



FORMATION OF COMPETITIVE HUMAN RESOURCES: EXPLORATORY STUDY OF PRE-JUNIOR HIGH SCHOOL STUDENTS

Chin-Lai Su
Ph. D. Student
Chang Jung Christian University

Hun-Chun Yang
Ph. D. Student
National Cheng Kung University

Yuan-Duen Lee
Professor
Chang Jung Christian University
ydlee@mail.cjcu.edu.tw

Abstract

To advance human resources (HR) and create a favorable workforce, training programs that include both family and school are required. According to surveys, parents and teachers are principal supports in the training of children before enrollment into junior high schools. This article reviews different perspectives on educational HR and various corresponding methods, including diplomas, children's temperament, parental conscientiousness, and personal ambition. Our finding indicated that the family's influence is the most perpetual and profound influencing factor for individuals. The three critical success factors for forming a competitive personality are the family's cognitive, emotional, and autonomous support. The mental discussion integrates Erikson's psychosocial developmental theory with the model pertaining to schooling, parental, and organizational perspectives. The results indicated that educational persons, especially parents, should be patient and ambitious when teaching their children, and pre-junior high school teachers should easily develop teaching skills, regardless of their educational background.

Keywords: human resource, education, critical success factors, mental issues

Introduction

Globalization has resulted in global competition, which has increased the value of core competencies; individuals must cultivate complex abilities to be able to face challenges. Family and school play crucial roles in the early stages of education and training. Childhood learning has long-term effects; parents and teachers of pre-junior high school students should be included in this discussion.

First, the psychology of economic development should be reviewed. Glewee, Ross, and Wydick (2018) claimed that “hope and motivation [can influence] economic development” (p. 331). Individual

progress is critically related to an individual's mentality when they were young. Thinking is imbued by experiences and lessons transmitted; patient and enthusiastic teaching can lead to strong confidence. Inspiring children to be responsible and encouraging interactions with others are vital. Intangible benefits, such as friendship, the praise of works, and interaction, are crucial to group recognition and to sustain children to strive for goals. This research assessed policies from reward and modern culture to data sharing.

Literature Review

Parental Engagement

Table 1. *Treatment of PACT on the Number of Minutes Spent Reading with the Digital Library for Parents with High and Low Discount Rates on the Future*

	Dependent Variable: Minutes Read			
	All PACT Parents (1)	Participated in Time Preference Task (2)	High Discount Parents (3)	Low Discount Parents (4)
Treatment	88.32*** (18.79)	82.12*** (24.08)	124.52*** (33.25)	42.26 (33.95)
Constant	63.34*** (9.49)	83.61*** (14.11)	68.33*** (12.57)	97.26*** (24.19)
SD control group	87.48	102.76	62.95	128.08
Dependent variable mean	107.24	63.34	135.20	119.11
Effect size	1.01	0.80	1.98	0.33
Observations	169	112	54	58

Source: Mayer et al. (2019)

Mayer et al. (2019) reported that disadvantaged parents did not read books for preschool children because “they undervalued the future gains for their children relative to the present

time and effort involved in reading” (p. 920). The digital library encourages parents to help young children because “preschools are thought to better prepare children for a more structured

primary school environment” (Bouguen et al., 2018, p. 477) and, parental actions have lifelong influence. Parents’ influence is critical because “there are no differences in average student characteristics across randomly assigned teachers” (Kraft, 2019, p. 16).

A study determined that participants continue reading with 63.34% and 83.61% and consider the reading

as their preferred task (column 2 in Table 1) (Mayer et al., 2019, p. 919). These findings revealed an adequate approach to motivating parents to nurture children for better outputs. A longer duration of action resulted in improved performance among children. This change in learning could provide considerable contributions to capable human resource development.

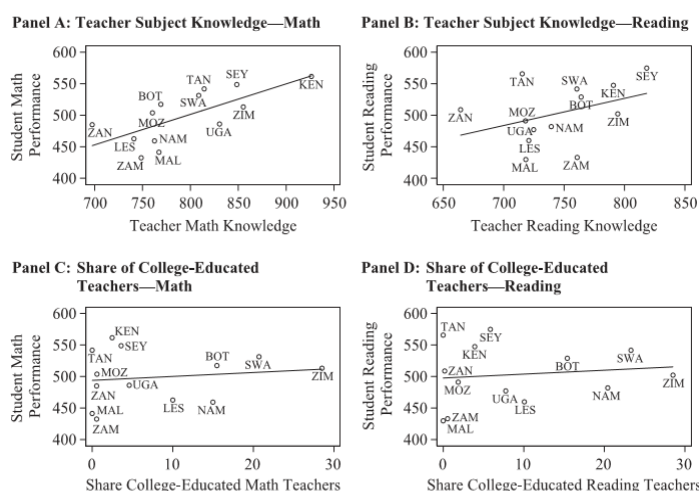


Figure 1 *Potential Determinants of Cross-Country Differences in Student Performance*

