



Family Risk and Protective Factors and Children's Literacy and
Social Skills in Guyanese Families

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Exposure to Difficult Circumstances

- Family violence
- Exposure to conflict
- Natural disasters
- Poverty
- Pandemic
- Statelessness
- Food insecurity
- Poor neighborhood infrastructure

Disasters—one-time or ongoing event of natural or human cause—that lead to stressors (threat of death, bereavement, disrupted social support, insecurity of basic needs such as food, water, housing, access to close family).

Sample of 2,030 children 2-17, 13.9% report a lifetime exposure to disaster

4.1% report a disaster in past year

Adults report a lifetime prevalence rate of 11-30%

Risk Factors

Tsunami, war, and family violence all contributed to poor child adaptation

Evidence of cumulative risk not fully supported

COVID-19: Impact on children

Lockdowns, social isolation, and changes in daily routines have affected adults' mental health and parenting negatively

Symptoms of stress seen in children include nervousness, agitation, aggression, separation fears, and clingy behavior (see [Cohen & Bamberger, 2021](#)).

Reduced opportunities for both indoor and outdoor play activities have also been linked to mental health difficulties in children in some cultures.



Depression

- Depression hampers the ability of parents to **interpret and meet** the emotional needs of young children (Parfitt et al., 2016).
- Depression is linked to **internalizing and externalizing behaviors, passivity, anxiety, attention deficit, and oppositional defiant disorders in children** (Breux et al., 2014; Meadows et al., 2007; Sweeny & McBeth, 2016).

Intimate Partner Violence (IPV)

- Physical intimate partner violence increases the risk of:
 - Children being neglected,
 - Injured
 - Experiencing social isolation, constant stress, and tension
 - Associated with internalizing and externalizing behaviors and trauma symptoms

(Bogat et al., 2006; Holmes, 2013; Rosser-Limiñana et al., 2020; Roopnarine & Dede Yildirim, 2017).

Goal of Study 1:

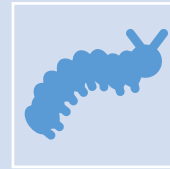
- Do parental cognitive engagement and parental guidance mediate the associations between socioeconomic and home environment educational resource risk factors and preschoolers' literacy and social skills?

Properties of Positive Psychology

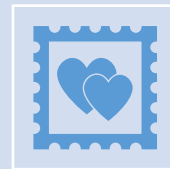
Positive Environments



Positive Psychology



Conditions and processes that contribute to the flourishing or optimal functioning of individuals, groups, and institutions (Gable & Haidt, 2005)



Research focuses on constructs that involve the importance of human interactions, for example, gratitude and forgiveness (Vazquez, 2013); strengths of cultural groups in communities affected.

Positive Parenting—Protective Factor

Sensitively attuned engagement

Warmth and affection, cognitive engagement, instilling hope

Insulating children from risks associated with family and neighborhood—e.g., encouragement of accurate cognitive appraisals and active coping, providing opportunities for play



Family Theoretical Framework (STUDY 1)

Family stress model (Conger & Conger, 2002)

Persistent economic hardship---affect
parents' functioning and their ability to meet
the daily economic, social, and cognitive
needs of children

Then affect children's cognitive and social
development negatively

Definitions

- **Socioeconomic risk: wealth index quintile** (source of drinking water, main sanitation facilities, number of rooms for sleeping, flooring materials, roof materials, wall materials, and main fuel for cooking) and possessions (e.g., television, radio, table, bed, sofa, water tank, refrigerator, tractor, domestic animals, and agricultural land) **and education** (0= Pre-primary or no education, 1 = Primary, 2 = Secondary, 3 = College level or higher)
- **Home Environment Educational Resource Risk Index:** (Availability or nonavailability of home environment educational items (number of children's books or picture books, homemade toys, and toys from shops)
- **Parental positive guidance** (explained why the behavior was wrong; gave the child something else to do; and took away privileges, forbade something child liked or did not allow him/her to leave the house)
- **Parental cognitive engagement** (read to child, tell stories, count/name objects, and sang songs)



