

Family functioning and children's risk from pre-adolescence to late adolescence: A cross cultural study

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Introduction

- Darling and Steinberg (1993) distinguish between *parenting style* and *parenting practices* as two separate components of parenting processes. *Parenting style* refers to the emotional climate that surrounds the parent adolescent relationship, whereas *parenting practices* are the most concrete parenting behaviors, usually guided by specific values and oriented to specific socialization goals.
- Two specific dimensions of parenting style that have been studied are *warmth or responsiveness* and *control or demandingness*.
- *Parental monitoring* is the most widely studied parenting practice, and has been linked to adjustment in adolescence in a number of studies (e.g., Jacobson & Crockett, 2000).

Goals of the Study

This study examines the relationship of parental style and monitoring with adolescent adjustment in three different countries: Italy, Chile, and the Philippines. The purposes this cross-cultural study are to compare:

1. The structure of parenting style, parental monitoring and adjustment problems in Italian, Chilean and Filipino adolescents.
2. The mean level of these constructs in the three countries.
3. The differences in the linkages between parenting styles and practices with adolescent adjustment in the three countries.

Method

- *Sample*

Data were collected in separate samples from Chile, Italy and the Philippines. While in some countries data were collected, beyond the high school years, we only included adolescents 12 to 19 years old.

The *Chilean sample* included middle and high school students from Santiago, Chile's capital, recruited in public schools. The *Filipino sample* included...The *Italian sample* included adolescents from middle and high schools from Milan's hinterland public and private schools. Demographic characteristics of the sample for the three countries are provided in Table 1.

Table 1
Sample Characteristics

	Chile	Philippines	Italy
N	410	140	382
Mean Age	15.28	16.14	15.21
Age SD	1.75	2.04	2.28
Women	57%	54.3%	42%
Divorced Parents	35%	SD	12%

Method

- *Procedure*

Students filled out a self-report questionnaire in their classrooms during school hours. The survey included demographic information relative to the adolescent and his or her family, and number of different scales. For the present study, we used items relative to parenting style (warmth/responsiveness and demandingness), parental attempt to know and actual knowledge of the adolescent behavior and 30-days symptoms and problem behavior as outcomes. Adolescents completed data for both their mother and father. For the present study, we used only mother's responses.

Mother's Warmth/Responsiveness Parcels and Items

Support	Expressed Affection	Companionship
They really understand me.	They often says nice things about me to their friends.	They spend time just talking to me.
I can count on them to help me out if I have a problem	They like me the way I am, they don't try to "make me over" into someone else.	They enjoy just spending time with me.
I know that they will "be there" for me if I need them.	They let me know through their words or actions that they love me.	

Maternal Control/Demandingness Parcels and Items

Rules	Demanding	
They really expect me to follow family rules.	I find it hard to please them.	
They point out ways I could do better.	They are very critical of me.	

Maternal Attempts to Know and Actual Knowledge Parcels and Items

Attempts to Know: How much your mother tries to know?

Tries1	Tries2	Tries3
Who your friends are?	Where you go at night?	How you spend your money?
Where you are most afternoons after school?	What you do with your free time?	How well you're doing in school?

Actual Knowledge: How much your mother really knows?

Knows1	Knows2	Knows3
Who your friends are?	Where you go at night?	How you spend your money?
Where you are most afternoons after school?	What you do with your free time?	How well you're doing in school?

Adolescent Symptoms and Problem Behavior Parcels and Items

Problem1	Problem2	Problem3
Felt nervous or worried?	Felt low or depressed?	Felt tense or irritable?
Smoked cigarettes or used chewing tobacco?	Had a drink of alcohol?	Had five or more drinks in a row?
Damaged property for fun (graffiti, broken windows, scratching cars, etc.)	Gotten into a physical fight (fist fight, brawl, etc.)	Felt apart or alone?