Source: Bietenbeck, Piopiunik, and Wiederhold (2018)

Teaching Knowledge

Because of differences in backgrounds, parents and teachers are biased by knowledge. This requires teachers to acquire diversified knowledge; however, parents can fix the gap of knowledge required. The digital library favors this process. Knowledge is crucial and affects performance. Bietenbeck, Piopiunik, and Wiederhold (2018) emphasized that teachers’ knowledge is critical, and “students in countries with highly knowledgeable teachers tend to perform better than

their peers in countries with teachers who have less of a command of the material they are teaching” (p. 558).

Several routes of access to knowledge exist, from institutions to family. Bouguen et al. (2018) declared that “Cognitive development in early childhood is important ... Low levels of cognitive development ... can undermine children’s potential future economic success” (p. 475). This illustrates the importance of childhood education to future competency. Bietenbeck, Piopiunik, and Wiederhold

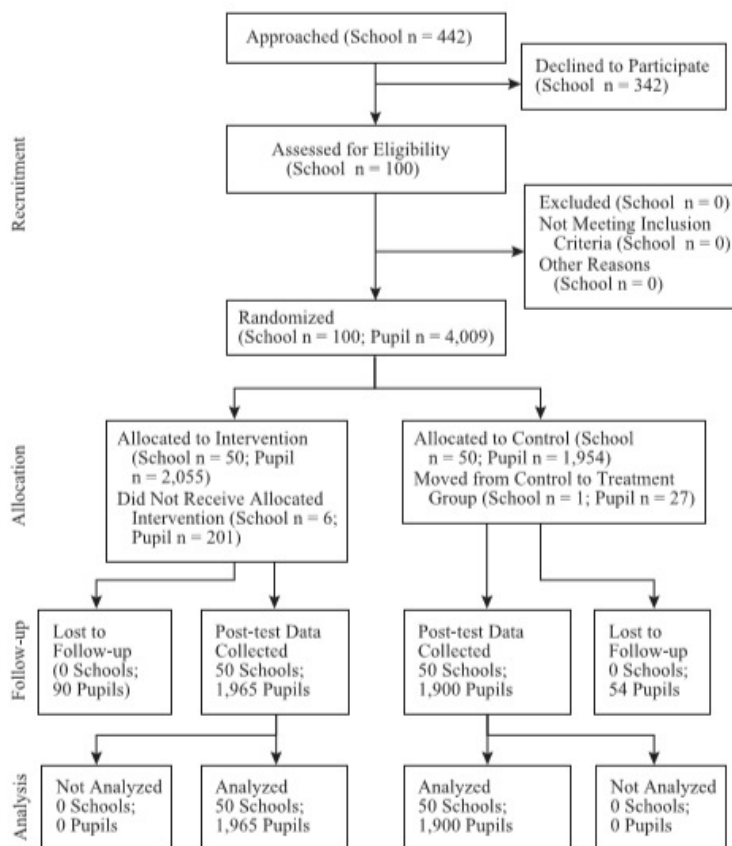


Figure 2 *Flow of Participants in the CSC trial*
 Source: Jerrim J. et al. (2018)

(2018) confirmed that the elements affecting learning are not credentials. Fig. 1 illustrates the low correlation between teachers’ diplomas and student learning, which indicates that teachers’ ability is not the principal factor; therefore, we assumed that well-structured family education plays a more central role.

Motivation by Game

The gaming industry attracts children, with spontaneous participation; combining games with teaching can be effective. Playing games requires full attention and is low pressure, which is suitable for children; well- designed

content with a specific purpose is the first step. Chess was suggested by Jerrim et al. (2018) because it has demonstrated favorable results among primary school students. The study reported positive effects when schools taught chess instead of one regularly scheduled lesson per week. Some lectures can be substituted with chess games because it has been reported that it “normally [acts as] art, humanities, or physical education” (p. 998). The success of the Chess in Schools and Communities Intervention (CSC) program indicates that chess can provoke higher levels of logical thinking, noncognitive skills, and wider

Table 2. Erikson's 8-Stage Psychosocial Development

Stage	Psychosocial Crisis	Basic Virtue	Age
1.	Trust vs. Mistrust	Hope	0 - 1½
2.	Autonomy vs. Shame	Will	1½ - 3
3.	Initiative vs. Guilt	Purpose	3 - 5
4.	Industry vs. Inferiority	Competency	5 - 12
5.	Identity vs. Role Confusion	Fidelity	12 - 18
6.	Intimacy vs. Isolation	Love	18 - 40
7.	Generativity vs. Stagnation	Care	40 - 65
8.	Ego Integrity vs. Despair	Wisdom	65+

Source: <https://www.simplypsychology.org/Erik-Erikson.html>

effects across several academic domains, compared with mathematics (p. 999).

