The RP3 Program to Promote Language for Early Childhood

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Abstract

Thailand had Family Development Center (FDC) Staff for family promotion and development to strengthen warm relations and social immunization of family members in the community. The RP3 Program has been created to enhance language development skills of people working with small children. This paper examines the effectiveness of the RP3 Program on improving FDC staff skills in early childhood language development in rural Thai communities. A quasi-experimental design was used with 40 FDC staff in each group. The intervention group received the RP3 Program. Data were collected using a self-administered questionnaire, and analyzed using paired t-test and independent t-test. The results revealed that the intervention group had significantly higher mean scores in self-efficacy after attending the program than before, and also significantly higher than the comparison group (p<0.001). This shows that FDC staff may be able to upgrade and change attitudes through intervention programs and have more belief in their ability to guide their parents. This study may be valuable for local authorities and relevant sectors as a guideline for FDC staff by considering the context of the organization and the community.

Keywords: Program; Family; Early Childhood; Language; Self-efficacy.

1. Introduction

Language is a source of communication for the world's children, a process that begins at birth and continues throughout life (Isler et al., 2017). Vygotsky mentioned that language was the essential tool for thought and played a crucial role in cognitive development. He believed that early language acquisition was obtained through cultural and social experiences. Young children learnt beliefs, values, customs, and language while they interacted with others. Accordingly, he suggested providing plenty of social interaction for young children (Levine and Munsch, 2018).

Early childhood language delay is a highly prevalent circumstance of professional and parental concern. It may bring about long-term deficits not only in language functions, but also in social and emotional well-being, and academic achievement. Such life-long consequences of early childhood delays can become a downhill trajectory and have an adverse effect on economic and social development of their countries. Thus, making an investment in young children is one of the smartest investments for their countries (Conti and Heckman, 2013; Sayre et al., 2015). The Ministry of Public Health, Thailand, has a strategic plan for health Promotion and Prevention by age group to support, implement and promote appropriate family and child development at all levels. Having strong families nationally reduces the cost of special education for children. It found that there were some problems in families and children, including in language development (Boonsuk et al., 2014; Kanpirom and Masena, 2017).

Family is the first environment where children interact beginning at birth and language development is a family task in early childhood, the 3 - 5 years old period (Khajornchaikul, 2017; Tran et al., 2016). For early childhood language acquisition, families act in an essential role to nurture children’s language skills and literacy development. The first language skill development of children occurred at home and parents are commonly a child’s primary teacher (Isler et al., 2017; Llewellyn, 2012). Children at an early age are fast learners because their brains are still programmed to acquire their parents’ tongues which facilitates learning the language. Therefore, families should promote language skill of their children by encouraging them to tell stories both about themselves and their surroundings, play quiz and games, sing, and read poems. Besides this, picture storybooks are instructional media that are useful for maintaining learner’s attention and enjoying language practice (Isler et al., 2017; Khajornchaikul, 2017). Although child rearing practices have significant influence on early child language development, literature reviews have revealed that some parents have inappropriate child-rearing practices especially in some countries and Thai rural communities (Denduang et al., 2016; Walker et al., 2020). It is necessary to emphasize the family’s role in promotion of early childhood language development and to strengthen the family’s capacity to care for its young children. Care and support programs should be concerned with and support families to address the risk factors that leave children vulnerable to maltreatment, such as lack of proper parenting skills. Educating parents and family
providers in child development and parenting issues may help them recognize the problems and challenges of child-rearing and more excellently equip them to deal with these. Also, consideration is needed of the influence of the broader society in which children grow up (Medrano and Tabben-Toussaint, 2012; Ngampornsukswadi et al., 2012; Smyth et al., 2016; Wenke, 2015), such as neighborhood, village or local community which can help the family to improve their small children’s language skills. (Medrano and Tabben-Toussaint, 2012; Ngampornsukswadi et al., 2012).

