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LINKS BETWEEN ECONOMIC DISTRESS AND ADOLESCENTS' DEVELOPMENT AS MEDIATED THROUGH FAMILY RELATIONSHIPS

Nilupulee Rathnayake
Department of Economics
University of Colombo, Sri Lanka
E-mail: nilupulee@econ.cmb.ac.lk

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Abstract

Family is the basic social foundation which facilitates the physical, emotional and psychological development during adolescence, one of the most critical periods of an individual's life. Under beneficial conditions, the household provides adolescents the opportunity to step into adulthood undertaking productive roles in the community. Nonetheless, quality of family environmentis mainly a function of economic resources.Mental health is severely affected by distressful life experiences tied up with the market economy leading to conflicted family environments. Hence, this study attempts to expand the knowledge on the links between economic distress and adolescents' outcomes as mediated through family interactions which is crucial in intervening to reduce the emotional instability faced by adolescents that can adversely affect their productivity in the future.For that purpose, the study examines the relevance of Family Stress Interactionist Modelwhich posits the idea that family's economic hardship influences children's developmental outcomes through a series of mediating family processesin the context of Sri Lanka using 400 families. The findingssuggest some discrepancies in the results based on contextual differences compared to previous international studies. The results show the direct impact of economic distress on adolescent's development affecting their mental health while showing the indirect impact through interconnected dyadic relationships between father and mother. Mothers seem to play a more significant role in adolescents' lives than fathers. Thus, the study identifies the need of addressing inequality and economic hardship through country's economic policy, subsequently the mental pressure under economic distress as a development bottelneck.

Keywords: Adolescents' development, Economic distress, Mental health, Parental involvement

Introduction

Developing countries in Asia have experienced histrionic changes in their economic, social and political domains due to globalization in the past few decades with market capitalism determining resource allocation and distribution. Wage labor has become the commonest form of employment within the process of development. More specifically in countries like Sri Lanka, family structures have changed significantly with both mother and father being involved in contributing to the family's economy. Changing family structures have contributed to changes in family values and roles, especially the role of women. Increased wants through the wave of market capitalism have made financial management within the family an endless struggle. This continual financial hardships and economic distress have deteriorated the quality of family relationships by increasing the frequency of family conflicts. In turn, changes in systemic quality, functioning, and involvement have negatively reflected on children's lives and their development. Children's exposure to family conflicts and violence have been found to be a significant factor affecting their productivity, school engagement and health.

> The family's affective role of nurturing and supporting its individual members includes promoting and safeguarding the health of children as well as instilling moral and social values in them with the overall goal of ensuring that the next generation is productive and socially responsible. (Perrino et al., 2000)

Evidence from a large number of research studies has shown that the family has a notable role in executing production, consumption, reproduction, and accumulation functions as a fundamental social and economic institution. According to Belcher et al (2011), these functions include family capital and family resilience which are necessarily associated with socio economic empowerment. Family social capital refers to a person's social network which shapes their personal identity, while family resilience refers to the ability of families to combat troublesome life challenges such as the inability to meet basic needs, physical and psychological exploitation and a likelihood of breaking up as a consequence of external economic, social and political factors (Belsey, 2005).

Economic stress becomes apparent either from poverty or threats to the financial status. Patterson (2002) shows that family demands could be giving rise to stress. Job loss, divorce, retirement, or disability can contribute to economic stress. Direct influences of economic stress determine individual well-being while indirect influences are generated through family interactions. The cost of economic stress is mostly associated with increased levels of anger, hostility, depression, anxiety, somatic complaints, and poor physical health. Effects of diminished relationship quality (marital, parent-child) and changes in social activities and networking could also be considered components of social cost. Generally, happiness and satisfaction of a marriage depends mainly on marital quality and when facing financial hardships, the quality gets inevitably diminished. Quality of parenting also suffers from economic stress and this is indicated through negative parent-child relationships and lower parental involvement in child related activities.

As stated by Bartholomae and Fox (2017), specific child outcomes in both long and short term are linked with economic stressors such as limited resources, limited opportunities, and diminished human capital development. Grown up adolescents are important here as they are about to step into adulthood. Adolescence, the age of confusion and distress is a critical stage as it brings shifts in cognitive and emotional capacities. At the same time, the development from childhood into young adulthood brings new cultural and societal opportunities and expectations (Svetlana & Ekaterina, 2014). Hence, Bartholomae and Fox (2017), suggest that adolescents who are concerned about family financial hardships are habitually suffering from various somatic complaints including stomach aches, loss of appetite, depression, sleeplessness, and lack of concentration. Moreover, they have stated that economic stress is the most strongly related fact in adolescent's self-perceived health.

Given this backdrop, it is clear that economic distress, mental and physical well-being, socialization process and family interactions are inextricably interconnected in influencing the development outcomes of adolescents. This is a critical stage of academic success and mental health and accordingly, there are more chances for them to be distressed by factors related to their living environment more specially, such as family economic hardships, family processes and academic pressure. This stresses the need for expanding knowledge on the links between economic distress and adolescents' outcomes mediated through family interactions which is crucial in intervening to reduce emotional instability of adolescents, the human capital of the future to ensure the development of the country through a productive future generation. The strengths of these relationships differ in societies depending on their cultural and social systems. Most of the available information in this sphere is from Western societies through a limited store of literature that exists for developing countries in the Eastern world. Having reviewed the available literature, this study attempts to fill up this vacuum in the literature by taking the Sri Lankan condition into account (as a developing country in Eastern sphere).

Theoretical Background and Empirical Evidence

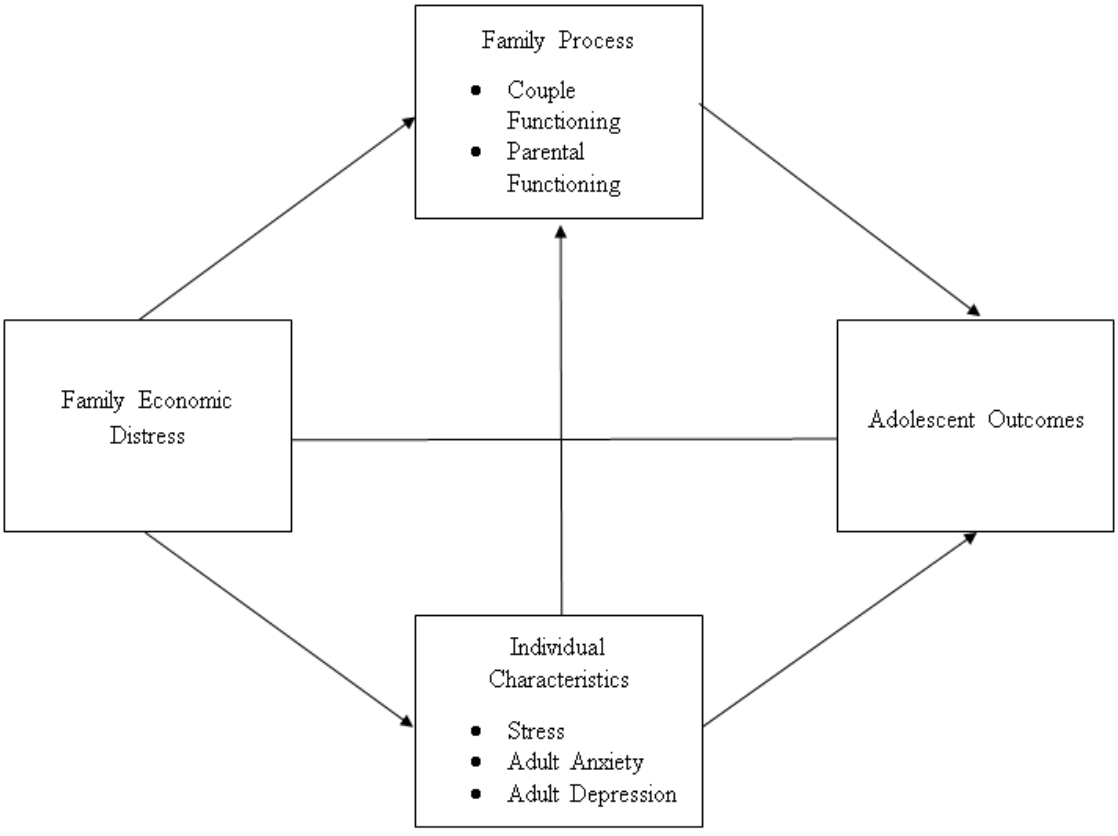
The theoretical background of this study is mainly based on the Family Stress Interactionist Model (FSIM) proposed by Conger and Donnellan (2007). In more general, the core of this model posits that family's economic hardship influences children's and adolescents' developmental outcomes indirectly through a series of mediating family processes, including perceived economic pressure, emotional distress, marital relations, and parenting practices. Developmental outcomes of children and adolescents are directly affected by parental practices according to this publication.

As conveyed by Conger andDonnellan (2007), three general theoretical approaches can be identified through review of research and theories, regarding the relationship between Socio Economic Status (SES) and individual development; these are social causation, social selection, and interactionist perspectives.Two theoretical approaches related to social causation perspective are Family Stress Model (FSM) and Family Investment Model (FIM).

