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Parenting, Socioeconomic Status and Psychosocial Functioning in Peruvian Families and their Children

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| Abstract: | The purpose of this study was to analyze the relation between two dimensions of parenting (Positive Parenting and Negative Behavioral Control) and child psychosocial functioning, such as self-worth and problem behavior. We investigated (a) whether socioeconomic status moderates the relationship between parenting and child psychosocial outcomes, (b) whether parenting mediates the relation between socioeconomic status and psychosocial functioning in a Peruvian context and finally, (c) whether there are interaction effects between positive parenting and negative behavioral control. Information was gathered on 591 Peruvian children and their families from the normal population in urban zones of Metropolitan Lima. Hierarchical multiple regression analyses were conducted to investigate direct and indirect effects (mediation and moderation). Results revealed a significant mediation effect of positive parenting and negative behavioral control in the relationship between socioeconomic status and self-worth. Implications about the role played by context are discussed. |

| Key words: | parenting; socioeconomic status; self-worth; behavior problems; childhood; Peru. |

| Introducción | Parenting is “the final common pathway to childhood oversight and care giving”, (Bornstein, 2007, p. 1). There have been numerous studies of parenting that have highlighted its relationship to child’s psychosocial development (Laird, Pettit, Bates & Dodge 2003). They show that, in almost all cases, children and young people do better or worse depending on the case, on a range of outcome measures which include self-worth, problem behavior such as drug taking and antisocial behavior (Steinberg, 2002). Parents can influence their children’s development in a negative or positive way (Coleman, 2011), that stated children also influence their parent’s behavior, creating a sort of bidirectional process (Mounts, 2004). Laird et al., (2003) pointed out that when parents have little knowledge of their children’s whereabouts there is a greater likelihood of them being involved in antisocial behaviors. Difficult behavior leads, either, to harsh or lax parenting which consequently, contributes to further difficulties in family relationships. In other words, whether the parent responds positively or negatively has an impact on the future disclosure patterns of the children, envisaging a cycle of effect and counter-effects (Day, 2010).

In this way, positive parenting and negative behavioral control are two main parenting dimensions that seem to influence child development and well-being in different ways and at different levels (Fletcher, Walls, Cook, Madison & Bridges, 2008). Nonetheless, further research is necessary. First, a relatively small amount of studies have combined these two constructs as an interactive process associated with child outcomes (Eisenberg et al., 2005). Second, it’s important to thoroughly study the impact of contextual variables such as socio-economic status (SES). This issue will be approached in this article by placing SES as the moderator in the association between parenting and psychosocial outcomes (Deardorff et al., 2011) as well as looking at the role of SES in psychosocial functioning, where parenting is a mediator. Finally, only a few studies have been done in a South American context, another point that will be tackled. It is not uncommon among Peruvian families to resort to harsh punishment as a corrective method for misbehavior. Nevertheless, it is important to acknowledge the many strengths of their traditional parenting style, including physical affection, respect, paternal involvement, and close family ties (López et al., 2000). We aim to reduce the gap concerning empirical research on South American families.

The general purpose of this paper, therefore, is to fill these voids in order to strengthen and improve research in the parenting field and on family processes. All these points will be discussed in the next section in more detail. |

| Conceptual issues about parenting | A great body of studies on parenting has empirically proven the association between psychosocial factors (e.g. self-worth, behavior problems) and various pivotal parental dimensions, such as parental demandingness and responsiveness (Baumrind, 1989; Maccoby & Martin, 1983). Parental demandingness refers to parental control with regard to |

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their offspring’s actions; it encompasses key indicators such as discipline and monitoring of children’s behavior. Parental responsiveness refers to the level of warmth and acceptance that parents openly display toward their children; it covers a set of behaviors like involvement, support and being affectionate and responsive to children’s needs (Carlo, Mestre, Samper, Tur & Armenta, 2011).

Specifically, in the present study, two main set of parenting behaviors involved the responsiveness-demandingness dimensionality aforementioned. ‘Positive parenting’ refers to parental behaviors characterized by responsiveness and connectedness toward children, whereas ‘negative behavioral control’ alludes to the regulation of the child’s behavior through discipline and the tendency to use harsh punishment. The latter concept is related to authoritarian behavioral control, which was conceived by Diane Baumrind (1966) and includes punitive and forceful parental behaviors undertaken in order to socialize the child.