The Ministry of Social Development and Human Security (MSDHS), Thailand, introduced The Family Development Center (FDC), a community-based and non-profit organization, with Volunteer staff and paid local government officers. It was established for family promotion and development to strengthen warm relations and social immunization of family members in the community. The role of FDC staff consists of three missions: 1) Surveying family problems in the community and preparing a family database including the vulnerable target groups and the size of the problem to plan and support families according to their needs. The target groups consist of the families, such as those in poverty, single parent families, devoiced families, and families with disabled members. 2) Conducting a surveillance and prevention program to solve family problems, counseling and referring at risky families based on the needs of target groups, aiming to enhance positive family relationships. 3) Developing and strengthening the family by providing learning activities to promote and support families, as well as to build collaboration in partnership with the community (Cheepsumon and Boonmak, 2014). In addition, it was suggested that FDC staff require increasingly extensive knowledge and services available to support vulnerable families with their children (McDonald, 2010). Due to their working conditions, most staff do not understand their roles in development, and lack of ability in learning activities (Phourai, 2010; Schermerhorn et al., 1982; Veerasilpa and EK-Iem, 2015). An example being the implementation of FDC in Phourai (2010) which revealed that most staff lacked experiences in social work and coordinating work, especially in co-summarizing the result of works and co-planning the implementation. According to, it is necessary to developing their knowledge and experience especially in early childhood language development using appropriate child-rearing practices, as well as to improve their ability to define missions clearly, to monitor and to continually evaluate. It may enhance a positive attitude and self-confidence and encourage their commitment to solving early childhood language developmental problems in the community and improve the continuity of program implementation after outsiders have left the project (Maggi et al., 2005). These ideas are consistent with a study by Moore et al. (2014) and Hatcher and Page (2019) who found that parents increased their responsibility, improved their expressive language skills and there was a positive impact on children’s early language development after they had participated in their programme. And this leads to self-efficacy, a psychological attribute that makes an individual ready to work effectively (Schermerhorn et al., 1982).

Self-efficacy theory, the social cognitive theory of Albert Bandura, was defined as; a person’s positive belief in their ability to manage and organize a course of action is necessary to accomplish a goal. In other words, persons with strong self-efficacy seemed to have a higher level of confidence in their competency to execute behaviors. Beliefs in self-efficacy had an essential influence on targets and accomplishments by inducing self-assessment, emotional reactions, work patterns and motivation. Perceived self-efficacy also affects how goals are accomplished successfully by influencing the level of effort and persistence a person will demonstrate in dealing with the barriers. Bandura (1977). For this research the objectives were: 1) To compare capacity for promoting parenting skills in early childhood language development among FDC staff within the intervention group and the composition group before and after the RP3 program, and 2) Between the intervention group and comparison group before and after implementation.

2. Material and Method

A quasi-experimental pre-post two-group design, was used with 40 FDC staff in each group. Participants for the RP3 Program consisted of the stakeholders who were purposively recruited by the formula of Lemeshow et al. (1990). The representatives of each relevant group included FDC staff, caregivers for 3-5 years old in child development centers, family health host, chief executive, and related staffs of Local Administrative Organization (LAO), and were under the supervision of sub-district administrative organization, in a district of Suphanburi Province, a central Thai province. Inclusion criteria included male and female, signing the informed consent form, having worked at least one year and constantly stayed in the province. Exclusion criteria included withdrawal for any reasons, and incomplete answer on the questionnaire.

The intervention group was purposively invited to participate throughout in self – efficacy theory, and the four step participatory learning activities of the RP3 Program (Kolb, 1984; Ministry of Public Health (MOPH), 1984). Whereas the comparison group received only a routine program provided by the central sector, and receive the RP3 Program manual after finishing the research process.

Content validity was approved and submitted to three experts for assessment of its accuracy and language usage, and the reliability was equal to 0.931. This research was approved by the Mahidol University Research Ethics Committee. Information sheets were provided for decision-making and participants were asked to sign informed consent forms before taking part in the research.

The research instrument was divided into two parts 1) FDC staff questionnaire was in two parts as follows: Characteristics of the sample were assessed regarding sex, age, educational level, occupation, and work experience. The questions were checklist question with a blank fill-in form.

Self-efficacy questionnaire consisted of a) Performance accomplishments b) Vicarious experience c) Verbal persuasion, and d) Emotional arousal. There were 20 items, 5 rating scales. The scoring was done as, Not at all confident =1, and Extremely confident =5, Total score = 100.
2) For the RP3 Program, FDC staff participated throughout in self-efficacy theory. The four steps of participatory learning concept consisted of a) concrete experience, b) reflective observation, c) abstract conceptualization and d) active experimentation which were applied as a framework for developing 4 sessions of learning activities.

Activities 1 (Role reflection): perception of the role of FDC staff through the reflection.
Activities 2 (Participatory family service): language development and appropriate parenting promotion.
Activities 3 (Partnership collaboration): communication and coordination with the family.
Activities 4 (Project management): project planning to promote parenting in early childhood language learning.

Two hours thirty minutes for each activity session. After conclusion of the activities, participants were asked to complete a questionnaire for knowledge and lessons learnt.