Financial difficulties have an adverse effect on parents' emotions, behaviors, and relationships, which in turn negatively influences their parenting strategies in FSM (Cui et al., 2002) while FIM draws attention to the ways that parents invest in financial, social, and human capital to promote the talents and well-being of their children. Social Selection perspective describes something different to social causation approach as individual differences in traits such as intelligence and personality can reduce exposure to economic pressure positively through decreasing the likelihood of parent emotional distress and inter-parental conflict, foster nurturing and involved parenting and leads to greater child well-being (Mayer &Salovey, 1997). According to the conclusion of Conger andDonnellan based on reviewing a number of studies and empirical evidence, neither perspective is satisfactory on its own. Hence, depicting on the combined set of research findings of social causation view and social selection view, Conger and Donnellan incorporated both perspectives to form the interactionist model which in turn provides the evidence base for further research to accurately capture how SES influences human development over time and across generations.

The FSIM outlines this theoretical process in an interactionist perspective where the main constructs are SES or economic distress, family processes (Couple functioning and parental functioning), individual characteristics, parental investments and child outcomes (Figure 1). Most of the studies have demonstrated FSIM through empirical evidence of the mediational role that family processes play in relating economic hardship to child and adolescent outcomes across a variety of contexts (Barnes, 2013; Ponnet, 2014; Ponnet et al., 2015).

Figure 1. Family Stress Interactionist Model by Conger &Donnellan (2007)



The study adopted an Actor Partner Interdependence approach (APIM) to the FSIM which allows to examine interdependence within interpersonal relationships in family. As family is a complex integrated unit, individuals within the family are necessarily interdependent. Hence, both actor and partner effects of dyadic patterns between father and mother are identified and compared within the conceptual framework of FSIM. APIM can evaluate the degree to which one independent variable of a person influences his or her score on the dependent variable which is known as actor effect and the APIM can also estimate the degree to which one independent variable of a person influences the dependent variable of his or her partner which is known as partner effect (Fitzpatrick et al., 2016).

Interdependence is measured by the APIM partner effect, the extent to which one person's thoughts, feelings, or behaviour influence the thoughts, feelings, or behaviour of another person (Cook & Kenny, 2005). This APIM model is being employed progressively in most of the studies in social sciences and more specifically was recommended for use in the area of studies on families (Rayens&Svavardottir, 2003), close relationships (Campbell &Kashy, 2002) and small groups (Bonito, 2002) (cited in Cook & Kenny, 2005).

Ponnet et al (2015) examined effects within (actor) and between (partner) parents and explored family-based pathways through which financial stress is associated with adolescent's externalizing problem behavior. According to them, actor effects are indicative of spillover effects which arise when individual experiences are transferred from one domain to another. For instance, as in their study, father's parental stress which could be related to a less open father child communication refers an actor effect. Partner effects are indicative of crossover effects which refer to transfer of experiences or feelings between family members as in an example where mother's stress is detrimental to the father-child relationship. Barnes (2013) also used APIM to FSIM based on Kashy and Kenny (2008) which examined both actor and partner effects in her study focusing on the links between economic distress and school engagement as mediated through negative marital interaction and parental involvement. Ponnet (2014) applied APIM to FSM in focusing on low, middle, and high income families. APIM allows gender differences in the pathways leading from financial stress to parenting and adolescent outcomes to be examined. Ponnet (2014), stresses the importance of APIM to FSM in assuming that the strength of these pathways may indeed differ between mothers and fathers and such differences might differently affect adjustment of adolescents.

Economic Distress and Depressive Symptoms

Numerous studies have examined the FSM related to economic distress. In this study too economic distress is employed as the main construct of conceptualized path model based on FSIM focusing on how depressive symptoms of presumed economic distress in turn alter adolescent school engagement.

Economic pressure is not poverty itself. Economic pressure refers to day to day strains faced by families caused by unstable economic conditions (Masarik& Conger, 2017). Poverty or negative financial events, such as job loss or health difficulties, give rise to economic pressure (Acquah et al., 2017). Inability to meet needs and wants in the context of current economic conditions is a major dilemma and in Sri Lanka the middle class is currently under economic pressure due to overspending as a result of having the capacity to borrow and access funds from formal lending institutions (Abeyratne, 2019). Hence, the current study is based on the data collected from both low and middle income families which may experience economic pressure due to different reasons. The words, economic pressure, economic strain, economic hardship and financial hardship are used interchangeably in this study.

Iowa families that were dependent on the agricultural economy during the 1980s, afflicted by the severe downturn were the focus of an FSM study by Conger and his colleagues (Conger & Conger 2002; Conger et al., 1994). These explain how financial problems influence family life. FSM advocates that economic pressure in the family alongside economic hardship (resulting from low income, high debts relative to assets, and negative financial events) could lead to loss of income, job insecurity and increased economic demands. Conger et al (1999), argues that economic hardship during childhood and adolescence has been identified as a continuing threat to the cognitive, social, emotional, and behavioral development of a disproportionate number of American youth. Conger also found that financial difficulties were associated with higher levels of marital conflict. Economic pressure was directly connected with parent-adolescent financial conflicts that also were indirectly responsible for hostile interactions in marriage and parental depression (Conger et al., 1994).

Economic pressure puts parents at severe risk of adverse psychological outcomes including anxiety and depression which are eventually linked to fragmented inter-parental relationships, including inter-parental conflict and reduced relationship satisfaction (Acquah et al., 2017).

FSM envisages that behavioral problems (e.g., anti-social behavior)and emotional distress such as depression, anxiety and anger of parents get increased with high economic pressure (Conger et al., 1999). Furthermore, such distress and problem behaviors give rise to increased marital conflict and reduced marital warmth which in turn weaken parental involvement. McLoyd (1990) has also demonstrated that financial pressures may increase parental hostility toward children.

Marital Interaction

Financial hardship is strongly related to inter-parental violence including emotional abuse, control and physical violence. Evidence from several cross-sectional and longitudinal studies also support the association between economic hardship and negative marital interaction.

Adverse economic change most directly threatens the status and well-being of men, so such hardship is likely to undermine the stability of marriage through his emotional distress and irritable behavior (Skinner et al., 1992). That means the financial difficulties are likely to raise conflicts in marital relationships. Skinner et al., (1992) also imply that the more fractured and discordant marriages are the more they lead to erratic, punitive parenting.

Holden and Ritchie (1991) examined the relationships between marital discord, parental behavior, and child behavior in two samples of battered women and compared mothers and children. Findings revealed that children from violent families were more involved in internalizing behavior problems and were more aggressive, and angry, than the control group (children from non-violent families). Maternal stress and paternal irritability were identified as the most significant predictors of child behavioral problems in violent families. Moreover, mothers in violent marriages were more stressed and irritable about their husband's role in fathering, as they reported them to be less involved than optimal in their parenting role.

Katz and Gottman (1993) who conducted a longitudinal study on the effects of marital interactions on children, demonstrate that the specific ways of marital dispute resolution may contribute to differences in the externalizing and internalizing behavior patterns of children.Another longitudinal study of unemployed job seekers and their spouses in the United States has also been proved that financial strain was a reason for partner withdrawal and reduced relationship satisfaction (Vinokur et al., 1996).

Harold and Conger (2006) examined the influence of children's awareness of marital conflict and reported level of parental hostility on symptoms of adolescents' distress. The research indirectly linked marital conflict to adolescent perceptions of parents' hostility through the mediating effects of parents and observers' reports of hostility towards the adolescent and through adolescent awareness of the frequency of inter-parental conflict. Maximum likelihood estimation of the proposed model showed that marital conflict was significantly related to parents' and observers' reports of parents' hostility toward the adolescents and to adolescents' awareness of conflict frequency.

Parental Involvement

The general view in literature is that parental involvement in the lives of children in school related activities has a positive influence on school related outcomes and behavior. Most studies based on empirical surveys have witnessed that there is a positive relationship between parental involvement and child outcomes.

Grolnick and Slowiaczek (2008), through a cross sectional study demonstrated an affiliation between higher levels of parental school involvement and greater academic success of children and adolescents. Findings divulged that parental school involvement is associated with early school success including academic and language skills and social competence among young children.

Parental emotional distress was directly related to problems in parenting for single-parent families, whereas research with two parent families suggested that emotional distress usually relates indirectly to parenting problems through inter-parental conflict (Mistry et al., 2002; Yeung et al., 2002).

Hill and Taylor (2004), imply that parents' psychological circumstances influence parental involvement in child related activities. Depression or anxiety seems to be a barrier to parental involvement in child school engagement. Moreover, depressed mothers tend to be less involved in the lives of young children and in the early years of school than non-depressed mothers. According to Eccles and Harold (1996), negative feelings about themselves may perhaps hamper parents from engaging in the child's school activities. Parental confidence of their intellectual abilities has been identified as the most salient predictor of involvement in child related school activities. Moreover, experience of poverty was identified as an important factor in determining parental mental health and self-perception. Despite increased stress which comes along with the struggle of making ends meet, there are some adverse indirect effects of self-perception of parents on children's early school outcomes mediated through less involvement of parents in child related school activities.

Day and Walker (2009) examined how parental connectedness and involvement in the lives of children occurred individually and collectively. Regression results of data obtained from 349 mothers and fathers along with their early adolescent child in a flourishing family project revealed that mothers' and fathers' contributions differed primarily as a function of child outcome. Fathers' connectedness and involvement were negatively related to adolescents' internalizing and externalizing behaviors while mothers' connectedness and involvement were positively related to adolescents' pro-social behaviors and feeling of hope. Another important finding suggests that when one parent's involvement is less apparent in the child's life for whatever reason, the other parent's involvement is more significant particularly in internalizing behavior and child's well-being.