TABLE 2

Proportion of endorsement of positive discipline, harsh physical punishment, physical punishment, and psychological aggression items by country

<i>Variables</i>	<i>Total (n = 5628)</i>	<i>Belize (n = 309)</i>	<i>Dominican Republic (n = 3968)</i>	<i>Guyana (n = 555)</i>	<i>Jamaica (n = 321)</i>	<i>Suriname (n = 475)</i>	χ^2 (df = 4)
Positive discipline							
Took away privileges, forbade something child liked or did not allow him/her to leave house	45.8%	53.7%	45.7%	40.1%	44.2%	49.1%	22.93 ^a
Explained why behaviour was wrong	71.7%	88.6%	67.9%	77.8%	78.9%	80.8%	134.12 ^a
Gave child something else to do	27.3%	50.0%	19.9%	40.3%	36.3%	53.2%	361.49 ^a
Physical discipline							
Spanked, hit or slapped child on the bottom with bare hand	39.6%	47.4%	36.8%	34.4%	58.1%	52.1%	104.03 ^a
Harsh physical discipline							
Shook child	17.6%	12.3%	15.8%	20.1%	25.2%	28.0%	29.44 ^a
Hit child on the bottom or elsewhere on the body with something like a belt, hairbrush, stick or other hard object	17.0%	24.0%	15.8%	16.9%	22.9%	17.7%	32.00 ^a
Hit or slapped child on the face, head or ears	2.6%	3.9%	2.1%	3.3%	1.6%	6.3%	26.69 ^a
Hit or slapped child on the hand, arm or leg	17.4%	30.1%	9.5%	31.8%	48.4%	37.1%	666.38 ^a
Beat child up, that is hit him/her over and over as hard as one could	0.9%	1.3%	0.6%	0.2%	1.6%	4.0%	26.46 ^a
Psychological aggression							
Shouted, yelled at or screamed at child	55.6%	45.5%	52.2%	55.8%	65.9%	82.9%	164.20 ^a
Called child dumb, lazy, or another name like that	7.5%	8.1%	5.0%	7.0%	9.7%	26.7%	240.20 ^a

^a $p < .001$.

Composite Mean Weighted Effect Sizes for Child Construct (N=88 studies)—Physical punishment



Construct	d
(Measured in Childhood)	
Immediate Compliance	1.13
Moral internalization	-0.33
Aggression	0.36
Delinquent and antisocial Behavior	0.42
Quality of parent-child Relationship	-0.58
Mental health	-0.49
Victim of physical abuse	0.69

Cultural Group	Sample Size (N=1,208)
African Guyanese	302
Indigenous (Amerindian)	311
Indo Guyanese	322
Mixed Ethnic	272



Sociodemographic Characteristics

- **25% were African/Black, 25.7% Amerindian/Indigenous, 26.7% East Indian, and 22.5% Mixed-Ethnic (e.g., East Indian/Black, Amerindian/Black).**
- **5.3% of caregivers had pre-primary school or no formal education**
- **24.2% had a primary school education**
- **59.4% had a secondary school level education**
- **11.2% had a college/university level education.**

- **54.6% attended preschool**
- **76.1% had no books in the home**
- **26.7%--absence of toys in home**

Parental Guidance

- **953 caregivers (78.9%) indicated that they explained to the child why a behavior was wrong**
- **524 (43.4%) gave the child something else to do**
- **672 (55.6%) took away privileges**
- **34.8% of caregivers used two guidance approaches**
- **29.4% used all three guidance approaches**



Cognitive engagement

21% of children had both parents read books to them (51.24% of children had only one parent read books to them)

24.59% of children had both parents name, count, or draw things with them (51.16% of children had only one parent name, count or draw things with them)

19.70% of children had both parents tell stories to them (50.17% had only one parent tell stories to them)

19.45% of children had both parents sing songs with them (50.58% had only one parent sing songs with them).