Parenting behaviors and child psychosocial development

It is important to deepen our knowledge of ways in which children’s behavior problems are associated with parenting, given the overlap between the social and cognitive domains of development. It has been suggested, in this regard, that there is a link between a child’s behavior problems and negative parenting behaviors (Burke, Pardini & Loeb, 2008). Moreover, some studies pointed out that harsh punishment is associated with negative outcomes (Friedman & Schonberg, 1996; Zhou et al., 2008). A large and growing body of literature has investigated the correlation between negative parenting and child externalizing behavior such as hyperactivity. It has been demonstrated that parents are more likely to resort to maladaptive strategies as a consequence of child’s inability to control impulses (Chronis et al., 2007; Ellis & Nigg, 2009; Johnston & Mash, 2001).

Previous research work has focused on external behavior disorder but far too little attention has been paid to self-worth and prosocial behaviors (Padilla-Walker, Carlo, Christensen & Yorgason, 2012).

Studies such as that conducted by Garber (1992) have shown that one possible factor contributing to the development of children’s low self-worth is negative behavior control. Harsh parental discipline and rejection has been associated to low self-worth and disruptive behavior problems (Hetherington et al., 1992; Rodriguez, 2003; Turner & Mulder, 2004; Zayas, 1992).

In early adolescence a combination of warmth and positive affect are pivotal to positive social functioning (Shaw, Bell & Gilliom, 2000). Empirical research work has proven that parental responsiveness, or warmth, is associated with pre-adolescents positive adjustment (Barber, Stolitz & Olsen, 2005). Parental support and warmth have been found to contribute to children’s self-worth (Bean, Bush, McKenry & Wilson, 2003). A number of studies have found that prosocial behavior in adolescent is associated to different aspects of authoritative parenting, combination of high levels of support and control, (Carlo, McGinley, Hayes, Batenhorst & Wilkinson, 2007). It has been reported that setting rules within a warm environment promotes and increases adolescent social behavior. In addition, parents who regulate their children behavior through reasoning and induction has been linked to prosocial outcomes in children.

Parenting behavior and contextual factors

Parenting reflects a dynamic and ongoing process (Ceballo & McLeod, 2002; Crouter & McHale, 2005). Changes in parenting develop in response to many variables including the situation, environment, parental emotions, stressors, culture, etc. Most studies related to parenting have focused their attention on direct effects in child adjustment while neglecting some contextual factors. The Ecological Perspective, developed by Urie Bronfenbrenner (1979) explains how the child is embedded in a succession of mutually interacting systems and contexts which interplay with one another. Hence, the child’s development is influenced by the interactions with people as well as objects or symbols in the immediate environment. In addition, one’s context includes aspects of the parent’s relationship with his/her partner, or with members of other networks including colleagues, friends, relatives, etc. Also important is the influence of cultural and socioeconomic status. It is these influences we wish to turn our attention to now.

The role of socioeconomic status

Bronfenbrenner (1977) has pointed out the important role of context in the development of children towards adulthood in his ecological theory. Research emphasizing the ecological model of child development has suggested that family socioeconomic status (SES) impacts child outcomes (Bronfenbrenner, 1979; López-Rubio, Fernández-Parra, Vives-Montero & Rodríguez-García, 2012).

Patterson, Reid, and Dishion (1992) have suggested that parental behavior is a result of various contextual factors and that the association of context and family management practices is bidirectional and asymmetrical. Studies have evidenced this claim particularly when shifting focus from context to the family. In their study Wilson and Herrnstein (1985) found a significant association between social status and delinquency in adolescents, while Elliot, Ageton, Huizinga Knowles and Canter (1983) proved a direct relationship between low SES and a higher risk for adolescents to commit serious crimes. More recently, Grant, Comas, Stuhlmacher, Thurm et al., (2003) reported more aggressive, intimidating and punitive parental practices in socioeconomically disadvantaged families. Callahan and Eyberg (2010) reported that SES was significantly positively associated to maternal prosocial talk.
This study extends existing research in which contextual factors are scarcely mentioned. The purpose of the present article is to analyze the relationship between parenting and child psychosocial functioning in a Peruvian sample of parents and one of their school-aged children. More specific research questions include (a) whether socioeconomic status moderates the relationship between parenting and child self-worth, prosocial and problem behavior; (b) whether parenting mediates the relationship between socioeconomic status and child psychosocial outcomes, in the context of Lima (c) and whether high positive parenting in combination with negative behavioral control is not associated with lower self-worth or more problem behavior. Based on previous findings, we hypothesize that the effects of SES on psychosocial functioning (at either self-worth or prosocial behavior and behavioral problems) are (completely) mediated by parenting behaviors (Larzelere & Patterson, 1990).

