

Parental Readiness, Parental Care, and Adolescent School Performance among Commuter Families in Malaysia: A Mediation Model

Siaw Yan Li, Samsilah Roslan, Maria Chong Abdullah, and Haslinda Abdullah

Abstract—This study aimed (i) to examine the relationship between parental readiness, parental care, and adolescent school performance; and (ii) to test the role of parental care as mediator between parental readiness to commute and the adolescent school performance. Quantitative test was employed in this study, which included correlation study design and path analysis. Two sets of questionnaires were used to gather the information from adolescent (Parental Care) and parent (Parental Readiness) among the commuter families. However, the adolescent school performance provided by the school management. Pearson Correlation Test was first conducted to analyse the relationship between research variables and path analysis was that used to test the mediation effect. A total of 217 parent-adolescent (dyadic relationship) respondents from commuter families in Peninsular Malaysia were included in this study. The findings showed that all correlations were statistically significant and analysis of structural equation modeling revealed full mediation model of parental care between parental readiness and adolescent school performance. The total direct effect was 0.11; whilst the total indirect effect was 0.3213. This implicates the importance of mediation effect between parental readiness, parental care and adolescent school performance. To the best of our knowledge, this is the first study conducted in Malaysia to investigate the mediation effect on parental care between their readiness to commute against adolescent school performance. Our earlier study suggested a different lifestyle between commuter and conventional family model in Malaysia. Therefore, the importance of parental readiness and their roles in commuter families need to be addressed to ensure the lifestyle of commuter families in Malaysia do not affect adolescent school performance.

Index Terms—Parental readiness, parental care, commuter families.

I. INTRODUCTION

Commuter marriages is defined as married couples who agree to have their own careers and maintain two residences in different geographical locations and separated from at least three nights per week [1], [2]. Rhodes [3] defined commuter families as couple in dual-career marriage who desire to stay married, but voluntarily choose to pursue careers to which they feel a strong commitment and establish separate homes. Commuter families combine the career location of one parent

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with the other parent's work location and the family home on a local scale [4].

In Malaysia, commuter families are defined as weekend families by means one of the married couple stay far away from the nuclear families and they only meet once a week, twice a month, once a month etc. Commuter families are recently on the rise amongst Malaysians' family especially the young couples who own their individuals' careers and ambition. Commuter family is a unique form and shows the existence of family structure that is not only different, but quite contrary to the conventional family model in Malaysia. In commuter families, parents are away working and thus spend rather limited time with their family members especially children. Previous studies in Malaysia showed that commuter psychosocial behaviours had a significant relationship with the children's behavior problems and academic performance [5]. Commuters with low readiness showed negative psychosocial behaviours were reported to be more emotional and unable to accept the commuter lifestyle. However, commuters with positive psychosocial behaviours showed positive attitude and adapted well to such lifestyle. Literatures reported that the commuter couples with negative psychosocial behaviour will affect parent-child communication and adolescent development [5]. Therefore, this research seeked to investigate the relationship and mediation effect between parental readiness to commute, parental care towards adolescents and adolescent school performance among commuter families in Malaysia. The research is important not only to ensure parental role in adolescent school performance but also to highlight the importance of parental readiness to commute among conventional family in Malaysia.

II. OBJECTIVES OF THE STUDY

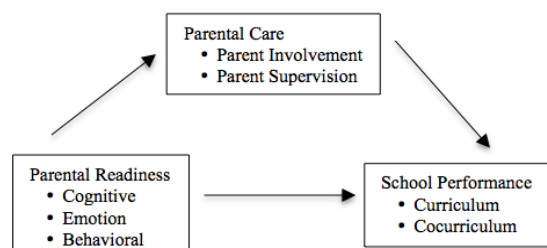


Fig. 1. Simple mediation model of adolescent school performance

The objective of the study is to investigate the role of parental care as a mediator between the relationship of

parental readiness and adolescent school performance among commuter families in Malaysia. A simple mediation model of adolescent school performance is proposed (Fig. 1). The present study comprised of two hypotheses:

- Hypothesis 1: There are significant relationship between parental readiness, parental care and adolescent school performance.
- Hypothesis 2: There are mediation effects in the simple mediation model of adolescent school performance.