Table 2. Percentages of mothers' and fathers' engagement in cognitive activities by country

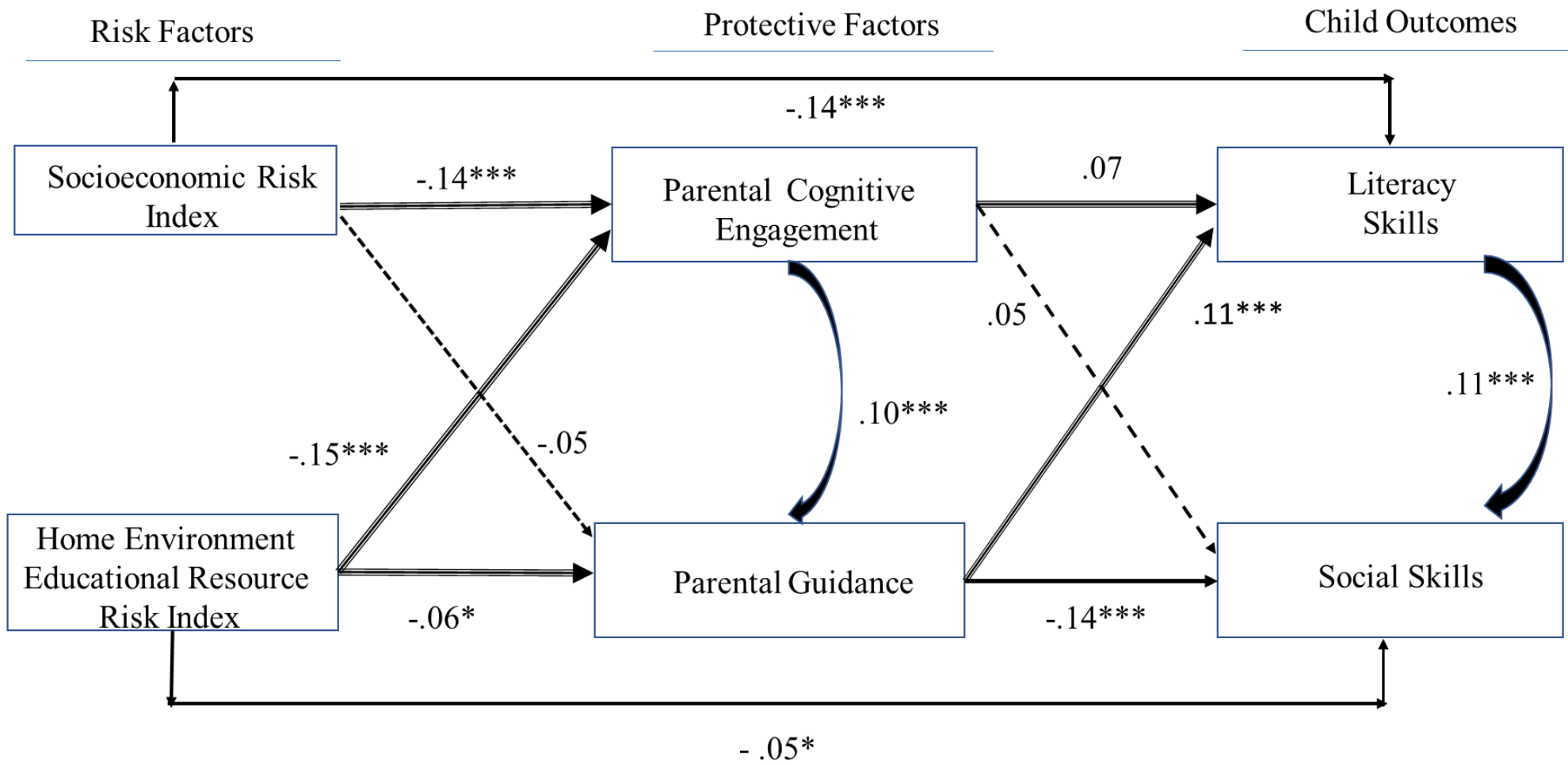
* $p < .05$, ** $p < .01$, *** $p < .001$