Method

Participants

Participants in the study were 591 Spanish-speaking students and their parents living in Lima. Subjects were regular school elementary children attending sixth grade over 45 classes in 17 different schools, located in urban zones of Metropolitan Lima. Their age ranged from 10.5 to 13.3 years old ($M = 11.54$, $SD = .40$). From the total sample, 249 (42.1%) participants were boys and 342 (57.9%) were girls. Regarding the type of school, 301 (50.9%) came from public schools and 290 (49.1%) from private schools.

Parents reported about their parenting behavior towards one target child, which was attending 6th grade of primary education. The vast majority of informants were mothers ($n = 517$, 87.5%), 39 (6.6%) were fathers, 19 (3.2%) parents decided to complete the questionnaire together and 16 (2.7%) participants were other people responsible of bringing up the child, such as grandparents or aunts. The mean age for male caregivers was 43.62 ($SD = 7.47$), age ranged from 27 to 78 years. Female Caregivers’ age ranged from 26 to 68, with a mean age of 40.10 ($SD = 6.35$) years. The Educational Level ranged from Non-Education to Post-Grade and the mean level for fathers was Secondary Complete and for mothers Superior Technical Complete. For the SES variable a Hollingshead Index was created based on educational/occupational status and the latest Peruvian National Census (2009). The mean SES for both parents was low, showing that the majority of the sample belonged to the lower classes. Appertaining to family composition, 361 (61%) caregivers were married, 136 (23%) lived together unmarried, and the rest (12.2%) was single, divorced or widow/widower.

Subjects were recruited via randomly selected elementary schools. We stratified the sample by region specifically in Local Educational Management Unit (UGE) in Metropolitan Lima (UGE 01 - San Juan de Miraflores; UGE 02 - Rimac; UGE 03 - Lima; UGE 04 - Comas; UGE 05 - San Juan de Lurigancho; UGE 06 - Ate Vitarte and UGE 07 - San Borja), to ensure that the views of this group was represented, with the whole student population of Metropolitan Lima. In order to do so, we used the statistical data of the Ministry of Education published on their website http://www.minedu.gob.pe/.

Instruments

For the purpose of the study, the English version of the PBS and self-worth were translated into Spanish, followed by a back-translation from Spanish into English. Furthermore, the opinion of three Spanish speaking researchers, fluently in English and aware of the reality of Peruvian families, was requested. For the rest of the scales we used Spanish versions available.

Parental Behavior Scale. (PBS; Van Leeuwen & Vermulst, 2004) assesses observable parental behavior and originally contains 45 items, assigned to nine scales. After evaluation of the factor structure and internal consistency of the Spanish version (Manrique Millones, Ghesquiere & Van Leeuwen, 2014), the original nine-scale measures were reduced to four subscales: Positive Parenting (making time for the child, showing interest; eleven items), Rules (teaching the child appropriate behavior; seven items), Discipline (punishment of the child when it misbehaves; six items), and Harsh Punishment (corporal punishment and verbal blaming; four items). Although the numbers of scales were condensed compared to the original instrument, the essential dimensions are present in the second-order scales Positive Parenting (consisting of rules and positive parenting scales) and Negative Behavioural Control (encompassing discipline and harsh punishment scales). Parents are asked to rate the frequency of each behavioral item on a 5-point Likert scale ranging from ‘never’ to ‘always’, focusing on their parenting behavior towards a specific child. A mean score is calculated for the set of items belonging to a scale, so that for each subscale a score between 1 and 5 is obtained, with 1 referring to ‘never showing this parental behavior’ and 5 indicating ‘always presenting this parental behavior’.