Characteristics of the two groups were analyzed by descriptive statistics: frequency distribution, percentage, mean and standard deviation. A paired t-test was used to examine the differences within the experimental group, while an independent t-test was used to compare the differences between the two groups. The statistical test level was at p < 0.05.

3. Results

Gender: the staff in both the intervention group and comparison group consisted of 7 males (17.5%), 33 females (82.5%). Age: the intervention group had an average age of 50.08. The ages of the staff were between 21-71 years old. While the comparison group had an average age of 53.58. The ages of the staff were between 30-72 years old. Educational level: a large number of the staff in the intervention group and comparison group, 45% and 40% respectively, had achieved secondary education. Occupation: most of the staff in the intervention group and comparison group 60% and 42.50%, respectively, had been agriculturists. Trained experience: most of the staff in the intervention group and comparison group had no experience 77.5% and 57.5%. There is no significant difference at p-value> 0.05. (Table1)

| Characteristics          | Intervention Group (n=40) | Comparison Group (n=40) | \( \chi^2 \) | p-value |
|--------------------------|---------------------------|-------------------------|-------------|---------|
| Gender                   |                           |                         |             |         |
| Male                     | 7                         | 7                       | 1.800       | 0.180   |
| Female                   | 33                        | 33                      |             |         |
| Age (year)               |                           |                         |             |         |
| 20-34                    | 5                         | 2                       | 4.662       | 0.863   |
| 35-49                    | 10                        | 13                      |             |         |
| 50-64                    | 22                        | 20                      |             |         |
| 65-79                    | 3                         | 5                       |             |         |
| \( \bar{X} \pm S.D. \)  | 50.08± 10.99              | 53.58± 10.38            |             |         |
| Min-Max                  | 21-71                     | 30-72                   |             |         |
| Educational level        |                           |                         |             |         |
| Primary education        | 9                         | 9                       | 20.581      | 0.195   |
| Secondary education      | 18                        | 16                      |             |         |
| High school              | 8                         | 7                       |             |         |
| Vocational cert.         | 2                         | 4                       |             |         |
| Bachelor’s degree        | 3                         | 4                       |             |         |
| Occupation               |                           |                         |             |         |
| Agriculturist            | 24                        | 17                      | 11.721      | 0.468   |
| Employee                 | 8                         | 8                       |             |         |
| Private business         | 4                         | 9                       |             |         |
| Trader                   | 3                         | 6                       |             |         |
| Maid/not working         | 1                         | -                       |             | 0.0     |
| Trained experience (times)|                           |                         |             |         |
| No experience            | 31                        | 23                      | 4.234       | 0.375   |
| 1-5                      | 7                         | 15                      |             |         |
| 6-10                     | 2                         | 2                       |             |         |
| \( \bar{X} \pm S.D. \)  | 0.93± 2.36                | 1.63±2.38               |             |         |
| Min-Max                  | 0-10                      | 0-10                    |             |         |

* p-value < 0.05

Before implementation, there was no difference in score between the sample groups (p = 0.964). After implementation score in the intervention group were significantly increased compared to the comparison group (p < 0.001).
After implementation, score within the intervention group were significantly increased compared to before attending the program (p < 0.001). On the other hand, there was no difference score within the comparison group before and after the intervention period (p = 0.155). (Table 2)

| FDC staff | Mean ± SD | t | df | p |
|-----------|-----------|---|----|---|
| Intervention group | | | | |
| Pretest | 71.22±9.94 | -13.19 | 39 | < 0.001* |
| Posttest | 85.10±8.86 | | | |
| Comparison group | | | | |
| Pretest | 71.13±10.07 | 1.45 | 39 | 0.155 |
| Posttest | 70.85±9.36 | | | |
| Before intervention | | | | |
| Intervention gr. | 71.22±9.94 | 0.05 | 78 | 0.964 |
| Comparison gr. | 71.13±10.07 | | | |
| After intervention | | | | |
| Intervention gr. | 85.10±8.86 | 6.99 | 78 | < 0.001* |
| Comparison gr. | 70.85±9.36 | | | |