Country	Read books			Tell stories			Name/count/draw		
	Mother	Father	$\chi^2(df=1)$	Mother	Father	$\chi^2(df=1)$	Mother	Father	$\chi^2(df=1)$
Barbados	81.7 %	33.2 %	97.20***	76.2 %	24.3 %	104.17***	83.2 %	35.6 %	91.38***
Belize	58.9 %	27.3 %	148.10***	58.4 %	26.3 %	146.32***	61.6 %	28.2 %	162.37***
Dominican Republic	29.7 %	7.4 %	1206.40** *	33.0 %	9.4 %	1235.00***	27.4 %	9.3 %	829.72***
Guyana	56.9 %	19.0 %	385.07***	54.7 %	19.7 %	322.68***	65.3 %	20.7 %	503.97***
Jamaica	66.9 %	13.9 %	351.29***	54.9 %	11.7 %	257.54***	68.7 %	15.7 %	355.12***
Suriname	26.1 %	5.4 %	192.64***	31.6 %	6.7 %	245.38***	51.6 %	11.5 %	449.40***

Table 1*Inter-correlations among Variables in the Conceptual model*

	1	2	3	4	5
1. Family socioeconomic risk	1				
2. Home environment resource educational risk	.26***	1			
3. Parental cognitive engagement	-.17***	-.16***	1		
4. Parental guidance	-.07*	-.08**	.13***	1	
5. Child literacy skills	-.23***	-.14***	.10***	.16***	1
6. Child social skills	-.07**	-.01	.06*	-.14***	.10***

Figure 1
Standardized Path Coefficients for the Association Between Risk Factors, Protective Factors, and Child Outcomes



Note. The significant pathways are indicated by compound lines. Non-significant pathways are indicated by dotted lines.

Major Findings

- Socioeconomic risk had a direct negative effect on children's literacy skills
- Socioeconomic risk was not associated with children's social skills
- Home environment educational resource risk had an indirect effect on children's social and literacy skills
- Parental guidance had positive associations with both literacy and social skills

Study 2:

Roopnarine, J. L., Ong'ayi, D., Krishnakumar, A., Ali, A., & Primus, M. (in press)
Maternal Depressive Symptoms and Physical Intimate Partner Violence and
Children's Internalizing and Externalizing Behaviors in Guyana: Mediating Role of
Constructive Conflict Behavior (**American Journal of Orthopsychiatry, in press**)

Developmental Psychopathology Framework

Developmental Psychopathology:
Risk and protective factors; active
coping

Antecedent risk factors within
families and communities are seen
as influencing childhood
development directly and indirectly
through multiple layers of functioning
at the family, community, and child
levels (Rutter & Sroufe, 2000)

Factors associated with parent-child relationships and childhood development and education

Long lasting impact of early paternal deprivation

Negative early experience affecting biology and brain development (poverty, toxic stress)

ACE includes abuse, neglect and household dysfunction, including caregiver mental illness, substance abuse and interpersonal violence

Length of exposure (dosage), timing, and context

Rates of Depression and IPV

Around 4.1% of adults in Guyana, 7.1% of adults in Jamaica, and 12.8% of adults in Trinidad and Tobago are depressed (Lacey et al., 2016; Maharaj, 2007)

For youth in Guyana (36.6%) (Roopnarine et al., 2017) and among adolescents in Trinidad and Tobago (25.3%) (Maharaj et al., 2008)

For Guyanese women, the lifetime physical/sexual intimate partner violence rate was 38.8%, with a prevalence of 16% among women who presented at an emergency facility with traumatic injuries (Miller & Contreras-Urbina, 2021).

Sample

- 196 couples from the greater Georgetown area (Mothers' mean age was 31.59 years (SD=5.63)).
- Roughly 39% Afro-Guyanese, 32% were Indo-Guyanese, and 33% were of Mixed-ethnic backgrounds (e.g., Indo-African, Indo-Amerindian, Amerindian-African)
- Thirty-four percent of mothers had attended secondary school, 60% had attended a technical college or university
- Thirteen percent of families made below \$300 US per month, 20% made between \$300-\$400 US per month, 30% made between \$400-\$500 US per month, and 36% made over \$500 US per month.
- Forty-five percent of mothers were married, 27% were in a common-law relationship, and 17% were in a long-term committed relationship.
- The children (108 boys, M Age=51.68 months, SD=8.75 months; and 88 girls, M Age=52.98 months, SD=9.52 months)

Measures

Centre for Epidemiological Studies–Depression Scale (CES-D-12) (Radloff, 1977). The 12-item CES-D assesses depressive symptoms in the previous week. Examples of items are: “I felt sad,” “I did not feel like eating;” “My appetite was poor,” and “I could not get going.”

Conflict Tactics Scales (CTS2) This subscale consists of 12 items (e.g., Kicked, bite, or hit partner). Eleven items were used because we combined “Pushed and shoved partner” and “Grabbed partner”

Constructive Conflict Behaviors between couples were assessed utilizing eight Likert-type items (Wood et al., 2012). (e.g., “We are good at solving our differences,” and “During arguments, we are good at taking breaks when we need them”)

Social Support focuses on trust, respect, friendship, commitment, and intimacy (e.g., “Partner can be counted on to help me,” “Partner listens to me when I need someone to talk to”, and Partner shows love and affection to me”).

Child Measures

- Child Behavior Checklist (Achenbach & Ruffle, 2000). Fourteen items are geared toward assessing children's **externalizing** behavior problems ($M= 13.83$, $SD= 3.00$), and twelve are geared toward assessing children's **internalizing** behavior problems

Results: Rates of Depression and IPV

124 mothers (63.3%) displayed minimal depressive symptoms, 60 (30.6%) somewhat elevated symptoms, and 12 (6.1%) elevated symptoms.

121 (61.7%) mothers reported that they did not experience physical intimate partner violence from male partners over the past year.

Violence toward women

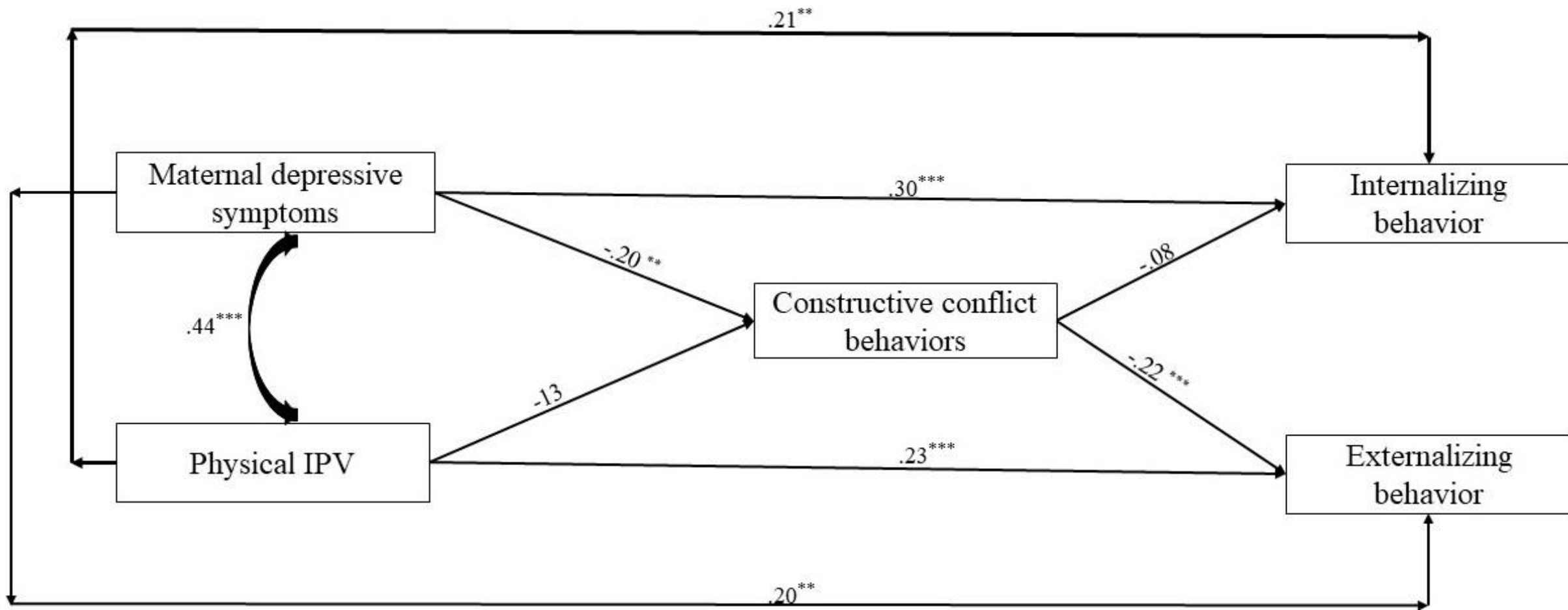
- Throwing something at (29.1%)
- Pushed, grabbed or shoved (34.2%),
- Slapped (31.1%),
- Kicked, bite, or hit with fist (26%), hit,
- Tried to hit with something (27.6%),
- Beat up (27%),
- Choked or strangled (23.5%),
- Used a knife or fired a gun (21.3%),
- Twisted arm or pulled hair (24%),
- Burned or scarred (21.9%), and
- Held down, pinning in place (24.5%).

• **Table 1**

• *Inter-correlations Among Constructs in the Conceptual Model (N=196)*

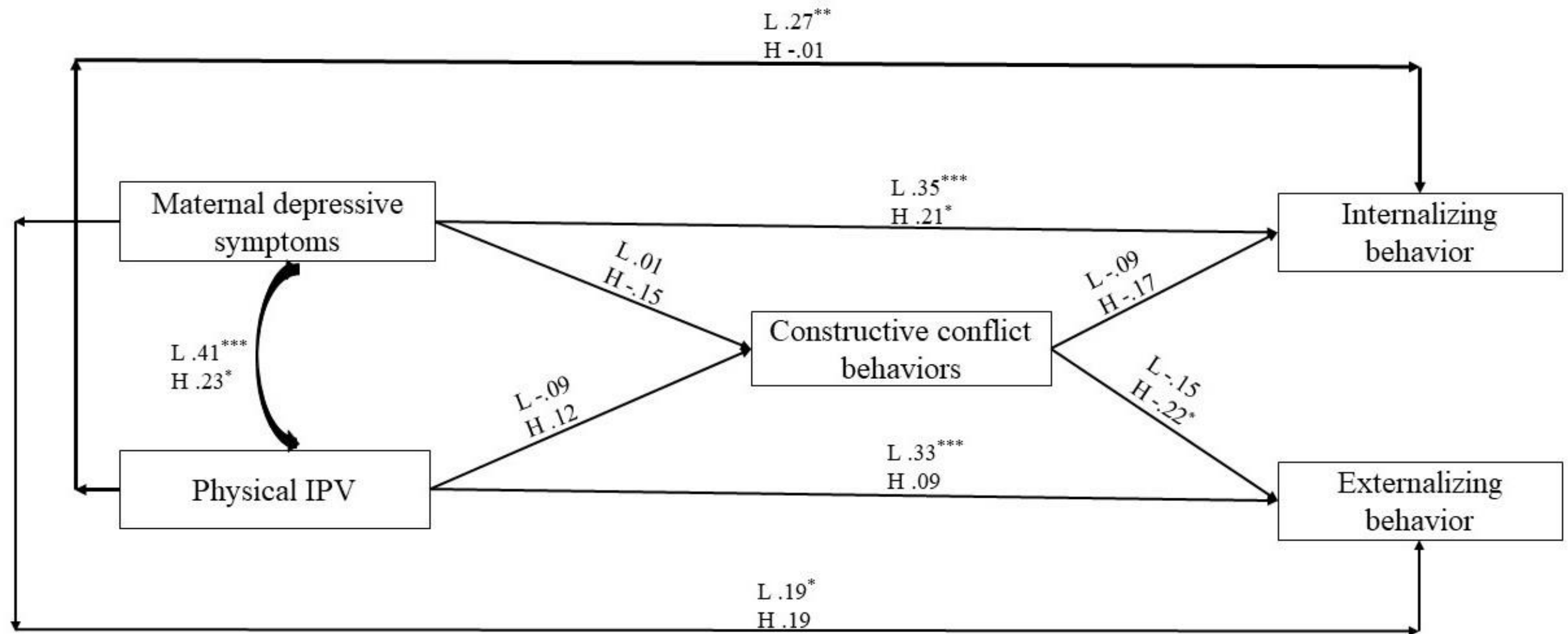
• * $p < .05$; ** $p < .01$, *** $p < .001$.