Steps in the Analyses

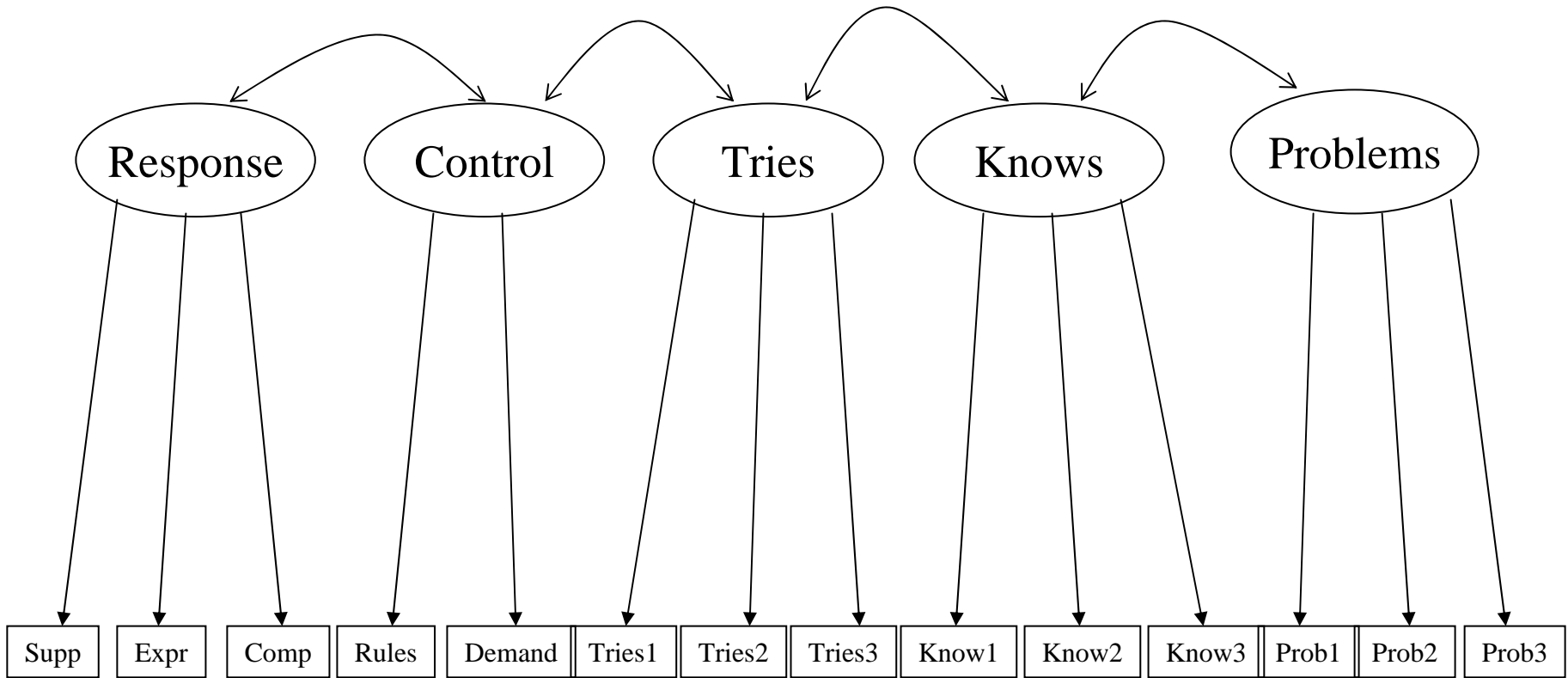
- Before comparing the pattern of relationship among the latent constructs, we ran a measurement model in order to assess the metric equivalence of the constructs in each of the three cultures.
- First, a measurement model was tested according to diagram 1.
 - First, the model was run allowing variation in the loadings of each item across countries (loadings freely estimated in each group).
 - Second, the same model was run constraining the loadings to be equal across the three samples.
- Once measurement invariance was established, equality constraints among the means across countries were imposed to test for differences.

Steps in the Analyses

- Then, a structural model was run to assess the hypothesized relationships among the constructs.
 - Just as for the measurement part, a first model was run allowing variation in regression coefficients across countries (loadings freely estimated in each group).
 - In the second stage, models were run constraining the different regression coefficients to assess effect invariance across the three samples, and specific differences were tested to assess the source of invariance where present.
 - Finally, the effects of gender and age were tested.
- Figure 1 presents the measurement model that was tested. Data fitted this model reasonably well [$\chi^2(192)= 312.01$, $p < 0.01$, RMSEA= 0.045].

Figure 1

Measurement Model



$\chi^2(192) = 312.01, p < 0.01, RMSEA = 0.045$ unconstrained

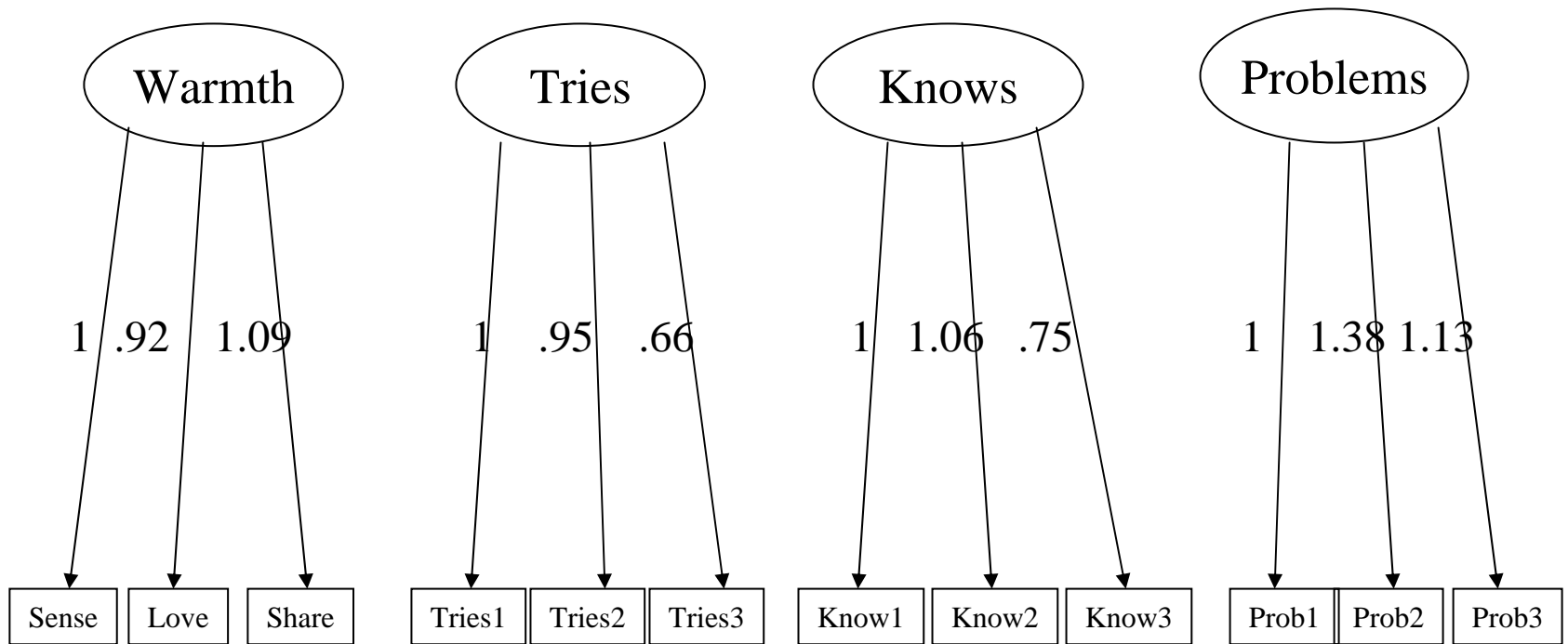
$\chi^2(210) = 488.62, p < 0.01, RMSEA = 0.066$ constrained

Measurement Model:

Are the Measures Equivalent in the Three Countries

- Simultaneously constraining the loadings for each factor to be equal across countries produced a significant decrease in model fit [$\chi^2_{\text{diff}}(18) = 176.61, p > 0.01$].
- Specific analyses to identify the source of the lack of fit suggested that loadings for the control factor varied in size and sign across countries. For example, the loading of *demand* on *control* was positive, but of different magnitude, for the Chilean and Filipino (0.20 and 2.1, respectively) sample. On the other hand, this loading was negative in the Italian sample (-1.07).
- A reduced measurement model (excluding control) produced a good fit to the data and supported the invariance hypothesis [$\chi^2_{\text{diff}}(16) = 22.49, p > 0.05$]. This reduced model was used in subsequent analyses.

Figure 2
Reduced Measurement Model



$\chi^2(135) = 187.62, p = 0.0019, RMSEA = 0.036$ unconstrained

$\chi^2(151) = 210.01, p = 0.0011, RMSEA = 0.036$ constrained

Mean Differences by Country:

Are Levels of the Parenting and Problems the Same in the Three Countries

- Equality constraints were imposed to the means of the latent constructs to tests for significant differences. The following patterns of relationships were found:

Warmth: Philippines=Italy \neq Chile

Tries: Chile=Italy \neq Philippines

Knows: Chile \neq Italy \neq Philippines

Problems: Chile \neq Italy \neq Philippines

- The mean values and standard deviations for each construct by country are presented in Table 2.

Table 2
Means and Standard Deviations
for Latent Constructs by Sample

Scale	Chile	Philippines	Italy
Warmth	3.91 ^a (0.74)	4.23 ^b (0.37)	4.25 ^b (0.46)
Tries	2.39 ^a (0.18)	2.50 ^b (0.12)	2.45 ^a (0.14)
Knows	2.40 ^a (0.17)	2.38 ^b (0.15)	2.54 ^c (0.11)
Problems	2.24 ^a (0.27)	2.00 ^b (0.11)	2.14 ^c (0.23)

Coefficients with different letters in each line are significantly different $p < 0.05$

Table 3
Gender and Age Effects for Chile and Italy

	Gender (Boy=0, Girl=1)		Age	
	Chile	Italy	Chile	Italy
Responsiveness	-0.10	-0.10	-0.03 [*]	-0.03 [*]
Attempts to know	-0.21 ^{**a}	-0.04 ^a	-0.01	-0.01
Actual Knowledge	-0.12 ^{**}	-0.12 ^{**}	0.02 ^a	-0.03 ^{**a}
Problems	-0.08 [*]	-0.08 [*]	0.04 [*]	0.04 [*]

*p < 0.05, ** p < 0.01,

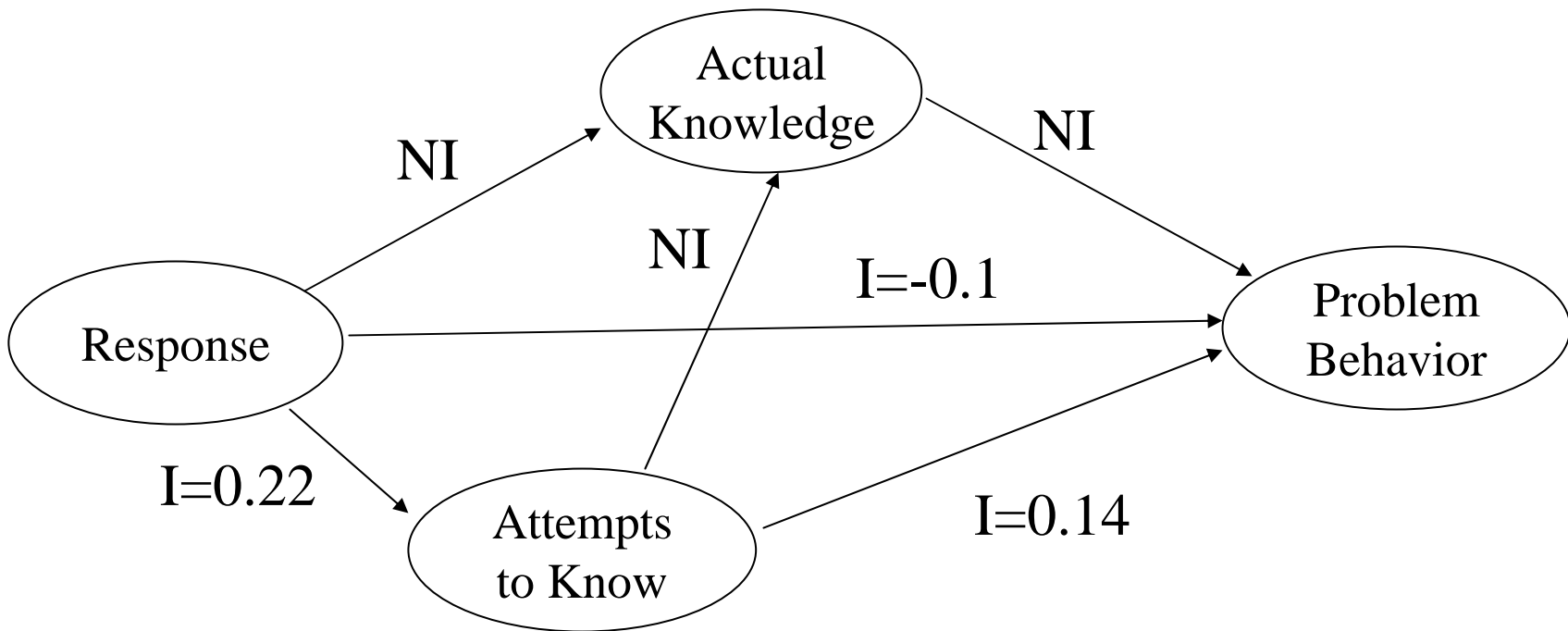
^aCoefficients significantly different p<0.05