Socioeconomic Status (SES). This variable was measured with a socio-demographic questionnaire created specifically to obtain such information. Different aspects of SES were requested from the parents: the income of the family per month, education and occupation of the parents. From this information and together with the last Peruvian Census (2009) a Hollingshead Index was calculated, resulting in a continuous variable ranging from 58.33 to 2833.33 (per month per family) Peruvian Nuevo Sol; (1 euro is equivalent to 3.44 Peruvian Nuevo Sol approximately).

Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). The Spanish version of the SDQ was applied in order to measure prosocial and problem behavior in children. The SDQ is a brief behavioral questionnaire for children between 3-16 years. It is a 25-items scale in which the teacher...
or parent has to mark for each psychological attribute (some of them positive and some negative) whether it is “Not True”, “Somewhat True” or “Certainly True”. These 25 items are divided into five subscales that comprise five items and can have a score among 0 and 10: Emotional symptoms, refers to the symptoms affecting the child emotions (e.g. “Often he/she is unhappy, downhearted or tearful”); Conduct problems, measures aggressive activities that cause disruptions in the child’s natural environments (e.g. “Often fights with other children or bullies them”); Hyperactivity / inattention, evaluates a group of characteristics that includes impulsiveness, easily distracted, aggressiveness (e.g. “Constantly fidgeting or squirming”); Peer relationship problems, assesses the relationship among peers. Some children are actively rejected by peers, others are ignored, or neglected (e.g. “Rather solitary, tends to play alone”); Prosocial behavior, measures if a child acts to help (with no goal other than help) another person. (e.g. “Often volunteers to help others”). Cronbach alpha’s for the five subscales ranged from .39 to .81. The total difficulties score is obtained by summing the scores from all the scales but the prosocial scale (based on 20 items ranging from 0 to 40 points). Previous studies have proved the good psychometric properties of the SDQ. Goodman (2001) showed in his study, with more than 10 000 children, a satisfactory reliability judged by internal consistency (mean Cronbach $\alpha = 73$, cross informant correlation (mean = 0.22) which makes the SDQ a valid, reliable and useful instrument of the adjustment of children and adolescents.

The Perceived Competence Scale for Children (Harter, 1982). Was used to evaluate global self-worth. It assesses a child’s sense of competence across different domains. It is a self-report instrument consisting of 36 items and explores the judgments and opinions that children have about their competence as well as an overall perception of their esteem as a person. It encompasses the following subscales: Scholastic competence ($\alpha = .62$), measures the perception of children about their competence or ability in school performance; all items are related to school; Social acceptance ($\alpha = .46$), evaluates the degree to which the child is accepted by his/her peers or feels popular; Athletic competition ($\alpha = .59$), explores all the content related to sports and outdoor games; Physical appearance ($\alpha = .61$), assesses the degree to which the child is happy with the way he/she sees him/herself; Behavior ($\alpha = .54$), evaluates the degree to which children like the way they behave, do the right thing, avoid getting into trouble, etc.; General self-worth ($\alpha = .64$), analyzes to what extent the child likes and feels pleased with him/herself as a person, whether he/she is satisfied with the way he/she is as a whole. Therefore, it is an overall assessment of the value of one as a person.

Procedure

The present research study was part of a large-scaled cross-sectional study designed to explore the relationship between parenting, psychosocial factors and academic achievement in Peruvian children (Manrique Millones, Van Leeuwen & Ghesquière, 2013). Schools were randomly selected in Metropolitan Lima. The first contact with the schools was made by telephone; a second approach was made in person in order to explain in detail the research aims. Next, a written notification was sent to parents through the school, explaining the objectives of the study and inviting them to participate.

Around 3% of the parents whose children are in public schools have a very basic education and are functionally illiterate in the worst case. In order to accommodate these conditions, two different methods in data collection were used, depending on the school type. An information letter together with the parenting questionnaire was sent to parents of private schools, in a sealed envelope. The letter gave detailed information about the study. Instead, in public schools a talk was given to parents and an oral consent was received.

Students completed collectively the test concerning self-worth. This activity took place in regular school hours and took between 40 and 45 minutes per session. Whereas, the collaboration of tutors or main teachers at the school were required by filling out the SDQ with respect to each student in his/her class.

Results

Correlational Analysis

Correlations between Prosocial, Problem Behavior, Self-Worth subscales, Parenting Dimensions and Socioeconomic Status are included in Table 1.