* p-value < 0.05

4. Discussion
Finding form the 3RP Program: 77.5% of intervention group reported no experience on the questionnaire (table 1). This may arise from the FDC staff’s lack of knowledge (45% had only secondary education), lack of ability to choose the correct knowledge to support families, lack of experiences in social work (Phourai, 2010; Veerasilpa and EK-Iem, 2015), or that they had only had a routine program provided by the central sector. Also, after implementation scores were significantly increased compared to the comparison group (table 2). Besides this, a strength of the program, based on self-efficacy theory and the participatory learning concepts, were various activities, such as games, videos, sharing of ideas and discussion, which could have an effect on the outcome. The learning module’s topic was also appropriate and consistent with the objectives of this study, and it initially emphasizes this study, and it initially emphasizes understanding the role of FDC staff through reflection from individuals and shared whole group perception of readiness to learn other relevant topics. It shows that FDC staff may increase their self-confidence and change attitudes through intervention programs. They had knowledge, and chose the suitable knowledge to support families. So self-efficacy theory, has been appropriate for exploring staff capacity predictors due to person's actual beliefs making them more confident in their behaviour and ability to complete tasks successfully (Bandura, 1977; Coleman and Karraker, 1997; Maibach and Murphy, 1995). Likewise, a study by Mouton et al. (2018) found that a self-efficacy program could have a positive effect on a child’s behaviour. Some studies found that after applying a model of participatory action research, parents observed their children’s behaviour more, learned from their practices at home, in school, and from resources (Ngampornsukswadi et al., 2012) and that parents increased their responsibility, and improved their language skills which had a positive impact on their children’s early language development following their participation in the programme (Hatcher and Page, 2019; Moore et al., 2014).

Furthermore, using the participatory learning principle as a method for developing this FDC staff program is appropriate for arranging learning activities for participants because the participatory approach to learning adopted in the program emphasizes the point that training is itself a demonstration of sound participatory learning practice. Kolb (1984) proposed that experiential learning is more effective because it is processed at much deeper levels when learners are more directly involved rather than passively receiving knowledge transmitted by the instructors. So, the RP3 Program has been created to enhance language development skills of people working with small children.

Several limitations of the current study. Firstly, data involved only 40 FDC staff in a single province. Thus, we do not claim that the findings are generalizable, even though many of the points emerging are compatible with the findings of earlier small-scale studies. Secondly, assessment questionnaires relied on self-reported. Finally, the success of applying this other FDCs depends on those community’s contexts.

5. Conclusion
This research shows that FDC staff can develop self-belief in order to become more confident in their behaviors and improve their self-efficacy. Further research is suggested as follows: The application of FDC staff program should be expanded to other rural areas or applied in primary care unit and child care centers by employing family counseling in early childhood language development. This study may be valuable for local authorities and relevant sectors as a guideline for FDC staff by considering the context of organization and community. Recommendations were made to apply the RP3 Program to training programs for FDC staff.

Conflict of Interest
None.
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References

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 84(2): 191-215.

Boonsuk, S., Prasitimit, T., Patthanapongthorn, J., Jummonsak, J. and Jetiyanon, S. (2014). Public health strategic plan for health promotion and prevention: PP by age group (5 Flagship project) fiscal year 2014. 2nd ed. Patthanapongthorn J. editor edn: Department of Health: Nonthaburi.

Cheeprum, Y. and Boonmak, P. (2014). Lesson learned: Family Development Center in Community: change in Thai family context. 1 ed. Chandeep Ch, editor. edn: Klakao Inspiration Co. Ltd.: Bangkok.

Coleman, P. K. and Karraker, K. H. (1997). Self-efficacy and parenting quality: findings and future applications. Developmental Review, 18: 47-85. Available: https://doi.org/10.1006/drev.1997.0448

Conti, G. and Heckman, J. (2013). The developmental approach to child and adult health. Pediatrics, 131(2): 133-41. Available: https://doi.org/10.1542/peds.2013-0252d

Denduang, S., Denduang, N., Pilin, I. and Nilnone, K. (2016). Family and conflict between work and family in the globalization. Faculty of Social Sciences and Humanities, Mahidol University.

Hatcher, A. and Page, J. (2019). Parent-implemented language intervention for teaching enhanced milieu teaching strategies to parents of low socioeconomic status. Journal of Early Intervention, 42(2): 122-42. Available: https://doi.org/10.1177/105381519873085

Isler, D., Kirchhofer, K., Hefti, C., Simoni, H. and Frei, D. (2017). Supporting early language acquisition: Language acquisition a conceptual framework for improving language education in the early years. Department of Education of the Canton of Zurich: Zurich, Switzerland.

Kanpirom, K. and Masena, P. (2017). Surveillance for childhood development in age group 0-5 years, region health provider, the office of permanent secretary, ministry of public health. Region 4: 5 Medical Journal, 36(4): 305-16.

Khajornchaikul, P. (2017). Child development and family task in an early childhood period. In: Duangkaew R, editor. Family studies and early childhood development: Teaching documents unit 1-7.1st edn. Nonthaburi Sukhothai Thammathirat Open University print inc.

Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Prentice-Hall: Englewood Cliffs, N.J.