III. METHOD

A. Research Design and Procedure

This is a quantitative research study which included correlational study design and path analysis. Pearson Correlation Test (SPSS) and Structural Equation Modeling (SEM) were used to study analyze. The study utilised the survey procedure in data collection. Two sets of questionnaire were used to gather the information separately from adolescent and their parents.

Ten schools were randomly selected from among the public secondary schools in the state of Selangor in Malaysia. Questionnaire sessions were scheduled by the respective schools to gather all the students from commuter families. The researcher conducted the session by briefing the aim of the study and introduction on how to fill out the questionnaire (Parental Care Instrument).

The second set of questionnaires (Parent Readiness Instrument) were distributed to, and collected from, the parents via the school management. Participation of the subjects (both students and parents) were voluntarily, and the parents were allowed to complete only on the part of the questionnaires that involved adolescents-parents (parent-child dyads).

B. Participants

Commuter families in the study were either the father or the mother or both staying separately from the nuclear families at least three nights a week because of career. A pool of 239 families were identified as commuter families and included in the research. After excluding incomplete data and potential outliers, 217 families (parent-child dyads) were proceeded for further analysis, of which, 65.2% husbands, 14.4% wives and 20.4% both couples respectively, commuted for work and families were taken care by caregivers.

C. Instruments

Two sets of questionnaire developed by the researcher were utilised. The questionnaires involved Parental Readiness (answered by parents) and Parental Care (answered by adolescent). The researcher developed both instruments by based on previous studies and existing instruments to ensure the items were suitable in measuring each construct [6]-[8]. The questionnaire specifically developed for three reasons: (1) to ensure the statements of the questionnaire is in Malaysia national language (*Bahasa Melayu*) and suitable with the culture in Malaysia; (2) based on my review, there are no specific instruments to measure parental readiness to commuter in Malaysia; (3) to enable researcher to gather the information related to research

hypotheses and objective.

First, the instruments were verified by panel of experts in the field of study. Second, the validity and reliability analysis were used to determine the validity and reliability of the instruments. Confirmatory Factor Analysis (CFA) was applied for each individual construct to determine the Average Variance Extracted (AVE) and Construct Reliability (CR) of the study instruments. Table I shows that both instruments had high AVE (more than 0.50), indicating high convergent validity [9] and the instruments are reliable with the CR more than 0.70. Table II reports the discriminant validity thru Average Variance Extracted and squared correlation coefficient. Discriminant validity refers to extent in which a construct is truly distinct from other constructs and involves relationship between a particular latent construct and other constructs of a similar nature [10], [11]

TABLE I: NUMBER OF ITEMS, CONBRANCH ALPHA, AVERAGE VARIANCE EXTRACTED (AVE), AND CONSTRUCT RELIABILITY (CR) OF STUDY INSTRUMENTS.

Construct	No Items	Cronb. Alpha	AVE	CR
Parental Readiness	32	0.873	0.563	0.7915
Parental Care	42	0.948	0.795	0.8843

TABLE II: AVERAGE VARIANCE EXTRACTED AND SQUARED CORRELATION COEFFICIENTS FOR STUDY INSTRUMENTS.

Construct	(1)	(2)	(3)
1. Parental Care	0.795		
2. Parental Readiness	0.396	0.563	
3. School Performance	0.348	0.194	0.952

Remarks: Average variance extracted (on the diagonal); Squared correlation coefficients (on the off-diagonal)

D. Instrument: Parental Care

This section comprised of 42 items which were devised into 2 dimensions: Parental Involvement (19 items) and Parental Supervision (23 items). A 4-point Likert-like scale ranging from 1 (never) to 4 (frequent) was used in the instrument of the study. Examples of the items were: "My parents know my daily schedule", "My parent is involved in my school activities like sport day, parents day etc". The purpose of the instrument was to understand parental care through the perception of the adolescents.

E. Instrument: Parental Readiness

Parental readiness was developed to measure the parent's readiness to accept and involve in the daily commuter lifestyle. The scale consisted of 32 items which were categorised into 3 subscales; cognitive, emotional, and behavioral. A 4-point Likert-like scale ranging from 1 (strongly disagree) to 4 (strongly agree) was used in the instrument. Examples of items were: "We accept and happy with the commuter lifestyle", "Sometimes we feel emotional", "We manage to arrange the daily household tasks and responsibilities as parents."