The CSC program (Figure 2) was adopted in 100 schools with a total of 4,009 pupils in Year 5 (ages 9–10 years). Year 5 should be ideal for parents because the material is not difficult but requires patience. The effects should be evident after 1–2 years, and teachers' backgrounds should not be a major concern when providing instructions about the game.

Jerrim et al. reported that the characteristics of chess, including thinking and planning steps, are most likely the main reasons for selecting chess. Chess relies on dynamic thinking of opponents' steps, which stimulates brainstorming. Diverse types of chess share the same features. Computer manufacturers sponsor the competition of the chess game to further improve their computer design.

Shorter Schooling Plan

The German G8 reform intended to reduce the duration of schooling without compromising other educational outcomes; it was efficient. The reform reduces schooling time and increases instruction hours in the remaining years (Marcus and Zambre, 2019, p. 469), with a higher focus on practical learning. Although the targets are high school students, the reform can be applied to younger ones. Parents can help diminish schooling learning but with more family participation. This reduction increases efficiency but also has benefits of "the general public in terms of higher tax revenues" and even "help[s] ameliorate the challenges that aging societies face" (p. 499). Every individual needs competitive skills to be global villagers.

When these plans trigger suspicions regarding the "negative effects of the reform on students' higher educa-

tion decisions” (p. 497), global competition emerges. In Taiwan, numerous parents raise children for tertiary education without considering that improper learning wastes time and money. Furthermore, these students may not be able to perform satisfactorily in terms of education or practical skills. Children’s development at a young age affects future competency. All the theories on the correlation between childhood training and performance should be discussed.

Research and Theory

Erikson's Psychosocial Developmental Theory

Erikson's theory is highlighted in this paper, with an emphasis on social interaction and decision-making. His eight-stage theory of psychosocial development displayed in Table 2 illustrates that the growth and change occurring during childhood can be profound.

This theory centers on the development of social, emotional, and cognitive growth, which can start with childhood memories and experiences. Depicting the influence of our growing orbit on our future personalities and acts is complicated. This theory aims to explain the questions and predict lifelong behaviors.

Effective Learning and Away from Television.

Table 2 demonstrates the development of children from mentality to competency at the age of 12 years. The theory is based on the literature on childhood cognition and learning.

Well-formed education and training during childhood can lead to better competencies and more capable human resources. People with a more favorable childhood are less likely to be “economically disadvantaged citizens” (Chen, Flores, and Flores-Lagunes, 2018, p. 1051). Job training is also crucial because “participating in Job Corps ... encourages them to enroll” (p. 1073), which can lead to more favorable outcomes. Chen, Flores, and Flores-Lagunes performed a survey and concluded that people with less need for job training are those who “are highly related to better labor market outcomes” (p. 1076). These individuals do not require a higher education diploma.

Childhood education and training lead to higher cognition because individuals are at the age of high acceptance. Hernæs, Markussen, and Røed (2019) reported that “skills are essential for the individual as well as aggregate economic outcomes” (p. 372), and skill learning is based on experiences. The compensation for labor can be different based on skills, not diplomas. Human resources ensure that competency is compensated with higher incomes. With globalization, a competitive workforce is crucial.

To increase learning, parents should limit exposure to television programs. The survey indicated that “the full coverage of cable television during childhood and adolescence [will] lower[x] ability test scores of young men by 1.2 percent standard deviations, corresponding to 0.18 IQ points” (p. 373). The acoustic-optics are attractive and thus television lowers the interest

Table 3 The Effect of Head Start Funding on Long-term Outcomes

	Composite (1)	Own Income (2)	Household Income (3)	Unemployment (4)	High Grade (5)	High School Dropout (6)	College Graduate (7)	Self- Rated Health (8)	Health Conditions (9)	Health Limitation (10)
Head Start exposure	0.081*** (0.023)	2,199** (877.145)	2,918** (1,437.375)	-0.005 (0.007)	0.125** (0.051)	-0.012 (0.010)	0.022* (0.013)	0.041 (0.032)	-0.003 (0.018)	-0.046*** (0.015)
Observations	2,685	2,272	2,273	2,554	2,559	2,559	2,559	2,270	2,271	2,271
Control group mean		40,503	68,518	0.128	13.05	0.0784	0.174	3.666	0.297	0.245
Percent change		5.4%	4.3%	-4.2%	1.0%	-14.7%	12.8%	1.1%	-1.2%	-18.7%

Source: Thompson, 2018

in reading; games can attract children's attention.