Lemishow, S., Hosmer, D. W., Klar, J. and Lwanga, H. K. (1990). Adequacy of sample size in health studies. Wiley and Son: New York.

Levine, L. E. and Munsch, J. A. (2018). Child development: An active learning approach. 3rd edn: SAGE Publications, Inc.: California.

Llewellyn, D. (2012). Strengthening families for better early childhood outcomes. Plan International Australia: Australia.

Maggi, S., Irwin, L. G., Siddiqi, A., Poureslami, I., Hertzman, E. and Hertzman, C. (2005). Knowledgenetwork for early child development: Analytic and strategic review paper international perspective on early child development: Human early learning partnership. College for Interdisciplinary Studies, University of British Columbia.

Maibach, E. W. and Murphy, D. (1995). Self-efficacy in health promotion research and practice: Conceptualization and measurement. Health and Education Research Theory and Practice, 10(1): 37-50.

McDonald, M. (2010). Building the capacity of professionals through post-qualification development and training. CAFCFA Practice Sheet.

Medrano, T. and Tabben-Toussaint, A. (2012). Manual 2: Guidelines and programming options for protecting vulnerable children in community-based care and support programs fhi 360 child protection toolkit. Mcgill d, editor. Research Triangle Park: New York City: FHI 360. https://resourcecentre.savethechildren.net/node/7433/pdf/protecting-children-care-support-programs.pdf

Ministry of Public Health (MOPH) (1984). Handbook for participatory learning. 4th edn: Wongkamon Production: Nonthaburi.

Moore, H. W., Barton, E. E. and Chironis, M. (2014). A program for improving toddler communication through parent coaching. Topics in Early Childhood Special Education, 33(4): 212-24.

Mouton, B., Loop, L., Stiévenart, M. and Roskam, I. (2018). Confident parents for easier children: A parental self-efficacy program to improve young children’s behavior. Education Science, 8(134): 1-19. Available: https://doi.org/10.3390/educsci08030134

Ngampornsukswadi, S., Chai-aroon, T., Phlainoi, S. and Makkasman, W. (2012). Parenting roles promotion model for participation in early childhood learning development: Prenc model. Kasetsart Journal (Social and science, 33(3): 387-96. Available: https://so04.tci-thaijo.org/index.php/kjss/article/view/246852/167746

Phourai, P. (2010). Implementation of the community family development centers (fcds): Characteristics and development. [degree of master of social work program in social welfare administration and policy]. Thammasat University: Bangkok.
Sayre, R., Devercelli, A. E., Neuman, M. J. and Wodon, Q. (2015). *Investing in early childhood development. Review of the world bank’s recent experience*. International Bank for Reconstruction and Development/ The World Bank: Washington DC, USA.

Schermmerhorn, J. R., Hunt, J. C. and Osborn, R. N. (1982). *Managing organizational behavior*. John Wiley and Sons: New York.

Smyth, W., Kruze, R., Mamun, A., White, A. and Shields, L. (2016). Working with families in community services: Multidisciplinary perceptions of working with children and their parents March. *Neonatal, Pediatric and Child Health Nursing*, 19(1): 18-23. Available: https://www.researchgate.net/publication/30299666Working_with_families_in_community_services_Multidisciplinary_perceptions_of_working_with_children_and_their_parents

Tran, T. D., Luchters, S. and Fisher, J. (2016). Early childhood development: Impact of national human development, family poverty, parenting practices and access early childhood education. *Child: Care Health and Development*, 43(3): 415-26. Available: https://doi.org/10.1111/cch.12395

Veerasilpa, K. and EK-Iem, B., 2015. "The Empowerment of Participative management of the community family development center for preventing domestic violence against women: The case study of upper north of Thailand." In The 37th. National Graduate Research Conference 17-18 December 2015. Chiang Rai Rajabhat University, Chiang Rai Province.

Walker, D., Sepulveda, S. J., Hoff, E., Rowe, M. L., Schwartz, I. S., Dale, P. S., Peterson, C. A., Karen, D. K., Goldin-Meadow, S., Levine, S. C., Wasik, B. H. and Horn, D. M. (2020). Language intervention research in early childhood care and education: A systematic survey of the literature. *Early Childhood Research Quarterly*, 50(2020): 68–85. Available: https://doi.org/10.1016/j.ecresq.2019.02.010

Wenke, D. (2015). *Family support and alternative care. The baltic sea states regional report 2015*. Sweden: Council of the Baltic Sea States Secretariat Stockholm. https://childrenatrisk.cbss.org/wpcontent/uploads/2020/12/Family_Support_and_Alternative_Care_Report.pdf