Positive Parenting showed meaningful associations with Physical Appearance (.12), Behavioral Conduct (.16) and Global Self-Worth (.11). Negative Behavioral Control was negatively correlated with Social Acceptance (.09), Self-Worth (.17), Prosocial Behavior (.16), and positively associated with Emotional Symptoms (.09), Hyperactivity (.20) and Total Behavioral Problems (.18).

Likewise, a negative significant association between Self Worth and Total Behavioral Problems (.17) was found. SES was negatively associated with Negative Behavioral Control (.13) and positively related to Positive Parenting (.13), Social Acceptance (.13).

Multiple Regression Analyses

Hierarchical Multiple Regression Analyses (HMR-1) were conducted to investigate independent, mediation and moderation (interaction) effects, following the suggestions by Aiken and West (1991) and Baron and Kenny (1986). In order to answer the research questions, moderation and mediation effects were explored separately for each parental dimension (Negative behavioral control and Positive parenting) and each psychosocial variable, that is (a) self-worth (Global self-worth, Scholastic competence, Social acceptance Athletic competition, Physical appearance, and Behavioral conduct), and (b) strengths and difficulties (Total problem score, Emotional symptoms, Conduct problems, Hyperactivity, Problems with peers and Prosocial behavior).
Testing for Mediation Effects

We examined the potential mediating role of parenting behavior (Negative control and Positive parenting) in the association between SES (predictor) and outcome variables (self-worth, prosocial and problem behavior scales). As an indicator of SES we used the Hollingshead Index, a continuous variable. For mediation to occur in the HMRA, the predictor and the criterion variable (Step 1) and the predictor and the mediator (Step 2) should be significantly associated. Using both predictor and mediator together in the prediction of the criterion variable, the mediator should have a significant effect (Step 3). When in Step 4 the predictor no longer contributes significantly to the variance, or in other words, when controlling for the mediator, the effect of the predictor on the outcome variable is zero, then there is complete mediation. When in Step 4 the absolute value of the coefficient is reduced in size as compared to Step 1, or in other words the strength of the relation between the predictor and the outcome is significantly reduced when the mediator is added to the model, then there is partial mediation.

To determine whether the correlations in step 4 are significantly lower, Sobel-\(t\) test was performed using the web-based statistical tool of Soper (2011).

### Table 1. Pearson Correlations between Prosocial, Problem Behavior, Self-Worth subscales, Positive Parenting, Negative Behavior Control and SES.

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<th>SW</th>
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** p ≤ .01; * p ≤ .05

### Testing for Moderation Effects

Regarding the association between SES and global self-worth the Sobel-\(t\) test was significant suggesting that partial mediation occurred for both, positive parenting (see figure 1.b) and negative behavioral control (see Figure 1.c). All associations in step 1, 2, 3 and 4 were significant but step 4 was lower than step 1.

Concerning the association between SES and Social Acceptance complete mediation occurred using negative behavioral control as a mediating variable: associations in steps 1, 2 and 3 were significant but step 4 was no longer significant and the Sobel-\(t\) test was highly significant (see Figure 1.d).

### Dependent Variables: Self-Worth Scales

**Dependent Variables: Prosocial and Behavior Problem Scales**

There were no mediating effects for the prosocial and behavior problem scales. This was due to the non-significant association between SES and behavior problems and the insignificant association between positive parenting and behavior problems (See Table 2). Nevertheless, using negative behavioral control as a mediating variable (see Figure 1.a) all four steps were significant, but step 4 was significantly lower than step 1 (indicated by the Sobel-\(t\) test), implying a partial mediation.
Table 2. Parenting Behavior as Mediator between Socioeconomic Status and Psychosocial Functioning.

<table>
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<th>Dependent Variable</th>
<th>Mediating Variable</th>
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<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
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<td>0.01</td>
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<td>0.03</td>
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<td>-0.12**</td>
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<td>0.13**</td>
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<td>-0.01</td>
<td>0.17</td>
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<td>-0.13**</td>
<td>-0.10*</td>
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<td></td>
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<td>0.11**</td>
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<tr>
<td></td>
<td>Negative Behavioral Control</td>
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<td>-0.08</td>
<td>-0.07</td>
<td>1.99*</td>
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<tr>
<td>Physical Appearance</td>
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<td>0.16***</td>
<td>0.15***</td>
<td>2.66**</td>
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<tr>
<td></td>
<td>Negative Behavioral Control</td>
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<td>-0.13**</td>
<td>-0.13**</td>
<td>-0.13**</td>
<td>3.25***</td>
</tr>
</tbody>
</table>

Note: Step 1: Path from SES to the dependent variable; Step 2: Path from SES to the mediator (Positive parenting or Negative control); Step 3: Path from the mediator to the dependent variable; Step 4: Testing mediation.* p < .05; ** p < .01; *** p < .001.