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Child age	-										
2. Child gender	-.03	-									
3. Socioeconomic status	.15*	-.07	-								
4. Maternal ethnicity	-.07	.16*	-.03	-							
5. Marital status	-.09	.04	-.06	-.02	-						
6. Depressive symptoms	.08	-.03	-.11	.01	-.16*	-					
7. Physical IPV	.15*	-.03	.03	.03	-.25**	.44**	-				
8. Constructive conflict behaviors	.02	-.03	.10	-.04	.22**	-.29**	-	-			
9. Social support	.03	-.06	.05	.02	.19**	-.38**	-	.60**	-		
10. Internalizing behaviors	.10	.00	-.10	-.05	-.24**	.42**	.37**	-.22**	-.17**	-	
11. Externalizing behaviors	-.06	.12	-.15*	.05	-.23**	.36**	.37**	-.33**	-.27**	.56**	
Skewness	.41	.21	-.61	.77	-1.10	.74	2.40	-.50	-.95	1.24	.50
Kurtosis	2.46	-1.98	-1.00	.45	-.80	.10	4.77	-.06	.92	1.33	-.39



$*p < .05$; $**p < .01$, $***p < .001$.

Standardized Beta Coefficients (β) of the Conceptual Model Linking Risk Factors and Children's Behavior Problems via Constructive Conflict Behaviors for High and Low Partner Social Support Groups



* $p < .05$; ** $p < .01$, *** $p < .001$.

Findings

Maternal depression and IPV had direct positive associations with children's internalizing and externalizing behaviors

Outcomes for children were worse in families with lower than higher partner social support

Discussion Questions

- What implications might these findings have for early education?
- What is needed now in schools and communities to address risk and protective factors in early childhood development?
- What practical and policy applications are required to address these issues?



Practical/Policy Needs

- Intra-personal and inter-personal family relationship factors must be addressed (e.g., violence)
- Interface between home and ECE environments—mental health screening, prevention and intervention
- More access to mental health counseling
- Mental health issues in teacher training

Concluding Remarks

Translational Research—
how best to transfer
knowledge about the
impact of family factors on
childhood development

Mental health promotion,
parenting support, early
intervention, and positive
school community amid
difficult circumstances

The goal is to strengthen
protective factors minimize
risks