Structural Model:

Is the Relationship Between Parenting and Problem Behavior the Same in the Three Countries

- Simultaneously constraining the path coefficients to be equal across countries produced a significant decrease in model fit [$\chi^2_{\text{diff}}(12) = 26.56, p < 0.01$]. This indicated that at least one of the path coefficients was not the same across country samples.
- Subsequently, analyses were conducted to identify the coefficients that varied across countries. A final model suggested partial invariance of the pattern of regression coefficients [$\chi^2_{\text{diff}}(6) = 2.51, p > 0.05$].
- Specifically, the following effects were invariant across samples
 - Maternal responsiveness → maternal attempts to know
 - Maternal responsiveness → adolescent's problem behavior
 - Maternal attempts to know → adolescent's problem behavior

Structural Model



I= Invariant

NI=Not Invariant

$\chi^2(151)=210.11, p=0,0011$, initial model

$\chi^2(157)=212.62, p=0,0021$, final model

Table 5
Effects that Vary by Country

Coefficient	Chile	Philippines	Italy
Response to actual know	0.17 ^{**a}	0.27 ^{**b}	0.27 ^{**b}
Attempts to know to actual know	0.40 ^{**a}	0.51 ^{**a}	0.23 ^{**b}
Actual know to prob. behavior	-0.36 ^{**a}	-0.03 ^b	-0.32 ^{**a}
<p>*p < 0.05, ** p < 0.01, Coefficients with different letter in each line are significantly different p<0.05</p>			

Summary

- There was metric invariance of factor loadings across the three groups for warmth, attempts to know, actual knowledge and problem behavior, suggesting measurement equivalence in these constructs.
- There was no measurement equivalence in control/demandingness. This suggests difficulties in the measurement of this construct.

Summary

- A similar pattern of relationships among the latent constructs was found across countries.
- The following regression coefficients were invariant across samples:
 - Maternal responsiveness → maternal attempts to know
 - Maternal responsiveness → adolescent's problem behavior
 - Maternal attempts to know → adolescent's problem behavior
- The following regression coefficients were not invariant across samples:
 - Maternal responsiveness → mother's actual knowledge
 - Maternal attempts to know → mother's actual knowledge
 - Mother actual knowledge → adolescent's problem behavior

Conclusions

- The goals of this study were to compare the structure of parenting style and practices and problem behavior in three countries, and the pattern of relationship among these constructs.
- The robustness of the structure of maternal responsiveness, attempts to know and actual knowledge across countries support the use of this constructs in future research.
- The consistent relationship between maternal responsiveness and attempts to monitor (know) their adolescent children, and the effects of these two construct on adolescent's adjustment, highlight the importance and potential universality of these processes.

Conclusions

- Also, with few exceptions, there seems to be a relative constancy in the variation of these constructs by gender and age.
- While we found some measurement and structural invariance, there are intriguing differences both in the structure and cultural meaning of some constructs that should guide future research in this area.
- Specifically, the strategies that mothers use to control or demand a certain type of behavior from their adolescent children seems to vary from country to country in ways that are still unclear. Beyond these differences, it is possible that the measures are not capturing common aspects of these dimensions.