Figure 1. Parenting mediates the effect of socioeconomic Status on Psychosocial Functioning.

Note. Predictor variable: SES = Socioeconomic Status; Outcome variables: HYP = Hyperactivity; GSW = Global Self-Worth; SA = Social Acceptance; Mediating variables: CON = Negative Behavioral Control; POS = Positive Parenting.

(1), (2), (3): Step 1, step 2 and Step 3 of mediation effects. * p < .05; ** p < .01; *** p < .001.
Interaction effects: Sex x parenting. There was one significant interaction effect of Negative Control x SES ($R^2_{change} = .01$, and $F_{change} = (1, 482) = 5.06, p < .05$), predicting the total behavior problems scale. For a better understanding of the interaction effects, post hoc tests were conducted and graphics were inspected (Aiken & West, 1991). Figure 2 represents this interaction with a significant slope for the effect of negative behavioral control on total behavior problems for high ($p < .01$) and average ($p < .01$) but not for low socioeconomic status ($p > .05$). Children of parents with a high and average SES have higher scores on the total behavioral problems score, when parents use a lot of negative behavioral control. Effect size for the interaction was calculated with the formula of Aiken & West (1991) ($r^2_{Y,M} = r^2_{Y,M}/(1-r^2_{Y,ML})$, where $r^2_{Y,ML}$ = the squared multiple correlation from combined predictors by two sets of variables, $M$ = main effects, and $I$ = interaction effect; $r^2_{Y,M}$ = the squared multiple correlation from prediction by set $M$. BFM. This results in a $f^2 = 0.01$, score that can be regarded as small (Aiken & West, 1991, p. 158).

Interaction effects: Positive parenting x negative control. There were no significant positive parenting by negative control interactions predicting prosocial and behavior problem scales.

Independent effects.

SES significantly predicted the hyperactivity scale ($b = .00, p < .01$), indicating that higher SES is associated with more hyperactivity in children (see Table 3).

As regards the parenting variables, negative behavioral control significantly predicted the hyperactivity scale ($b = .34, p < .001$) meaning that when negative behavioral control is high, hyperactivity tends to be high as well. Negative behavioral control also contributed to the variance of prosocial behavior (CON: $b = -.24, p < .001$) meaning that more use of negative behavioral control is related to less prosocial behavior.

There were no independent effects of positive parenting predicting prosocial and behavior problem scales.

### Table 3. Moderation Effects for Prosocial and Problem Behavior.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Total Score</th>
<th>SDQ Scales</th>
</tr>
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<tr>
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<td>ΔF</td>
<td>B</td>
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<tr>
<td></td>
<td>Total</td>
<td>Emotional</td>
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<tr>
<td></td>
<td>Score</td>
<td>Symptoms</td>
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<td>Positive Parenting x SES</td>
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<td></td>
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<td>POS, SES</td>
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<td>-.05, -.00</td>
</tr>
<tr>
<td>POS x SES</td>
<td>0.63</td>
<td>-.01</td>
</tr>
</tbody>
</table>

Negative Behavioral Control x SES

|                                |            |            |            |             |           |            |            |           |
| Sex                            | 0.71       | -.08       | 2.84       | .16         | 1.65      | -.12       | 14.19***   | .34***     | 0.02      | .01        | 16.45***   | .37***     |
| CON, SES                       | 7.46**     | .30*** , .00| 3.06      | .13, .00    | 11.96***  | .32*** , .00| 16.27***   | .34*** , .00*| 0.40     | .05, .00   | 7.85*** , .24***, .00 |
| CON x SES                      | 5.06*      | .01*       | 0.86       | .00         | 2.66      | .00        | 0.80       | .00        | 0.82      | .00        | 0.71       | .00        |