F. Instrument: School Performance

School performance included curriculum and co-curriculum scores in school. The scores were provided by the school management based on the adolescent yearly (year 2012) final examination marks for curriculum and yearly average scores in co-curriculum.

IV. DATA ANALYSIS

Three statistical analyses were conducted in the study by using SPSS and AMOS (Analysis of Moment Structures). The statistical analyses included the test of model fit, Pearson correlation test, and test of mediation effect. Simple mediation model was used in the analytical data process to measure and explore the relationship and mediation effect between parental readiness, parental care, and adolescent school performance.

The test for model fit was examined using AMOS. The purpose for the test of model fit was to confirm whether the model proposed by researcher is acceptable with good fit and suitable for the hypothesis test. Pearson correlation test was used to determine the relationship between the constructs. According to Holmbeck [12], to establish the mediation model, the relation between initial variable, outcome, and mediator should be statistically significant.

For path analysis, AMOS was used to establish the presence of mediation effect and also the direct and indirect effect for the research model. Mediation effect is created when a third construct intervenes between two other related constructs [9]. Overall, there are 4 plausible decisions of mediation test: full mediation; partial mediation; no mediation; and indirect effect.

V. RESULTS

A. Model Fit

To test for the model fit, a number of fit indices were used. Table III shows the recommended value for fit indices and the simple mediation model fit indices for this study. All

values in the research model reported to fit the recommended value. Hair [11] suggested to present a minimum of 3 to 4 fit indices for a model fit. Therefore, the model suggested in this study fits well and is statistically accepted.

TABLE III: FIT INDICES

Fit Indices	Recommended Value	Model Value
Relative Chi-square	<= 5.00	1.223
AGFI	>= 0.90	0.957
GFI	>= 0.90	0.983
CFI	>= 0.90	0.998
IFI	>= 0.90	0.998
RMSEA	<= 0.80	0.032

B. Correlation

- Hypothesis 1: Relationship between parental readiness, parental care and adolescent school performance

Table IV indicates the relation between parental readiness, parental care, and adolescent school performance. All correlation was statistically significant at 0.01 level of conbrach alpha. Therefore, the step to establish mediation was met since the initial variable (parental readiness) was correlated with the outcome (school performance), and mediator (parental care) [13], [14], and hypothesis 1 fail to reject.

According to Guilford’s rule of Thumb (Table V), the moderate relationship was observed between parental care and parental readiness ($r = 0.570$); as well as parental care and school performance ($r = 0.511$). However, parental readiness and school performance showed low correlation ($r=0.386$).

TABLE IV: CORRELATION BETWEEN PARENTAL READINESS, PARENTAL CARE AND SCHOOL PERFORMANCE

Variables	1	2	3	4	5	6	7	8	9
1. Cognitive (readiness)									
2. Emotional (readiness)	0.505**								
3. Behavioral (readiness)	0.451**	0.671**							
4. Parental Involvement	0.395**	0.472**	0.423**						
5. Parental Supervision	0.414**	0.552**	0.459**	0.774**					
6. Curriculum	0.298**	0.384**	0.299**	0.391**	0.579**				
7. Co-curriculum	0.256**	0.362**	0.301**	0.365**	0.546**	0.927**			
8. Parental Care	0.745**	0.858**	0.890**	0.512**	0.564**	0.386**	0.365**		
9. Parental Readiness	0.429**	0.542**	0.467**	0.946**	0.937**	0.511**	0.480**	0.570**	

**correlation is significant at the 0.01 level (2-tailed)

TABLE V: GUILFORD’S RULE OF THUMB FOR INTERPRETING PEARSON CORRELATION COEFFICIENT

0.0 to 0.29	Negligible or little correlation
0.3 to 0.49	Low correlation
0.5 to 0.69	Moderate or marked correlation
0.7 to 0.89	High correlation
0.9 to 1.00	Very high correlation

C. Mediation

- Hypothesis 2: The role of parental care as a mediator

As shown in Fig. 2, the data was found to be acceptably fit to the model. The simple mediation model was established and hypothesis 2 fail to reject. The squared multiple correlation (R^2) for parental care and school performance was 0.40 and 0.35, respectively. The value indicated that 40% of the variance of parental care was explained by parental readiness, while 36% of the variance of school performance

was explained by parental care and parental readiness. The total effect of the simple mediation model was 0.4313. The indirect effect was 0.3213, higher than the direct effect of 0.11 in the model.