Strategic Intervention by Governmental Organizations.

Numerous studies have indicated that children from economically disadvantaged backgrounds have inferior resources, which hinders learning. Improving the life chances of poor children has long been at the center of policy debate (Thompson, 2018, p. 1100). Organizational sponsorships are a potential solution. Preschool interventions from official authorities should favor children's personalities. Numerous reports have indicated that the policies at this stage should "promote early human capital development and social mobility" (p. 1101), which would involve allocating resources to enable children to access success and compete with global competitors.

According to Head Start funding data, a plan from the National Archives and Records Administration Community Action Program, Thompson demonstrated that the ratio can be up to 5.4% and 4.3% for household income (Table 3). This indicates that government intervention can be efficient in improving the social obstacles caused

teachers need to employ more approaches to improve learning, there are underlying problems. We believe that teachers can develop gaming activities with an inspirational approach. Therefore, hypothesis 2 is proposed as follows:

H2: Pre-junior high school teachers should easily develop teaching skills regardless of their educational background.

Organizational sponsorship trends toward contemporary intervention, but several of them center on financial support without thorough policies, which may affect the outcomes. However, this is still an indispensable intervention. Therefore, we developed hypothesis H3.

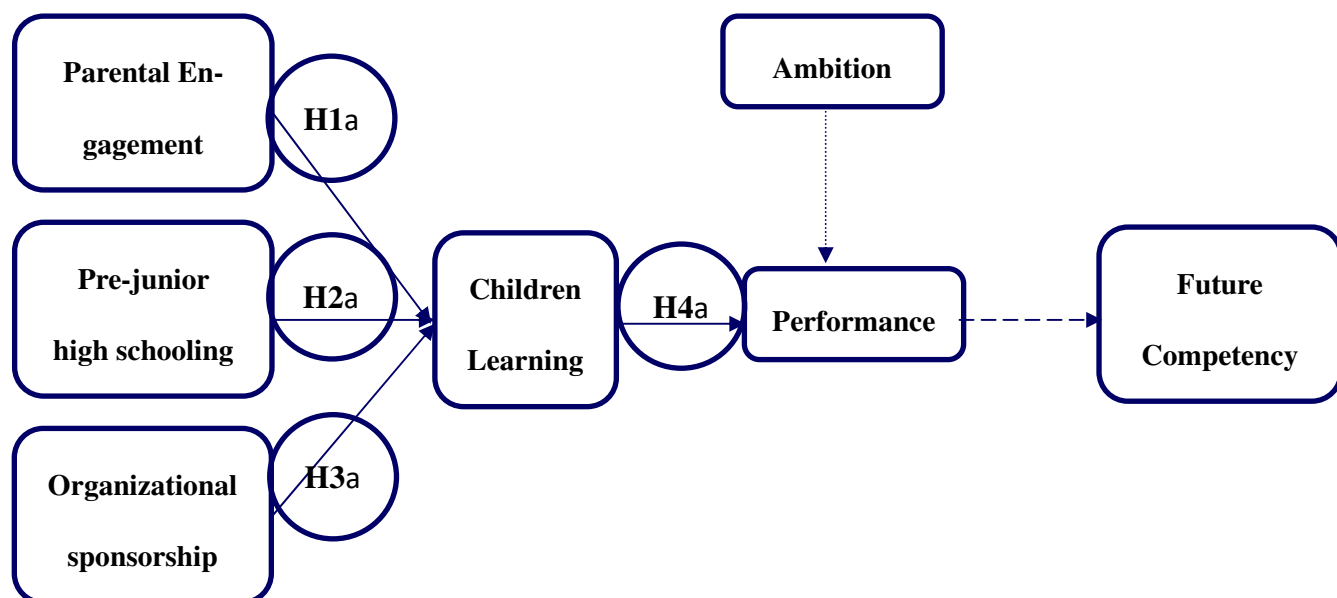


Fig. 3 Research Model

H3: Organizational sponsorship favors children's development, but the effect may not be as strong as parental engagement or schooling.

Conclusions and Limitations

Although "One-on-one coaching programs tend to have large effects on student outcomes" (Oreopoulos and Petronijevic, 2019, p. 299), placing this burden on teachers is impractical. Time, energy, payment, mentality, and other elements restrain the results. Parents are the best candidates for this kind of job.

Children deserve equal opportunities to improve their learning; workable methods can improve our future. Children represent the future; therefore, their competency is crucial; the competitive generation guarantees a better country with better finance and less

confrontation. Numerous parents rely on schooling and ignore the importance of parental assistance, in favor of social media. When children are not mature enough to learn proper knowledge and skills, parents should learn or accompany children to learn from the media.

Because of the time and ability, our hypotheses were formed based on ideas presented by qualified papers.

The start time of the curriculum is also crucial; Heissel and Norris (2018) developed relevant research. Eliminating confusing factor, the start time is not included; however, a well-organized paper should include. Research regarding the start time is crucial in students with tertiary education but not in younger students.

York, Loeb, and Doss (2019) reported that “Most existing interventions try to rapidly change complex parenting behaviors through a small number of time-intensive and information-intensive parent education sessions” (p. 538). Parents need to be patient because the training and learning times are long and do not have fast outcomes. The overall aim should be to inform parents while requesting participation. By investigating this perspective, we determined that parents with ambition and patience were the best coaches. Once again, education and credentials did not have a large effect on the formation of personality.

If sufficient finance and time are available, we aim to employ surveys to investigate local childhood students; the survey should also present parental wills. During the survey, we may remind parents that they are the best tutors and that they are contributing to the future workforce. Therefore, these hypotheses will be tested in an empirical survey.

References

- Bietenbeck, J., Piopiunik, M., and Wiederhold, S. (2018). Africa’s Skill Tragedy: Does Teachers’ Lack of Knowledge Lead to Low Student Performance? *The Journal of Human Resources*, 53(3), pp. 553-578.
- Bouguen, A., Filmer, D., Macours, K., and Naudeau, S. (2018). Preschool and Parental Response in a Second Best World: Evidence from a school construction experiment. *The Journal of Human Resources*, 53(2), pp. 474-512.
- Chen, X., Flores, C. A., and Flores-Lagunes, A. (2019). Going beyond LATE: Bounding average treatment effects of job corps training. *The Journal of Human Resources*, 53(4), pp. 1050-1099.
- Glewee, P., Ross, P. H., and Wydick, B. (2018). Developing Hope among Impoverished Children Using Child: Self-Portraits to measure poverty program impacts. *The Journal of Human Resources*, 53(2), pp. 330-355.
- Heissel, J. A., and Norris, S. (2018). Rise and Shine: The effect of school start times on academic performance from childhood through puberty. *The Journal of Human Resources*, 53(4), pp. 957-992.
- Hernæs, Ø., Markussen, S., and Røed, K. (2019). Television, Cognitive Ability, and High School Completion. *The Journal of Human Resources*, 54(2), pp. 371-400.
- Jerrim, J., Macmillan, L., Micklewright, J., Sawtell, M., and Wiggins, M. (2018). Does Teaching Children How to Play Cognitively Demanding Games Improve Their Educational Attainment? Evidence from a randomized controlled trial of chess instruction in England. *The Journal of Human Resources*, 53(4), pp. 993-1021.

- Kraft, M. A. (2019). Teacher Effects on Complex Cognitive Skills and Social-Emotional Competencies. *he Journal of Human Resources*, 54(1), pp. 1-16.
- Marcus, J., Zambre, V. (2019). The Effect of Increasing Education Efficiency on University Enrollment: Evidence from administrative data and an unusual schooling reform in Germany. *The Journal of Human Resources*, 54(2), pp. 468-502.
- Mayer, S. E., Kalil, A., Oreopoulos, P., and Gallegos, S. (2019). Using Behavioral Insights to Increase Parental Engagement: The parents and children together intervention. *The Journal of Human Resources*, 54(4), pp. 900-925.
- Oreopoulos, P., and Petronijevic, U. (2018). Student Coaching: How far can technology go? *The Journal of Human Resources*, 53(2), pp. 299-329.
- Thompson, O. (2018). Head Start's Long-Run Impact Evidence from the Program's Introduction. *The Journal of Human Resources*, 53(4), pp. 1100-1139.
- York, B., Loeb, S., and Doss, C. (2019). One Step at a Time: The effects of an early literacy text-messaging program for parents of preschoolers.