Positive Parenting x Negative Behavioral Control

|                                |            |            |            |             |           |            |            |           |
| Sex, SES                       | 0.55       | -.10, .00  | 3.34** .15, .00* , 0.79 | -.10, .00 | 7.31** | -.30**, .00*| 0.21      | -.02, .00 | 6.12** | .33**, .00 |
| CON, POS                       | 7.32**     | .28***, .02| 1.83      | .14, .02    | 9.43***   | .30*** , .02| 10.23*** | .31*** , .06| 0.78     | .03, .13 | 5.15** , .22**, .07 |
| CON x POS                      | 8.42       | .10        | 0.66       | .12, .39    | 3.39      | .27        | 2.72       | .23        | 0.62      | .12        | 0.67       | .12        |

Note: With multiplicative terms, neither traditional unstandardized nor standardized regression coefficients are appropriate to report. Nevertheless, when the cross-product is based on z scores, it is appropriate to use the unstandardized solution with interaction terms (Aiken & West, 1991, pp 43-44). CON = Negative Behavioral Control, POS = Positive Parenting, SES = Socioeconomic status.*p < .05; **p < .01; ***p < .001.
Dependent Variables: Self-Worth Scales

Effect of the control variable gender in the HMRA testing the Sex x parenting interaction. Results showed a main effect of gender in Step 1 ($R^2_{\text{change}} = .01$; $F_{\text{change}}(1,519) = 3.87$, $p < .05$, with $b = .17$, $p < .05$) for the behavioral conduct subscale. The positive association means that girls have a higher self-esteem on the domain of behavioral conduct compared to their male peers.

Effect of the control variable SES in the HMRA testing positive parenting x negative control interaction. In the analyses exploring the positive parenting x negative control interaction there was a significant effect of SES in Step 1 ($R^2_{\text{change}} = .02$; $F_{\text{change}}(2, 435) = 3.63$, $p < .05$). The control variable SES was positively related to the social acceptance subscale ($SES = b = .00$, $p < .05$) which means that when the socioeconomic status is high the social acceptance of the child is high.

Interaction effects: Sex x parenting. There was one significant interaction effect of Negative behavioral control x SES ($R^2_{\text{change}} = .01$, and $F_{\text{change}}(1, 516) = 5.54$, $p < .05$), predicting the behavioral conduct scale. Post hoc tests showed no significant slopes ($p > .05$) and size effect was small ($f^2 = 0.01$).

Interaction effects: Positive parenting x negative control. There was no significant interaction effect of positive parenting by negative control interactions predicting self-worth scales.

Independent effects of Sex and parenting. SES significantly predicted both global self-worth ($b = .01$, $p < .01$) and social acceptance ($b = .00$, $p < .01$), showing a positive association between socioeconomic status and these two self-worth subscales.

Positive parenting showed a significant association with global self-worth ($b = .21$, $p < .05$), physical appearance ($b = .26$, $p < .01$) and behavioral conduct ($b = .31$, $p < .01$). Higher self-worth ratings of children are related to more positive parental behavior.

Negative parenting was associated with global self-worth ($b = -.24$, $p < .001$), scholastic competence ($b = -.18$, $p < .01$) and behavioral conduct ($b = -.19$, $p < .01$): the more negative parental control, the lower the child reported self-worth.

Table 4. Moderation Effects for Self-Worth.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Global Self-Worth</th>
<th>Global Self-Worth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Score</td>
<td>Scholastic Competence</td>
</tr>
<tr>
<td>POS x SES</td>
<td>$\Delta F$</td>
<td>$B$</td>
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<tr>
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<td>POS, SES</td>
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<tr>
<td>POS x SES</td>
<td>0.06</td>
<td>-.00</td>
</tr>
<tr>
<td>Sex</td>
<td>1.80</td>
<td>-.13</td>
</tr>
<tr>
<td>CON, SES</td>
<td>13.60</td>
<td><strong>-.24</strong></td>
</tr>
<tr>
<td>CON x SES</td>
<td>0.17</td>
<td>.00</td>
</tr>
</tbody>
</table>

Note. With multiplicative terms, neither traditional unstandardized nor standardized regression coefficients are appropriate to report. Nevertheless, when the cross-product is based on z scores, it is appropriate to use the unstandardized solution with interaction terms (Aiken & West, 1991, pp 43-44). CON = Negative Behavioral Control, POS = Positive Parenting, SES = