhood providing primary schools at Bau district have been starling due to lack of instruments for pre-school services. These issues are now then become more tangled because of its multiracial education policy integration with students' self-regulations from cultural diversity conditions belonging to variety beliefs and attitudes. Quantitative and qualitative related data were obtained through field observation, interviews and field surveys while secondary data collected from diverse sources. Nearly 57% of the respondents agreed for improvement of ECD policy with sustainable mechanism of monitoring and implementation at each of developmental stages of child. The research has also shown that there are gaps between the aspired and implemented comprehensive education policies for more quality preschool classes and initiatives. The study suggests future research trajectories of a new collaborative alternative dynamic approach to drive the methodological agenda and recommendations on ways to further incorporate the demanding ECD policy instruments towards growth of self-regulations.

Keywords: *Early Childhood, Self-regulations, Education Policy, Malaysia.*

1. Introduction

Self-regulation is the ability to adaptively regulate one's own emotions, cognition, and behavior in order to respond effectively to internal as well as environmental demands [1, 2]. Early childhood is a sensitive stage for the development of self-regulation. In longitudinal studies, self-regulation increases substantially during infancy and the preschool years, with individual variability in growth rates [2, 3, 4, 5]. Inter-individual differences in self-regulation in early childhood are predictive of numerous outcomes across the lifespan [6, 7], including school readiness [8, 9], literacy and math skills [10, 11], behavioral problems in the classroom [12], and building as well as maintaining positive peer relationships [13]. Dynamic education policy and value system can change only with growth and development. This education plays a key role in enhancing about these changes, and the right time to initiate this process of education is better from early childhood. The study explores the issues and challenges of doing early childhood development (ECD) policy for growth of self-regulations along with Sekolah Kebangsan Tringgus pre-school at Bau district in Sarawak, Malaysia.

Early childhood is an epoch of prompt brain development that protects the system for growth of self-regulation skills. Therefore, early childhood is a sensitive phase for the growth of self-regulation which as shown in Figure 1.

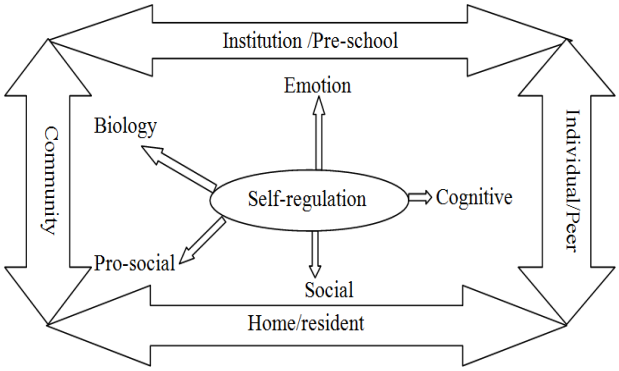


Fig. 1: Integrated Self-Regulation for early childhood development

Self-regulation has become familiar for its early personality [37] in promoting wellbeing across the lifetime including: (i) Physical, (ii) Social, (iii) Emotional, (iv) Dynamic health, (v) Educational achievement (Figure 2). Recently the problems of early childhood providing primary schools at Bau district have been starling due to lack of instruments for pre-school services. These issues are now then become more tangled because of its multiracial education policy integration with students' self-regulations from cultural diversity conditions belonging to variety beliefs and attitudes. Preschool students learn to regulate thoughts, feelings, behaviours and emotion by watching and responding to adults' self-regulation [14]. Meanwhile, sensitive and comforting support in reaction to preschool students' stress is a key to nurturing self-regulation [15].

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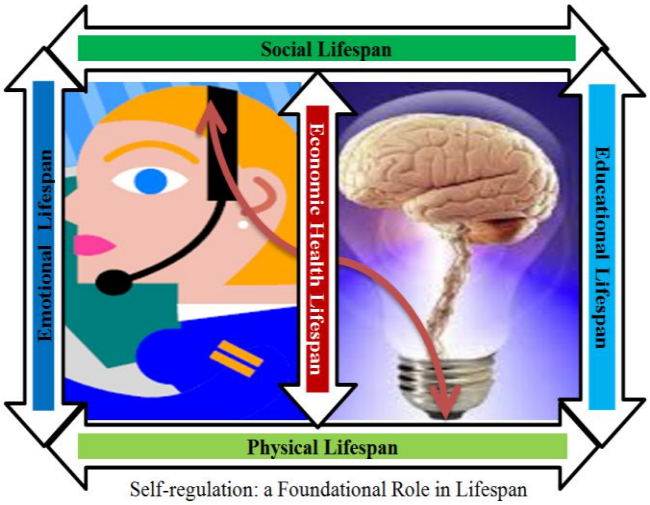


Fig. 2: Role of Lifespan in connection with Self-Regulation

The study focuses to harmonize existing ECD Policy related goals, objectives and initiatives for ensuring access to self-regulated, quality, equitable and inclusive pre-school services within and across educational institutions in Sarawak, Malaysia.

2. Methodology

The study undertook a survey on Tringgus Primary School at Bau district in Sarawak, Malaysia to determine the effectiveness the present early childhood policy (ECD) for the growth of self-regulation. The survey based on the ground by looking at data related instruments to legal knowledge, relevant policy improvement to enhance self-regulation perspectives from the local stakeholders. The sampling method used includes observations, semi-structure questionnaire and interviews identify the pre-school students' body mass index (BMI) and self-regulation scoring. Semi-structure interviews were used and selected based on the opinions related to parent-teacher-students perspective, class attendance, BMI ranking and self-regulation scoring.

Body mass index, $BMI = \frac{weight}{height^2} \times 703$

Where, below 18.5 = underweight, 18.5 to 24.9= normal, 25.0 to 29.9 = overwieght, and 30.0 to up = very overweight (BMI, 2018).

Self-regulation scoring: Self-regulation scoring is connected with cognitive domain, social domain and emotional domain, which include scoring within 0 to 50 and and ranking as usual approximately, good, very good and excellent according to the achieving the scoring [16].

Secondary data were collected from journals, books, Ministry of Education (MoE) and Sarawak State Education Office of Malaysia, Government Institutions, Universiti Sarawak Malaysia, and National and International NGOs in Sarawak. The existing policy reviews in connection with national, regional and global agreements on ECD.

All general collected data/information regarding the ECD to enhance growth of self-regulation at Tringgus Primary School were checked for accuracy from different sources and the sources of information were also verified, which were included in the preparation of master sheet and incorporated into convenient forms used in the result and discussion section. The data were compiled and analyzed using standard data analysis software like Microsoft Office Suite 2016 and R programming version 3.4.

3. Results and Discussion

Based on primary and secondary information from different sources, the results of the study were illustrated as follows.

3.1. Body Mass Index (BMI) and Self-Regulation Scoring

Self-regulation is connected with BMI. From the field survey, the study observed that 85% of students are normal weight on BMI ranking 18.5 to 24 and 15% of students are underweight-mild thinness, who is both boy and girl of SK Tringgus Pre-school. The study suggests for maternal education in connection with ECD policy. Average Self-regulation scoring is 33.64, where maximum scoring 41 among male students and minimum scoring 27 among female students. The study suggests for improvement of integrated ECD policy in connection with self-regulation at Tringgus Primary School in Bau district, Sarawak.

3.2. Enrolment and Attendance

The 6 age- group commonly referred to as the 'preschool years', which anticipates enrolment into primary school – now a major transition for most of the Sarawakian's children. There is a marked shift in the emphasis of policy and research for this age group, with much stronger engagement from the education sector, and a strong tradition of research evaluating the impact of experimental, mainly centre-based, programmes. Male enrolled 57% and female 33% at SK Tringgus Pre-school class. Attendance at pre-school has growing significance in shaping life course trajectories for children. 86% in Tringgus village and 14% outside village.

3.3. Effective Policy Improvement

Nearly 57% of the respondents strongly agreed for improvement of ECD policy with sustainable mechanism of monitoring and implementation at each of developmental stages of child, while 38% respondents were 'agree' from the study, which as shown in Figure 3.

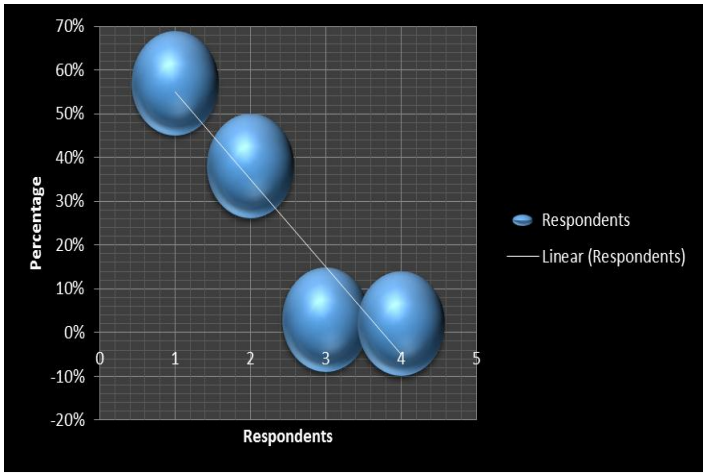


Fig. 3: Respondents' Opinion on ECD Policy Improvement for Sarawak Dynamic Education

Bearing in mind, self-regulation involvements for pre-school children during the period of 5 to 6+ years, it is first supportive to reveal on the significant appearances of normative growth at this age when self-regulation difficulties are controllable and developmentally distinctive.

Some cognitive regulation skills are emerging quickly along with language skills which support impulse control and following rule. Skills in managing emotions increase and allow young children to calm themselves and tolerate some frustrations and distress. However, in situations where adversity or stressors are prolonged or severe, self-regulation development may lag. To support self-regulation development, co-regulation through the activities listed in the table is needed. Such supports can be provided by caregivers (i.e., parents, teachers, mentors, or program staff) through

interacting with young children either at home or in child care settings such as SK Tringgus School at Bau district.

Table 1: Diversified parameters for growth of self-regulation and co-regulation at ages 6+

Parameters on Growth of Self-Regulation	How Caregiver provided Co-regulation
Language style begins to control emotional responses.	Express to communication skill and rapport building each other.
Perspective-taking and empathy support pro-social target-oriented goals.	Provide external consequences to reflect emerging self-regulation skills.
Delay gratification and inhibit responses for longer time.	Coach rule-following and task completion guidance.
Concentrated attention augments but is still brief.	Model, reinforce and prompt or coach self-calming strategies when child is disapointed.
Start to use principles, rules, planning and strategies to guide behaviour related to situation.	Instruct and coach use of words to express emotion and identify solutions according to problems.

3.4. Providing External Regulation of Behavior by Teaching Rules, Setting Limits and Redirecting

Encourage preschool teacher of Tringgus Primary School should provide "self-regulation coaching" to pre-school students. This includes:
1) Prompting use of self-regulation skills in specific situations (e.g., taking deep breaths when upset).
2) Anticipating self-regulation demands (e.g., during transitions or less structured activities) and reviewing rules and strategies proactively.
3) Role-playing such strategies to support the child's effective implementation of skills in the moment/situation.
4) Monitoring the child while they are using these skills and providing specific positive feedback on small steps and efforts.
5) Praising and reinforcing the child for success and teaching the child to self-praise, and
6) Helping the child consider alternative solutions to problems when efforts are not successful.
7) Identify ways to support staff's own self-regulation capacity, so they can better provide co-regulation support to young children and "buffer" them from stress and adversity in the environment.
This will be particularly important for low-wage earners and staff who have experienced trauma in their own lives. Staff supports may include mindfulness instruction and practice, reflective supervision, and public acknowledgement of use of co-regulation strategies.

3.5. Policy Gaps in Early Childhood Development

The research has also shown that there are gaps in Tringgus Primary School between the aspired and implemented comprehensive education policies for more quality preschool classes and initiatives for self-regulations. These gaps are mainly in:

- Lack of self-regulation interventions in ECD program.
- Lack of relevant information dissemination for dynamic growth of self-regulation.
- Lack of Training and intensive monitoring for self-regulation capacity.
- Lack of update curriculum and support for effective implementation.
- Lack of fixed syllabus and lesson plans towards pre-school programs.
- Laying down different techniques for pre-school teaching.
- Laying sets of qualification for pre-school teachers.

3.6. Challenges the Looking forward

Sarawak, Malaysia faces a number of challenges for empirical dynamic ECD policies. Mainly, it is alarming that matters such as Federal Policy can effectively executed at the State Government and department levels in Malaysia, it would to need sectoral policies integration. Limited research is on pre-school education at Bau district in connection with relevant sectors / departments in Sarawak, Malaysia. Additional major challenge in Sarawak is how to interconnect research-findings in an easy to recognize to policy-makers pertinent with Convention on the Rights of the Child (CRC), UNICEF and Sustainable Development Goals (SDGs) so as to enable them to formulate ECD related policies that are favorable to enhance the growth of self-regulation.

3.7. Improvement of ECD Policy for Growth of Self-Regulation

Early childhood programs play an imperative role in sustaining children's learning, growth/development, health and well-being. Evidence from miscellaneous arena of study mentioned that children grow in programs where adults are concerned and approachable that highlight on dynamic learning through journeying, cooperating and investigation [17]. Self-regulation enhances children to deal with their growth, behaviour, emotions and concentration in ways that are supportable in social circumstances in Bau district, Sarawak ultimately achievement of positive relation, learning, wellbeing, and their overall five aspect of self-regulation factors, namely,

(i) Biological factors,
(ii) Emotional factors,
(iii) Cognitive factors,
(iv) Social factors, and
(v) Moral factors.

For children to become cheerful, safe and sound members of Tringgus community, they must learn how to effectively deal with instant problems in interpersonal relationships. In addition to learning self-discipline and inner control, they must also learn encouraging dynamic ways to cooperate with these factors. The function of the pre-school teacher is to support the child's sense of being a meaningful person while providing opportunities for the child to learn suitable traditions to interrelate communally and with other people. This accompanies between the child and caregiver, fundamental particularly during early childhood to accept for development of flexible self-regulation skills that sustain adjustment and exploration. Flexible self-regulation stems from the process of internalizing prior prototype observed by the child during caregiver support regulation [18].
Indeed the child's protection and well-being as well as promoting social, emotional and cognitive development, it is compulsory at this stage in connection with Convention on Child Right (CRC) to enforce restrictions or to set principles of adequate performance. According to Article 6 of the Convention on the Rights of the Child (CRC) stated *every child has the inherent right to life, and the State has an obligation to ensure the child's survival and development.* This child development is incorporated with early childhood education (ECE). ECE is the foundation of primary education. The child has a right to education and the State's duty is to ensure that primary education is free and compulsory. For this purpose, the State connects in International Cooperation to implement this right.
Parents-Teachers-Adults (PTAs) are required to be guided by their knowledge and understanding of the child's growth and development, as well as appreciative of the individual child at Tringgus community in Bau district through the five-step technique to ensure that the steps are used accurately such as: (i) Read the signs of stress, (ii) Recognize the stressor, (iii) Reduce the stress, (iv) Reflect on the priority, and (v) Respond

accordingly. These techniques are incorporated with strategies for self-regulation within the context of entire curriculum development. Therefore, components of curriculum development are of a high quality encourages dynamic self-regulation. The main components are (a) teachers, (b) teaching-learning environment, (c) effective program, (d) parent/ guardian participation and (e) integrated evaluation (Figure 4).

Self-regulation is indispensable to the strategic learning process which can support pre-school students generate better learning habits and strengthen their learning skills as well as learning strategies to enhance speculative results through monitoring and assessing their academic performance [19, 20, 21, 22, 23]. To improve self-regulation in classroom, teachers must teach their students with the self-regulated approaches that facilitate pre-school learning at Tringgus Primary School in Bau. These approaches include different ways, namely goal-setting, early childhood planning, self-motivation, attention control, flexible use of learning strategies, self-monitoring, effective help-seeking and self-evaluation [24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36].

ECD is a multidimensional field covering several policy sectors, and varied research backgrounds, but with the objectives of creating more inter-sectoral, and more incorporated models of services delivery. Early childhood pioneers have highlighted the importance of respecting children's holistic development for at least two centuries. Policy and programming must be sensitive to changing needs and priorities at different ages and stages, all embraced within the concept of 'ECD' for growth of self-regulation. Pre-school children are shaped by cultural beliefs and institutional arrangements and development changes in their capacities, vulnerabilities and developing autonomy. Their needs are for care, ways of communicating, playing and learning; and the patterns of their daily lives in modern societies, including access to ECD services and pre-schools for the growth of self-regulation. The study enhances the students at developing their personality, talent, mental and physical abilities to the fullest extent through his / her oneself cultural identity, language, values for cultural background of others in multiracial environment.

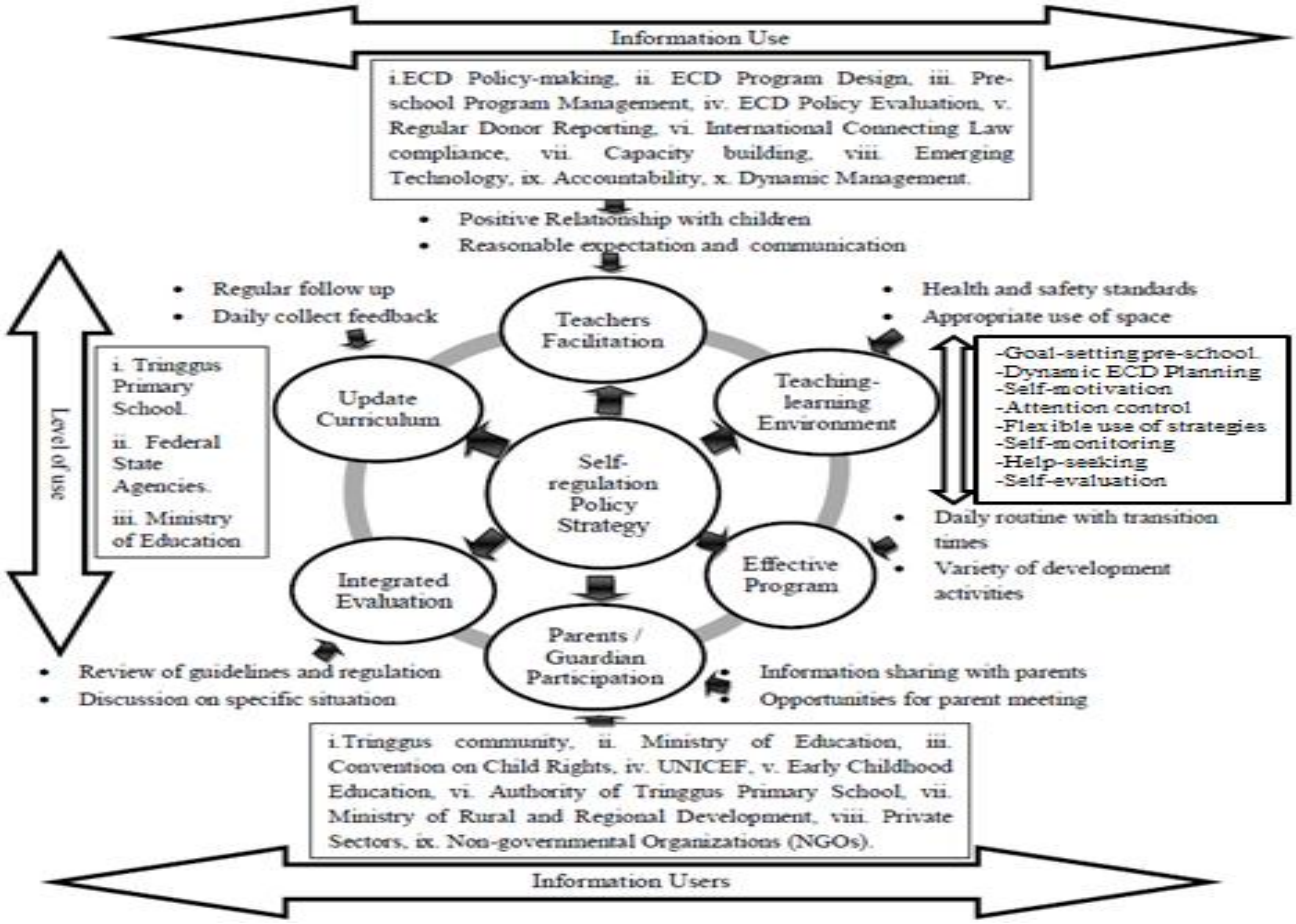


Fig. 4: Strategies for incorporating Self-Regulation into Curriculum Development

4. Limitations

This study adds to the literature base on how the quality of children's preschool experience is associated with young children's gains in self-regulation during the preschool year. However, several limitations deserve attention. Although this was a short-term longitudinal study, it was correlational in nature and so it is not possible to infer a causal relationship. The associations between children's engagement in the classroom and development of self-regulation are almost certainly transactional in nature—that is, children's experiences in the early childhood classroom impact their self-regulation skills.

5. Conclusion

The research explores the early childhood development policy's instruments for growth of self -regulation at Tringgus Primary School at Bau district in Sarawak, Malaysia. The research generally showed the need to train policy-makers and relevant organizations on early childhood education to advance policy towards growth of self-regulation. A variety of self-regulation interventions result in meaningful positive effects on cognitive, emotional, and behavioral self-regulation as well as broader outcomes across development like mental health and academic achievement. However, results are quite variable, with many in-

terventions failing to find significant effects. There are also many gaps in the current evidence base for self-regulation interventions, and more research and development is needed. Overall, the research suggests future research trajectories using a new scientific dynamic approach to enhance self-regulation development agenda and recommends ways to further improve ECD policy in Sarawak of Malaysia.

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Conflict of Interests

The authors have no conflicts of interests.

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