TABLE VI: RESULTS OF MEDIATION TEST FOR PARENTAL CARE ON RELATIONSHIP BETWEEN PARENTAL READINESS AND ADOLESCENT SCHOOL PERFORMANCE

Construct	Beta	P
Direct Model		
Parental Readiness → School Performance	0.44	0.00
Mediation Model		
Parental Readiness → School Performance	0.11	0.21
Parental Readiness → Parental care	0.63	0.00
Parental Care → School Performance	0.51	0.00

To test the mediation effect, Table VI shows the standardized direct effect of parental readiness to school

performance without control by parental care was statistically significant ($\beta = 0.44$; $p < 0.05$). However, the study indicated the effect of parental readiness to school performance in full mediation model was statistically non-significant ($\beta = 0.11$; $p > 0.05$). Therefore, parental care is a complete mediator in the relationship between parental readiness and school performance.

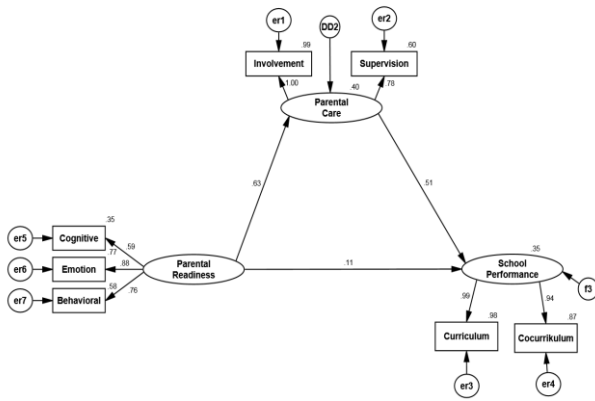


Fig. 2. Standardized path for simple mediation model.

Additional Bootstrapping (AMOS) and Model Regression analyses [13] revealed results in line with the research outcome. Both analyses showed that parental care had full mediation effect on the relationship between parental readiness and school performance which totally support the research outcome. Regression model test for mediation, which included 4 steps of model analyse [13] found that the influence of parental readiness on adolescent school performance is reduced and not significant after controlling parental care as a mediator.

As shown in Table VII, bootstrapping for mediation test indicated that the standardized direct effect of parental readiness to school performance in direct model was significant but the effect was reduced and not significant in the mediation model with the significant Standard Indirect Effect (SIE). Therefore, full mediation effect was accepted.

TABLE VII: BOOTSTRAPPING FOR MEDIATION TEST

Model	Beta
Direct Model	
Parental Readiness → School Performance	0.44**
Mediation Model	
Parental Readiness → School Performance	0.11
Std. Indirect Effect (SIE)	0.33**

** Significant at the 0.01 level (2-tailed) 95% CI Bootstrap BC: LB= 0.22; UP= 0.48

VI. DISCUSSION AND CONCLUSION

The present paper explored correlation and mediation effect between parental readiness, parental care, and adolescent school performance among commuter families in Malaysia.

Research finding revealed that parental readiness, parental care and school performance were significantly related with each other. The findings supported that parental involvement and supervision will increase adolescent school performance [15], [16]. Adolescent with low parental care was always related to low academic performance and behavioral problem [17], [18]. According to the literature, parents' readiness will

influence parental psychosocial and emotional behaviour. Parents with low readiness would be more stressful, emotionally unstable and less involved in children's daily activities which indirectly effect children's school performance and behavior problems [19]-[21].

The finding of this study also supports the simple mediation model suggested by the researcher. Parental care-fully mediated the relationship between parental readiness and adolescents' school performance among commuter families in Malaysia. Parents with high readiness to accept and involve in the commute lifestyle showed a positive psychosocial behaviour in daily activities. Samsilah [22] reported that parents with positive psychosocial behaviour have more communication and involvement with their children, and this is significantly correlated positively with children's academic achievement.

In summary, the total indirect effect of full mediation model is higher than the direct effect between parental readiness and adolescent school performance. The mediation model established with a full mediation effect. Parental care plays an important role as a mediator in adolescents' school performance especially in the commuter lifestyle where there are having a separate living life between parents and children. Parental readiness to commute is important to ensure their involvement in child-rearing among commuter families.

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