In the Sri Lankan context, Pathirana (2016) shows that variations in parent-adolescent relationships to a great extent affect the development of adolescents. Findings from semi structured interviews suggest that if parents were attentive and supportive, adolescents would stumble on in greater comfort with their parents. In contrast, distant, aloof, uncaring or abusive parent-child relationships seemed to be perceived as negative. Perceived parental bonds seemed to be accepted and supported as adolescents felt that they could tell anything to their parents.

School Engagement

Child outcomes can be identified in terms of different aspects and researchers bring different approaches to bear in measuring outcomes in a variety of contexts related to FSIM which links economic strain and child outcomes through mediated pathways of family interactions. In this study, school engagement has been highlighted as the measurement construct of child/adolescent outcome though it is rarely focused on in previous studies.

When faced by economic stress, parents might monitor their children less frequently, reduce parental sensitivity, or may withdraw their support and affection. These parenting practices in turn link to different kinds of child related problems including externalizing problems, internalizing problems, academic problems, physical health problems, social and interpersonal relationship problems. Further, consequences of economic hardship mainly depend on children's developmental stage of life; cognitive development and school performance are the most affected areas in the lives of young children whereas in older children, the risk is with social and emotional problems. (Acquah et al., 2017)

Fedricks et al (2004) identify three separate elements of school engagement as behavioral, emotional and cognitive engagement. Active participation in academic, social and extracurricular activities which relate to positive outcomes are behavioral engagement while emotional reaction towards fellow students, teachers, academics and school are categorized as emotional engagement. Levels of effort in learning academic material is considered cognitive engagement. All three aspects being taken into account under the construct of school engagement strengthens this study.

Dickerson and Popli (2014) investigated the impact of persistent poverty on cognitive development of children in early years of their lives. Structural Equation Modelling (SEM) results suggest that continually living in poverty in the early years of childhood have a cumulative negative impact on their cognitive development. Barnes (2013), states that a decrease in school engagement results from stress of children and struggles of their parents (particularly mothers who are more involved in children's lives).

Conceptualization

Based on the APIM approach to FSIM, the study sought to examine two different models of relationship between economic hardship and adolescents' outcomes which were mediated through family interactions. The APIM approach to FSIM satisfactorily highlighted the interdependency of the family stress processes to comprehend the affective role of family on adolescents' development as a major social and economic institution in the early stage of their lives.

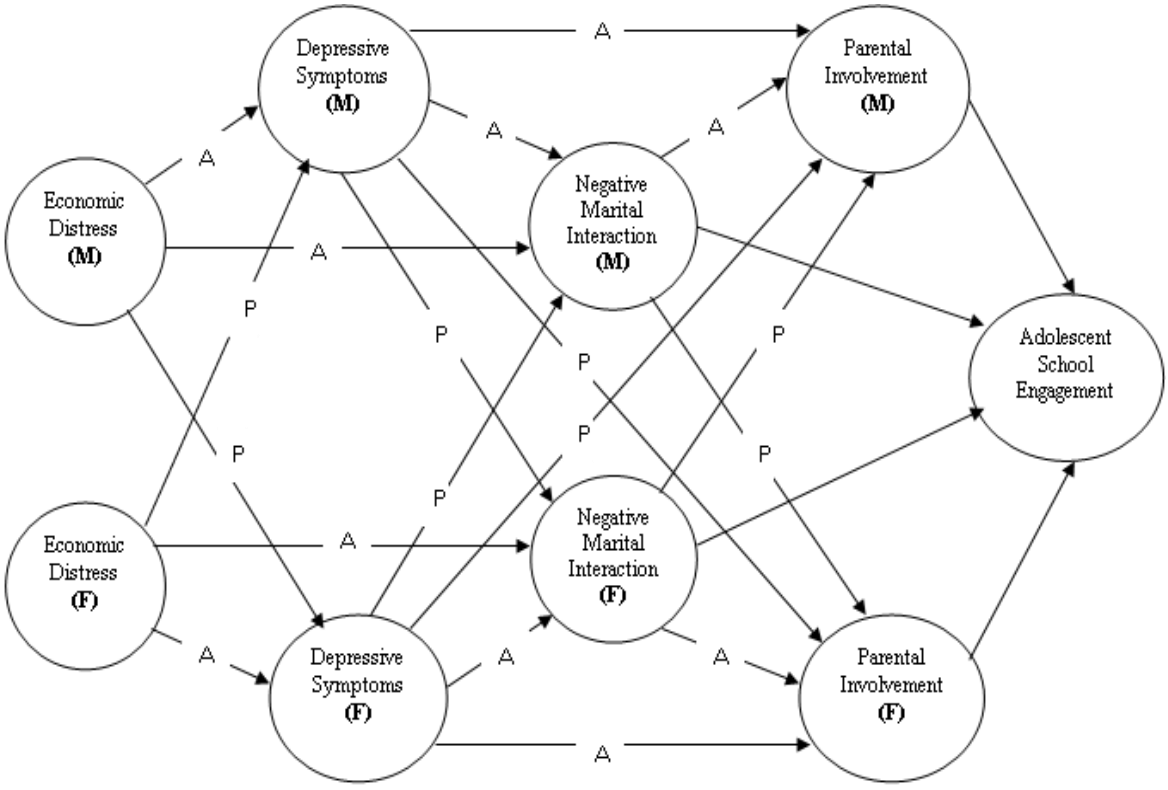
The first model was developed to examine the relevance of FSIM in the context of Sri Lanka and it has been extended based on Ponnet (2014). The APIM approach was applied to identify the actor and partner effects of dyadic relationships between father and mother. Hypothesized pathways between latent constructs including actor and partner effects of interdependency of the conceptualized path model can be identified as presented in the Table 1. Arrow heads show the direction of the hypothesized pathways in Figure 2.

Table 1. Hypothesized Relationships – Conceptualized Model 1

Pathway		
Actor Effects	**Partner effects**	**Direct effects to ASE**
MED → MDS	MED → FDS	MNMI → ASE
FED → FDS	FED → MDS	FNMI → ASE
MDS → MNMI	MDS → FNMI	MPI → ASE
FDS → FNMI	FDS → MNMI	FPI → ASE
MED → MNMI	MDS → FPI	
FED → FNMI	FDS → MPI	
MDS → MPI	MNMI → FPI	
FDS → FPI	FNMI → MPI	
MNMI → MPI		
FNMI → FPI		

Source: Developed by author based on Ponnet (2014) and previous literature on FSIM.
Note. MED – Mother's Economic Distress, FED - Father's Economic Distress, MDS – Mother's Depressive Symptoms, FDS – Father's Depressive Symptoms, MNMI – Mother's Negative Marital Interaction, FNMI – Father's Negative Marital Interaction, MPI – Mother's Parental Involvement, FPI – Father's Parental Involvement, ASE – Adolescent's School Engagement.

Figure 2. Conceptualized Path Model 1 - An APIM Approach to the extended FSIM from family perspective



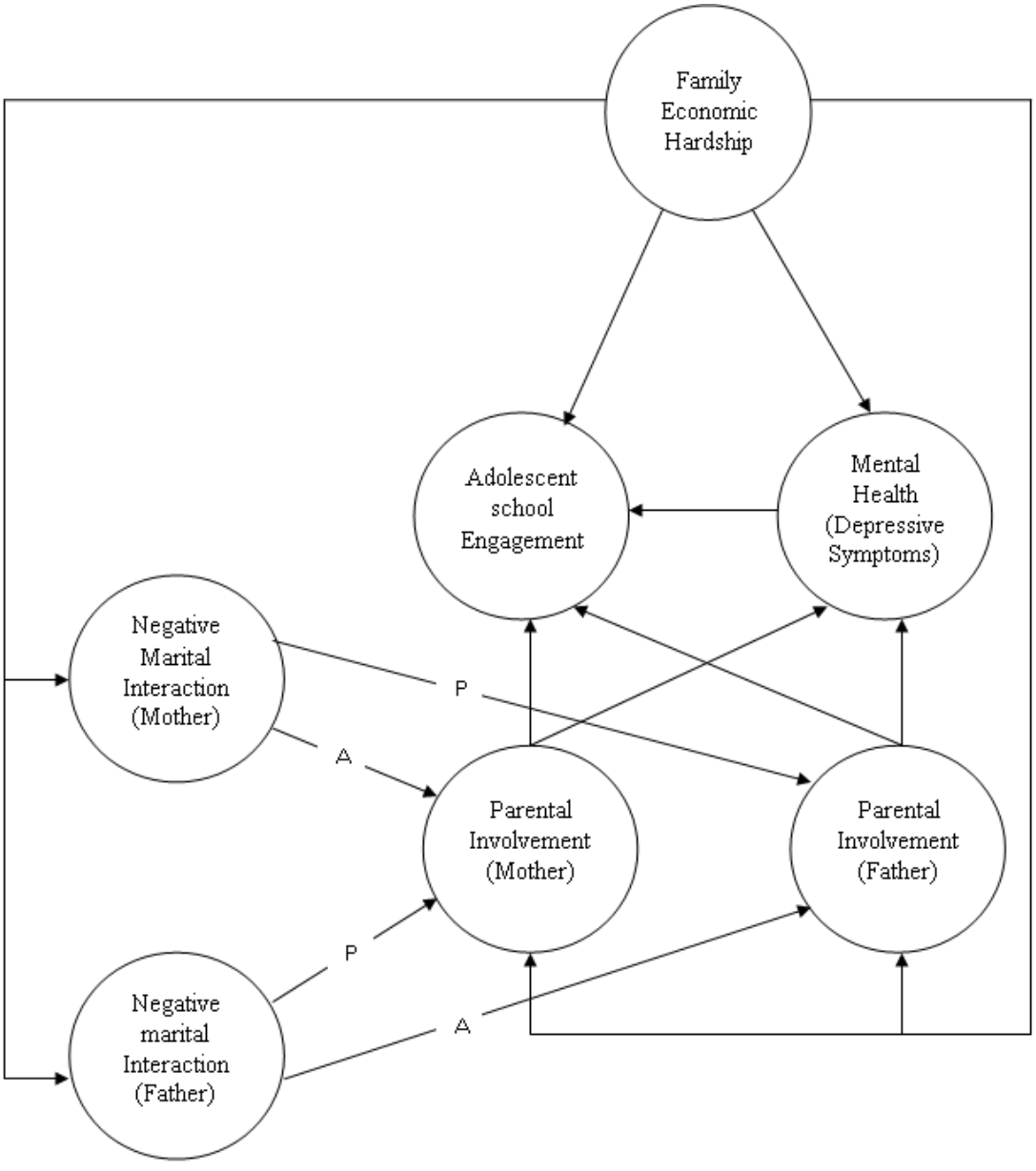
Source: Developed by author based on Ponnet (2014) and previous literature on FSIM
Note. A – Actor effect, P – Partner effect, F – Father, M – Mother

Most literature focused on the effects of family economic hardship on adolescents' outcomes from a family perspective which has no insights into adolescents' perception of family economy and its impact on their lives. Only a few studies found a direct impact on adolescents' outcomes of family economic hardships from the adolescent point of view (Wadsworth &Compas, 2002). Hence this study incorporated the second framework in its conceptualization that focused on the direct influence of adolescents' awareness about family's economic hardship. This model investigated how their perception and awareness of the family's

economic hardship impinge on their developmental outcomes in school engagement and mental health which also can be indirectly affected by family stress processes.

As identified through the literature, the latent constructs related to FSIM are set out from an adolescent point of view as family economic hardship, negative marital interaction and parental involvement of father and mother separately, school engagement and mental health (depressive symptoms) of adolescents. The conceptualized model has different hypothesized pathways between latent constructs as reflected in Table 2. Arrow heads of pathways in the diagram show the direction of the hypothesized relationships (Figure 3).

Figure 3. Conceptualized Path Model 2 - An APIM approach to the extended FSIM from Adolescents' Perspective



Source: Developed by author based on previous literature on FSIM
Note. A – Actor effect, P – Partner effect

Table 2. Hypothesized Relationships – Conceptualized Model 2

Pathway			
Actor Effects	**Partner effects**	**Direct effects to ASE and ADS**	**Other effects**
MNMI → MPI	MNMI → FPI	FEH → ASE	FEH → MNMI
FNMI → FPI	FNMI → MPI	FEH → ADS	FEH → FNMI
		MPI → ASE	FEH → MPI
		MPI → ADS	FEH → FPI
		FPI → ASE	
		FPI → ADS	
		ADS → ASE	

Source: Developed by author based on previous literature on FSIM

Note. FEH – Family Economic Hardship, MNMI – Mother's Negative Marital Interaction, FNMI – Father's Negative Marital Interaction, MPI – Mother's Parental Involvement, FPI – Father's Parental Involvement, ADS – Adolescent's Depressive Symptoms, ASE – Adolescent's School Engagement

Materials and Methods

This study is solely based on cross sectional primary data collected through a sample survey. A structured questionnaire was designed founded on the theory and based on previous literature, to be used for data collection. A quantitative analysis was conducted to fulfill the research objectives. The sampling procedure, the process of conducting the survey, the format of structured questionnaire and the analytic strategy are described below.

Sample and Survey Procedure

The survey was conducted in 6 randomly selected schools in an urban setting considerably distanced from the commercial capital; Colombo. The schools were first stratified and then randomly sampled so as to gain two girls' schools, two boys' schools and two mixed schools. All the 6 schools had adolescents from both urban and rural areas throughout the province, as admission of some was based on the grade 5 scholarship examination (the means by which rural students can enter the better resourced urban centers of learning). Low and middle income families would then be part of the sample. The adolescents in the sample were selected using simple random sampling technique within the sample frames of schools for students between ages of 15 to 17 years (late adolescents). Their families were then approached and their consent sought regarding participating in the survey. Families were eligible for the study if the child lived in a household with both parents and the families had given their consent regarding participation. The questionnaires, along with an information sheet (letter) explaining the purpose of the study was then sent to the parents who had consented to be part of the study. The adolescents were given time to fill out their questionnaires in school, while the parents filled out the questionnaires at home and then returned them through their children in a sealed envelope, within a stipulated time period. The questionnaire did not include any questions involving identity, so that anonymity and confidentiality were fully guaranteed. The questions involved responding to 5 point lickert scale answers. The process of sending out and collecting the questionnaires was handled by a group of undergraduates with the support of class teachers. Three separate questionnaires were adopted: adolescent, mother and father reports.

The sample consisted of 600 adolescents between ages of 15 to 17 with 100 students selected from each school. Given the inclusion criteria of living with both parents and being middle or low income, the final sample was reduced to 400. Lack of time prevented the use of 2 questionnaires, the first to the entire adolescent sample to screen for whether both parents lived in the same household as the adolescent, and were of low and middle income levels, that could then have provided the framework for sampling directly according to the criteria of this study.

Measures of Latent Constructs

Five latent constructs were identified to examine the FSIM based on previous literature, conceptualized in two path models which are Economic Distress, Depressive Symptoms (Mental Health), Negative Marital Interaction, Parental Involvement and Adolescent's School Engagement.

For each of these constructs, several questions were asked in order to gain a measurement for each latent variable and these were included in all 3 survey questionnaires (father, mother and adolescent reports). Responding to the questions involved a 5 point lickert scale.

Economic distress of mother and father were measured taking items from Ponnet et al (2015) under 3 criteria which are financial need, financial insecurity and financial burden. Several questions related to financial need and insecurity were asked specifically from mother as the management of the family budget is most often handled by the mother in Sri Lankan families. As the main contributor to the family's economy in most Sri Lankan families, the father was asked about the financial burden faced by the family. As one of the two conceptualized models is based on FSIM solely from an adolescent perspective, the survey report for the adolescents included questions about family economic hardship both regarding awareness and impacts on their lives.

Depressive symptoms were asked about in accordance with the World Health Organization (2019). There are some differences in the questions related to depressive symptoms used for father, mother and child to capture the psychological differences between father, mother and adolescent arising as they are engaging in different roles.

According to the criteria which Barnes (2013) adopted in her study, negative marital interaction of father and mother were assessed on 5 dimensions: verbal attack, hostility, anger, coercion, contempt and physical attack. In child report also, this was asked from the adolescent point of view, using a number of questions to see if father and/or mother were affected by such behaviors. These questions were asked to ascertain adolescents' awareness of family conflicts.

Parental involvement was measured by asking the same 5 questions separately from father and mother. The questions focused on their role in the adolescent's life, specially their involvement in school activities through giving social and economic support to their children. The same 5 questions were asked from the adolescent, from their perspective as how they feel the involvement of father and mother separately in their lives and school activities. These responses were employed in the second model.

The construct of school engagement was measured by including several questions related to three separate elements of school engagement identified as behavioral, emotional and cognitive engagement by Fedricks et al (2004). This was collected only from an adolescent perspective and was employed in both conceptualized models.

Analytical Process

As conceptualized based on the literature, the path diagram was analyzed based on Structural Equation Modeling (SEM) using STATA software to examine the theory of FSIM and also it was given an APIM approach to measure actor and partner effects of dyadic relationships between father and mother. Theory of FSIM was an established theory and examined by most of the scholars as different extended versions but the relevance of the theory to a particular context could generate different outcomes, so direct SEM estimations may not be effective. Hence this study first conducted an Exploratory Factor Analysis (EFA) to comprehend how observed variables are loaded onto latent factors relative to theory. Data reduction of a larger set of measured variables was another purpose of this activity. The Principal Component Analysis was used as the data extraction method in this EFA while using Varimax with Kaizer Normalization as the rotation method. Then the measurement model of EFA was confirmed through a Confirmatory Factor Analysis (CFA) by using maximum likelihood estimation and fit indices including CFI (Comparative Fit Index), TLI (Tucker-Lewis Index), RMSEA (Root Mean Squared Error of Approximation),SRMR (Standardized Root Mean Squared Residual) and CD (Coefficient of Determination) were tested in determining the model fit. The final step was the path analysis of Structural Equation Model to identify the linear relationships of significant pathways between latent variables as hypothesized in the conceptualized models.

Results

Socio-Demographic Profile

As the study is on quantifying the impact of economic distress of families on adolescent outcomes, it is worth beginning by focusing on their Socio-Economic Status to determine the background of the sample of 400 adolescents and their families finally included in the study. Initially, 600 adolescents in the original sample were surveyed but in line with the eligibility criteria of the survey this reduced to 400 (exclusion of 88

categorized as high income households, 79 single parent households and 33 adolescents who were unwilling to participate).

Table 3. Demographic Profile of the Sample

Demographic Characteristic	Percentage or Average Value	
Gender	Male	44% (176)
	Female	56% (224)
Average age	Adolescent	16.27 years
	Father	49 years
	Mother	46.5 years
Average family size		4.6 members
Income Category	Low Income (Below LKR 35,000 Monthly)	30.75% (123)
	Middle Income (LKR 35,000 – 140,000 Monthly)	69.25% (277)
Residential area	Urban	34% (136)
	Rural	66% (264)
Highest educational attainment	**Father**	
	No Schooling/Primary	9.75% (39)
	GCE O/L	17.25% (69)
	GCE A/L	18% (72)
	Diploma or vocational training	22% (88)
	Bachelor's degree	28% (112)
	Masters and above	5% (20)
	Mother	
	No Schooling completed	4% (16)
	GCE O/L	14% (56)
	GCE A/L	21% (84)
	Diploma or vocational training	24% (96)
	Bachelor's degree	29% (116)
	Masters and above	8% (32)
Contribution to family economy	Mother	68% (272)
	Father	100% (400)
Financial Management	Mother	58% (232)
	Father	21% (84)
	Both	21% (84)

Source: Author's compilation based on survey data

Results of Conceptualized Model 1

The first model was developed to examine the relevance of FSIM in the context of Sri Lanka considering data from all three reports; father, mother and child reports. As the first step, EFA was conducted and Bartlett's Test of Sphericity was used to test the hypothesis that the correlation matrix is an identity matrix. In this first model, the test statistics for sphericity was 8358.057 at 0.01 significance level which shows that the set of variables has sufficient correlation to develop the factor model. This also proves that the use of this factor model is acceptable. The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy was 0.901 which is very close to 1 and this shows the significant sampling adequacy of the factor model.

Principal Component Analysis (PCA) was conducted to extract data for the EFA using the software STATA as the model needed to reduce the large collection of correlated observed variables. In the PCA analysis, linear combinations of the observed variables are formed and the total variance is considered to derive factors that contain small levels of specific and error variance. Factors were rotated to be more meaningful and interpretable using Varimax with Kaizer Normalization. This act has the benefit of maximizing the variances of the loadings within the factors which enhance the interpretability of the factors.

9 factors were extracted from the first model with eigenvalue for each factor greater than 1 as related to the conceptualized model. These 9 factors account for 67% of total variance and were taken from rotated component matrix for the SEM model build up based on factor loadings of measured variables which were greater than 0.4 (Table 1 – Appendix). Some of the measured variables were left out because those variables are not loaded into one factor as expected in the conceptualized model. Economic distress, negative marital interaction, and parental involvement were determined as separate latent factors for father and mother without any problem of multicollinearity in the model since these factors needed to be considered separately.

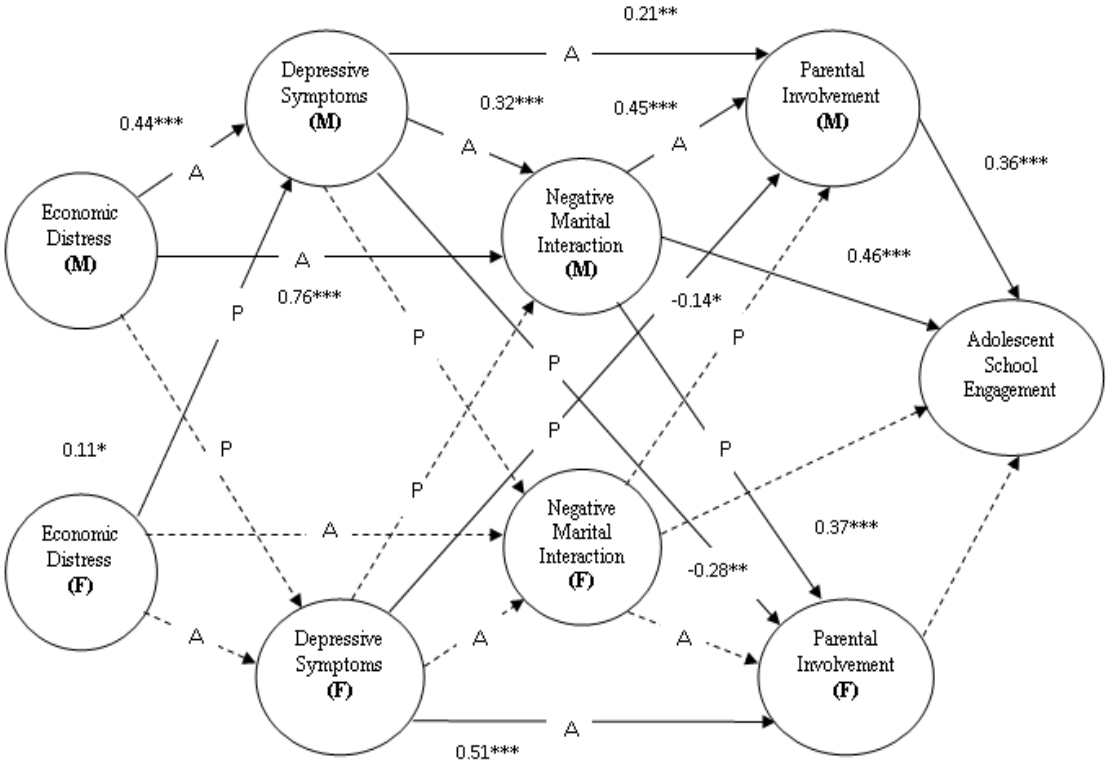
Internal consistency of the set of variables was measured as a reliability measure of the conducted factor analysis using Cronbach's Alpha. This first factor model has a Cronbach's Alpha of 0.913 which lies between 0.900 and 0.925 in 95% of confidence interval. 7 observations which may had missing data were excluded and 393 observations which explained 98.3% of the total sample (n = 400) were included in the factor analysis.

To confirm the factor model, this study also conducted a CFA using maximum likelihood estimation which basically identifies the covariance between latent factors. To determine the adequacy of the model fit, the study relies on several statistical tests: RMSEA, CFI, TLI, SRMR and CD. In this model the RMSEA value is 0.054 which is good as the requirement is to remain below 0.08. CFI and TLI values are expected to be greater than 0.9 for the best model fits and here it is 0.918 for CFI and 0.904 for TLI which says that the model fit is good. SRMR requirement is also fulfilled as it is less than 0.08 (0.053 value). CD is 0.999 which is exceedingly close to 1 and hence all the tests prove that the factor model is appropriate in terms of goodness of fit which is generally a rare situation in conducting factor analyses according to literature.

According to the SEM results of this first conceptualized path model, only the pathways of mothers' negative marital interaction and mother's parental involvement are significant for adolescents' school engagement with positive coefficient β values of 0.46 and 0.36 respectively at 0.01 significance level. There are positive relationships between mother's economic distress, depressive symptoms, negative marital interaction and parental involvement which were identified as actor effects of mother while the same actor effects of father are insignificant except the positive impact of depressive symptoms on his own parental involvement (see the Table 4 and Figure 4for β and p values for relationships). SEM results also proves the interdependence of dyadic relationships between father and mother in the family according to the APIM approach as there are some significant partner effects which supports the hypothesized pathways between father and mother. There is a positive impact of father's economic distress on mother's depressive symptoms with a coefficient β of 0.11 which is significant at 0.1 significance level while also having a positive effect of mother's negative marital interaction with 0.37 coefficient β value at 0.01 significance level on father's parental involvement. Father's depressive symptoms have a negative impact on mother's parental involvement with -0.14 β value at 0.1 significance level and on the other hand mother's depressive symptoms also have a negative impact on father's parental involvement with a β value of -0.28 which significant at 0.05 significance level.

The model fit of SEM was also measured through the same fit indices that had been used in CFA and were as good with RMSEA at 0.062 which is lower than the threshold of 0.08 and CD is 0.987 which is exceedingly close to 1 but CFI and TLI recorded lower values than 0.9 (0.890 and 0.875 respectively). But those values are also extremely close to the threshold and hence the SEM model can be accepted as most of the previous literature suggested that achieving appropriate fit indices was challenging.

Figure 4. SEM Results – Conceptualized Path Model 1 (Family perspective)



Source: Author's compilation based on survey data using STATA output of SEM in model 1
Note. A – Actor effect, P – Partner effect, F – Father, M – Mother

Table 4. SEM Results – Model 1

Pathway	Coefficient (β value)	P value	Support to hypothesis
Actor Effects			
MED → MDS	0.4445***	0.000	Supported
FED → FDS	-0.0572	0.555	Not Supported
MDS → MNMI	0.3192***	0.000	Supported
FDS → FNMI	0.0580	0.519	Not Supported
MED → MNMI	0.7682***	0.000	Supported
FED → FNMI	0.0727	0.302	Not Supported
MDS → MPI	0.2028**	0.012	Supported
FDS → FPI	0.5149***	0.000	Supported
MNMI → MPI	0.4589***	0.000	Supported
FNMI → FPI	0.0002	0.998	Not Supported
Partner effects			
MED → FDS	-0.1086	0.251	Not Supported
FED → MDS	0.1070*	0.075	Supported
MDS → FNMI	-0.0063	0.921	Not Supported
FDS → MNMI	0.0208	0.519	Not Supported
MDS → FPI	-0.2891**	0.041	Supported

FDS → MPI	-0.1422*	0.055	Supported
MNMI → FPI	0.3727***	0.010	Supported
FNMI → MPI	0.0398	0.456	Not Supported
Direct effects to ASE			
MNMI → ASE	0.4692***	0.000	Supported
FNMI → ASE	0.0144	0.761	Not Supported
MPI → ASE	0.3689***	0.000	Supported
FPI → ASE	-0.1023	0.198	Not Supported

Source: Author's compilation based on survey data using STATA output of SEM model - 1

Note. MED – Mother's Economic Distress, FED Father's Economic Distress, MDS – Mother's Depressive Symptoms, FDS – Father's Depressive Symptoms, MNMI – Mother's Negative Marital Interaction, FNMI – Father's Negative Marital Interaction, MPI – Mother's Parental Involvement, FPI – Father's Parental Involvement, ASE – Adolescent's School Engagement

P < 0.1*, P < 0.05**, P < 0.01***

Results of Conceptualized Model 2

The second model was developed to examine the FSIM in adolescent perspective. In this model also, all three steps of EFA, CFA and SEM were conducted to examine the direct and indirect impacts of family economic hardship on adolescent school engagement and their mental health as conceptualized based on the literature. Indirect impacts are mediated through their awareness of parental marital interaction and involvement in their school engagement. APIM approach was also used for this model and actor and partner effects of dyadic relationship between father and mother have been examined from the adolescent perspective here.

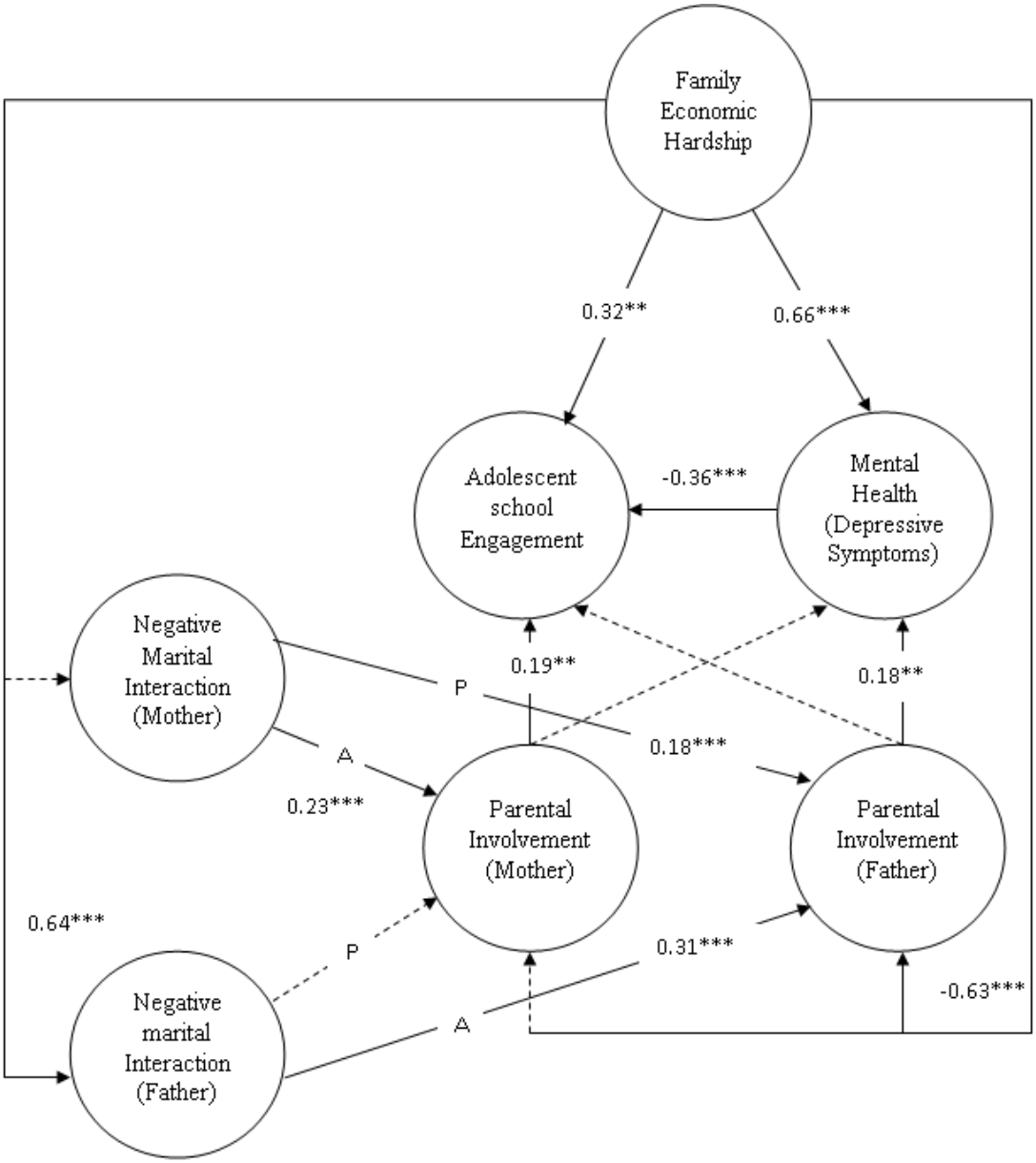
KMO value of sampling adequacy is 0.726 which is acceptable and Bartlett's test for sphericity is also significant at 0.05. Factor loadings are above 0.4 (see Table 2 – Appendix) and 7 factors were extracted using PCA and rotation method of Varimax with Kaizer Normalization as eigenvalues are greater than 1 for which explain 65% of total variance. Cronbach's Alpha is 0.749 which is an acceptable internal consistency as greater than 0.7. 399 observations excluding one observation from total sample of 400 were included in the measurement model of EFA.

CFA approved the model fit with 0.078 value of RMSEA and 0.065 value for SRMR which is smaller than 0.08. CD is near to 1 with the value of 0.831. CFI and TLI values are 0.781 and 0.744 respectively which are not close to 0.9 but can be acceptable as moderately satisfying the required criteria according to the literature.

SEM results suggest that there are positive effects of family economic hardship on adolescents' school engagement and their mental health problems (see Table 5 and Figure 5). The strength of positive effect of family economic hardship on adolescents' mental health problems (β – 0.66 at 0.01 significance level) is greater than the positive impact it has on school engagement (β – 0.32 at 0.05 significance level). More specifically, the mental health problems of adolescents which is affected by family economic hardships has a negative impact on their own school engagement with a coefficient β value of -0.32 at 0.01 significance level. As in the first model also, father's parental involvement is insignificant for adolescents' school engagement but it has a positive impact of 0.18 (significance level – 0.05) on their mental health problems. Mother's parental involvement has a positive impact (β – 0.19 at 0.05 significance level) on adolescents' school engagement same as in the first model but is not significant for their mental health. According to adolescents' point of view, family economic hardship has no impact on mother's negative marital interaction or parental involvement as those pathways are insignificant in this model but father's parental involvement has been negatively affected by family economic hardships with -0.63 β value at 0.01 significance level while also having a positive impact on father's negative marital interaction with β value of 0.64 at 0.01 significance level. Actor effect of negative marital interaction on parental involvement of both father and mother are positive at 0.01 significance level (β – 0.23 for mother and β - 0.31 for father) according to the adolescents' awareness. Only significant partner effect in the model is between mother's negative marital interaction and father's parental involvement which is also positive with 0.18 β value at 0.01 significance level.

Goodness of fit of this model is satisfactory as RMSEA value is 0.078 and it has 0.067 value for SRMR while CD is 0.831 which is also acceptable. CFI and TLI were not satisfied as they are below 0.9 with the values of 0.778 and 0.745 respectively.

Figure 5. SEM Results – Conceptualized Path Model 2 (Adolescents' perspective)



Source: Author's compilation based on survey data using STATA output of SEM in model - 2
Note. A – Actor effect, P – Partner effect.

Table 5SEM Results - Model 2

Pathway	Coefficient (β value)	P value	Support to hypothesis
Actor Effects			
MNMI → MPI	0.2365***	0.001	Supported
FNMI → FPI	0.3184***	0.003	Supported
Partner effects			

MNMI → FPI	0.1852***	0.009	Supported
FNMI → MPI	-0.0632	0.541	Not Supported
Direct effects to ASE and ADS			
FEH → ASE	0.3294**	0.013	Supported
FEH → ADS	0.6647***	0.000	Supported
MPI → ASE	0.1912**	0.020	Supported
MPI → ADS	0.1215	0.131	Not Supported
FPI → ASE	0.0641	0.515	Not Supported
FPI → ADS	0.1828**	0.047	Supported
ADS → ASE	-0.3633***	0.003	Supported
Other effects			
FEH → MNMI	0.0383	0.559	Not Supported
FEH → FNMI	0.6436***	0.000	Supported
FEH → MPI	0.1396	0.181	Not Supported
FEH → FPI	-0.6354***	0.000	Supported

Source: Author's compilation based on survey data using STATA output of SEM model - 2.
Note. FEH – Family Economic Hardship, MNMI – Mother's Negative Marital Interaction, FNMI – Father's Negative Marital Interaction MPI – Mother's Parental Involvement, FPI – Father's Parental Involvement, ADS – Adolescent's Depressive Symptoms, ASE – Adolescent's School Engagement.
P < 0.1*, P < 0.05**, P < 0.01***

Discussion

It should be noted that findings of family processes in this study differ from previous studies. It is important then to examine these differences to gauge if they are indeed a result of contextual differences, particularly since they then may provide some important policy directions for the future. The significant pathway between the two latent constructs of mother's parental involvement and mother's negative marital interaction being unexpectedly positive suggests a high involvement of mothers' in their children's lives occurring even under high levels of marital conflict. The other seeming anomaly is between parental involvement of mother and their depressive symptoms which has an unexpected positive impact, possibly again reflecting their commitment to children. This suggests that the fact that women's main role in Sri Lanka is perceived to be the reproductive role emphasizes her social responsibility of raising children and pursuing their development. In most cases, empirical evidence from small community studies captures how totally committed to her family mothers are even when the family suffers from financial difficulties. In most cases, in the Sri Lankan context most mothers support their children by engaging in school work because they consider education to be the sole option for children in climbing up the social ladder and escaping poverty. Social value systems tend to make mothers responsible for families and children's well-being. Hence mothers are instinctively emotionally and socially stimulated to become involved in their children's lives. This includes taking on greater family's responsibilities even under severe family economic hardships, regardless of fathers' involvement. In most of the Sri Lankan families, fathers tend to be seen as the "breadwinner" and are often spared from household chores and responsibilities. It also lessens their expected interaction with children and their educational activities. Societal expectations and traditions that often accept mother to play the significant role as caregivers rather than fathers is also supported by these study findings.

There is a positive impact of fathers' depressive symptoms on fathers' parental involvement. Kessler (2003), highlights the consequences in gender differences in depression. Based on that Williams and Cheadle (2015) highlight that fathers in general often have lower levels of depression than mothers. On the other hand, the unwillingness of fathers to express their true feelings (desire to be unemotional to meet social artificial gender norms) might be the reason for this unusual result.

There is also the possibility that in developing counties like Sri Lanka (particularly in the rural sector), as compared to the west there is unawareness of mental health issues including feelings of depression (often misunderstood and not discussed freely with others, with the view that sufferings are often the result of karma or fate and needing to be borne stoically or resolved through one's own effort, rather than acknowledging that economic hardship could lead to mental health issues that could need interventions and support).

There are four significant pathways of partner effects which support the hypothesized relationships (Table 4). Father's economic hardship has affected positively on mother's depressive symptoms as proved by many studies. It clearly implies the interdependency of the dyadic relationship between father and mother. According to Ellawella et al (2015), factors related to the spouse impact on mother's perception of stress. Therefore when the spouse is facing economic distress mothers tend to be emotionally depressed due to financial insecurity as a parent. Moreover mothers are busy looking after everyone else in the family hence the possibility of depression is greater for mothers than fathers. Father's depressive symptoms also can negatively relate to mother's parental involvement again as a result of the above argument. On the other hand, mother's depressive symptoms could also have a negative impact on father's parental involvement which shows the interdependency of the dyadic relationship between them. Generally when mothers have to be more concerned about their depressed spouses, they simultaneously miss out on their children's activities. Alternatively they may try to compensate for their spouses neglect by getting more involved in their children's well-being. Mothers always worry about family's well-being often putting their own well-being as least important. In Sri Lankan society, the main resource provider of the family is the father and economic distress and depressive moods could be seen as a threat to the future of family and this might negatively affects the mother's role as the main caregiver to children, particularly when it is adolescents and academic activities that are the concern.

Mother's negative marital interaction is also positively related to father's parental involvement as also proved by the other model of this study that involves the adolescent perspective of family relationships which is different from the results in such previous studies. It may be explained that, when fathers' interaction with spouses falter they tend to be more involved with their children. In the Sri Lankan cultural context, in the past and even to an extent today, parents keep marriages going for the sake of children.

Involvement with adolescents may differ according to culture. In Sri Lanka, even in the present day parents think they have a major role to play in guiding children even in late adolescence. Sri Lankan parents are less likely to perceive adolescents' autonomy and thus react to adolescent behavior with a frustration which in turn may leads to increased control of this children. Moreover, development from childhood into young adulthood brings new cultural and societal opportunities and expectations (Svetlana & Ekaterina, 2014) which traditional parents may fail to understand as they strongly believe in their culture. This is also a pressure for adolescents and they have limited opportunities for social networking. Mental pressure of adolescents are increased under such circumstance.

In addition to the findings of first model, the findings of second model (Table 4 and Figure 5) which is from an adolescent perspective also implies important contextual differences of relevance of FSIM to a particular society when compared with previous international studies. Most of these studies have been conducted from a family perspective which had no chance to examine the impact of economic hardship on adolescents' feelings and emotions. And also, family economic strain and their developmental outcomes are mediated by their awareness of family violence and negative interactions. This can be proved by some of the results of path diagram in SEM analyses related to the first conceptualized model. Possibility to have dishonest data is also limited unlikely in the first model as these data have taken directly from children. One concern regarding this study is the issue of data accuracy: the questionnaires were returned in a sealed envelope through the adolescent and this may have prevented parents from being totally honest in their responses.

Results of second model shows that there are positive impacts of family economic hardship on adolescents' school engagement and adolescents' depressive symptoms. Positive relationship between family economic hardship and depressive symptoms of adolescents has been proved by many studies. For instance Fox et al (2000), stipulate that troubled adolescents for their financial hardships are habitually suffering from various somatic complaints, including stomachaches, loss of appetite, depression, sleeplessness, and lack of concentration. Adolescents in this sample are more engaged with school work when they are faced by household financial stress which might reflect adolescent's need for getting educated in middle and lower income families in the Sri Lanka.

Since most of the families in the sample are middle class families which tend to be think of education as the main solution available to their children, adolescents might face pressure to engage in school work. But educational success may be doubtful as their depressive symptoms are negatively related to their school engagement. Moreover, depression can decrease productivity of adolescents in ways that diminish the quality of human capital. Hence, the problem raised is that mental health issues, arising from financial hardship must be addressed if such adolescents are to benefit from increased school engagement.

According to adolescents' point of view both actor effects of the dyadic relationship between mother and father related to negative marital interaction and parental involvement were positive and significant. That might have ensued from parents who had conflicting relationships with their partners tending to be more involved in their children's lives since they consider their children as a responsibility. Some previous studies argued that SES or conflictive family environments are not significant in parental involvement as it is motivated by the contextual processes like parent's social networks in most of the time (Sheldon & Epstein, 2003). Moreover, parents' beliefs about child rearing, child development and appropriate home support roles in children's education are also created their role in involvement (Green et al., 2007). Hence the study can come up with an argument i.e. when negative marital interaction between partners increase, the impact of other factors for being involved with their children may get increased as a result of social beliefs, social responsibility and social networking.

Since men may normally tend to be more easily flooded by hard emotions and may have difficulty in getting involved with their children when they have stressful life events such as economic distress and negative marital interaction (Gottman, 1993), data in this study also supports the pathway between family economic hardship and father's parental involvement being negative and significant according to adolescents' perspective. On the other hand, there is a positive relationship between family economic hardship and fathers' negative marital interaction which is again true according to above argument. However, the pathway of partner effect between mother's negative marital interaction and father's parental involvement was positively related which might be considered as that the family responsibility of raising children lies in the hand of father when mothers are emotionally distressed due to stress as in the case of financial hardship. This put pressure on fathers to be more involved in children's lives under the circumstance of marital instability. Even though most of the scholars suggest that there is an emotional crossover which one partner is affected by the mood of other partner (Thompson & Bolger, 1999), mother's parental involvement was not supported by the pathway of father's negative marital interaction. Women are better able to buffer these negative feelings when interacting with their children according to Gottman (1993) and continue to be involved regardless of other stressors and feelings.

Family is the fundamental institution of the socialization process of adolescence which is particularly a more critical period of individual's life. Under good conditions and background, it prepares adolescents to step into adulthood by undertaking beneficial roles in the community. Parenting is impactful at this time. According to Umberson et al (2010), challenges in parenting a young child increase psychological distress. That can adversely affects children and the health of the whole family. According to the adolescents' point of view, parenting by fathers' has a positively related impact on adolescents' depressive symptoms as in most of these stressed families, men are more likely to be punitive and arbitrary toward other family members and harsh parenting of fathers may lead their children to be mentally depressed which in turn can be negatively related to their developmental outcomes in life.

Adolescence is a crucial and significant period of an individual's life (Boardman &Onge, 2005) and the challenges which youngsters face at this stage may have life-long impact (Wheaton and Clarke 2003). School and education should not be a torturing factor for adolescents under a family pressure due to suffering from economic hardships but should be interactive and supportive environments in their life development with good health. According to findings of this study adolescents' awareness with family economic hardships and interactions reveal that they are under mental pressure even though they tend to be more involved in school activities. Family interactions are more significant in their lives in different angles as discussed above and mother's role is somewhat significant compared to the father's role in adolescent lives. But the impact of father also cannot be left out as shown in the above discussion because family is necessarily an integrated whole. Improving mental health is important from the point of developing future human capital of the household and country. The direct impact of family economic hardship from an adolescents' point of view has no significant negative impact on their school engagement but has a negative impact on their mental health. Mental health mainly depends on social institutions with socialization and social networking being highly connected with those institutions.

Hence, developing countries like Sri Lanka need to pay as much attention to mental health as they pay on physical health without considering it as a social embarrassment or issue of stigma.

Limitations

This study was developed on a cross sectional design while having many time varying factors like individual characteristics, economic hardships and family interactions which cannot be adequately analyzed through cross sectional data. The study had to be limited to one geographical location due to constraints of time and resources. The demographics of the sample suggest that most of the families were middle income families while others were low income families but the study has conducted a single quantitative analysis (due to author specific constraints) which is more interpretable if it could be conducted separately for both low and middle income families.Interviewer administered questionnaires may have extracted more information, but this option was not feasible given time and resource constraints. The survey was based on a structured self-administered questionnaire which survey participants had the chance of not responding to with their true feelings (many sensitive questions were included in the questionnaire) which may have affected study findings. This suggests that interview based surveys should ideally be used for future research. Moreover, this study targeted only late adolescence. Family economic distress affects children and early adolescents and this too has threats to future human capital generation.This study focused on school engagement and mental health as developmental outcomes in adolescence but there are many other types of outcomes such as impact on social life and addictive behaviors which are not considered in this study. The scope of future research is not time constrained could be much broader. This study was very important despite its limitations as an exploratory research exercise. It resulted in highlighting some major issues relating to adolescents in terms of future human capital formation. Many avenues of future research exist that could enhance evidence on this issue for the future.

Conclusion

The study highlights the importance of family as the basic social foundation in economic development of a country. Human capital generation is crucial for achieving high quality development. Individuals should have good mental health as well as physical fitness to perform well in their activities. An individual's physical, emotional and psychological development begins within the family environment. Family facilitates the socialization process during adolescence, one of the most critical periods of an individual's life. Under beneficial conditions, the household provides adolescents the opportunity to step into adulthood undertaking productive roles in the community. As a result, 'quality of family life' is an important and influential factor and it is considered to be mainly a function of economic resources.Mental health is severely affected by distressful life experiences and in developing countries it is in an increasing trend as most persons tied up with the market economy, often involved in the informal sector and vulnerable to the uncertainty and risks that are a predominant characteristic of globalization and capitalist economies. Crises in the global economy, inequities of international trade, even the impacts of climate change, impact of employment and prices domestically, making earnings unstable and subjecting many households to economic hardship, transitory poverty and exacerbating inequality in the economy, that in turn creates economic distress through relative poverty, a problem of then associated with the middle class, while the poor are subject to both absolute and relative poverty impacts. Hence this study attempted to expand the knowledge on the links between economic distress and adolescent outcomes which mediates through family interactions which is crucial in intervening to reduce the emotional instability faced by adolescents that can adversely affect their human capital in the future.

The study has examined the relevance of FSIM for fulfilling the above objective which posits the idea that family's economic hardship influences children's and adolescents' developmental outcomes indirectly (as well as directly) through a series of mediating family processes (parental conflict, parental involvement). The results of two conceptualized models suggest that the above theory is applicable in the context of Sri Lanka as well but that contextual differences cause some discrepancies in the results. Mothers seem to play a more significant role in adolescents' lives than fathers, but fathers cannot be left out as the APIM approach proves the interdependence of dyadic relationships between father and mother in Sri Lankan scenario. Family economic hardship has directly affected adolescent's mental health as recorded as suffering from depressive symptoms which in turn have a negative impact on school engagement. Adolescents are involved in school activities even when facing household economic pressure as education is seen as the means of climbing the social ladder.

But productivity and quality of this education is debatable given the impact of mental health problems arising from economic hardship. Family pressures of father and mother resulting from economic hardship could indirectly impact on adolescent's lives.

Recommendations

Three major recommendations emerge from this study. Firstly economic hardship has an adverse impact on many persons and in many ways and has to be a predominant issue addressed through economic policy. This can take four main forms: firstly addressing chronic poverty through strengthening livelihood programs. Secondly sound macroeconomic policies should be in place to counteract issues such as business cycle impacts and inflation that can result in financial hardship. Thirdly policies that are targeted at reducing income and wealth inequality are important to lessen the adverse impacts of relative poverty that lead to issues of indebtedness and over consumption, particularly by the middle class. Fourthly income support systems and transfer payment schemes and public goods should be used to support those in poverty: both chronic and transitory poverty.

Secondly the study highlights the need for greater involvement of the Social Services Ministry through collaboration with the Ministry of Education, and specifically working at school level to help counteracts the practical problems created by economic hardship. Evidence of such programs in developed countries is very positive where illness of parents or temporary unemployment is responded to by interventions from social services in the form of meal provision and transport allowances for school children.

Thirdly and most importantly responding to the issues of depression faced by mothers and adolescents, possibly fathers too though this does not get recorded as significant in this study. Mental health problems are likely to be severe as society is not aware much of this phenomena and consider a social embarrassment and cause for stigmatization, so government intervention is essential in terms of mental health programs and counseling as future human capital can be severely affected by economic hardships and negative family processes.

Consequently, mental pressure under economic distress should be addressed systematically. In such a background, state responsibility is crucial in working for more mental health awareness and services. Public discourse of mental health development should be funded by government as society lacks the knowledge and awareness to deal with this issue at present. Sri Lanka has a well-developed health sector in terms of physical curative care but it has historically focused on maternal and child health issues. It is now essential to focus on mental health issues, and on adolescent health in particular.

Modern life is stressful and more so when economic distress pervades the household. Counseling is becoming a very important facility at school and community level to counteract the mental issues related to economic distress, family conflict and depression. Family interactions and social networking can help, but independent wider perspectives provided by counseling and dissemination of mental health messages should be advocated and supported by the government, with the realization that this would improve well- being in the present and be an investment, through safeguarding and enhancing future human capital.

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Appendix

Table 1. Factor Loadings – Conceptualized Model 1

Factor	Measured variable	Factor Loading
Mother's Economic Hardship	It is difficult to afford much more than the basics with our current income	0.737
	With our current income it is difficult to make the ends meet	0.686
	I think that I will have to scale down my living standard in the following month	0.807
	I am often worried about our financial situation and I am frightened about what is going to be done if I or my partner would lose the job	0.585

Mother's Depressive Symptoms	How often within the past months you angry or irritable? (e.g.; argued parents about money or things other than money)	0.781
	How often did you feel depressed as a parent within the past month?	0.805
	How often did you feel helpless or hopeless within the past month?	0.783
	How often did you feel lonely within the past month?	0.783
Mother's Negative Marital Interaction	Verbal Attack (verbally attack on your partner)	0.636
	Contempt (disgust shown toward Partner, mocking statements, criticisms of the other person)	0.509
Mother's parental Involvement	Attend your child's activities and engage activities with your child	0.728
	Give encouragement to your child	0.795
	Take care of your child (like fix him/her food or pick him/her up from school)	0.672
	Make it easy for your child to talk to you about their problems and share their ideas and act as a friend to your child	0.733
Father's Economic Hardship	Burden of expenditure on food items and clothing	0.735
	Burden of expenditure on childcare and child related activities (Studies or pocket money)	0.492
	Burden of expenditure on medicine and healthcare	0.765
	Burden of expenditure on paying bills and house related costs (Rental or other)	0.739
Father's Depressive Symptoms	How often within the past months you angry or irritable? (e.g.; argued parents about money or things other than money)	0.661
	How often did you have trouble in focusing, making decisions or remembering things within the past month? (Concentration problems)	0.786
Father's Negative Marital Interaction	Verbal Attack (verbally attack on your partner)	0.580
	Hostility (angry, critical, disapproving, rejecting or contemptuous behavior is directed toward the other in the case of spouse's behavior, appearance or personal characteristics)	0.755
	Angry Coercion (attempts to control or change the behavior or opinions of other, or attempts in a hostile manner to get partner to do what you want)	0.712
	Contempt (disgust shown toward Partner, mocking statements, criticisms of the other person)	0.667
Father's Parental Involvement	Take care of your child (like fix him/her food or pick him/her up from school)	0.598
	Make it easy for your child to talk to you about their problems and share their ideas and act as a friend to your child	0.828
Adolescent School Engagement	I am always interested in taking part of extra-curricular activities at school	0.806
	I pay attention in class	0.789
	I study at home even when I do not have a test	0.671
	I read extra books to learn more about things we do in school	0.781
	I check my schoolwork for mistakes	0.765

Source: Author's compilation based on STATA output of EFA

Table 2. Factor Loadings – Conceptualized Model 2

Factor	Measured variable	Factor Loading
Family Economic Hardship	My parents don't have enough money for my school activities and extra-curricular activities	0.680
	We don't have enough money for new clothes	0.542
	My parents don't have enough money for the foods I like to eat	0.429
	We don't have enough money to do things I want to do for fun with my friends	0.736
	We don't have enough money for our health care	0.435
	There is no extra money to do something fun as a family	0.643
	We can't afford a nice house and private vehicle	0.566
Adolescent's Depressive Symptoms	How often within the past months you angry or irritable? (e.g.; argued parents about money or things other than money)	0.503
	How often did you feel that everything you did was an effort within the past month? (Loss of energy or even small tasks are exhausting or take longer to complete)	0.773
Mother's parental Involvement	Attend your activities and engage activities with you	0.777
	Give you encouragement	0.726
	Take care of you (like fix you food or pick you up from school)	0.754
	Help you with homework	0.665
	Act as a friend to you and make it easy to talk to her about my problems	0.684
Father's Parental Involvement	Give you encouragement	0.776
	Take care of you (like fix you food or pick you up from school)	0.654
	Help you with homework	0.589
Mother's Negative Marital Interaction	I heard my mother say mean things to my father	0.812
	I heard my mother shouting at my father and disapproving or rejecting his behavior, appearance or personal characteristics	0.745
	I saw my mother refusing father's company and neglect him disrespectfully	0.725
	My mother yells at me when she gets angry with my father	0.776
Father's Negative marital Interaction	I heard my father say mean things to my mother	0.709
	I heard my father shouting at my mother and disapproving or rejecting her behavior, appearance or personal characteristics	0.737
	I saw my father refusing mother's company and neglect her disrespectfully	0.743
	My father yells at me when he gets angry with my mother	0.749
Adolescent School Engagement	I study at home even when I do not have a test	0.675
	I check my schoolwork for mistakes	0.657
	If I do not know what a word means when I am reading, I do something to figure it out	0.545
	I read extra books to learn more about things we do in school	0.676
	If I do not understand what I read I go back and read it over again	0.720

Source: Author's compilation based on STATA output of EFA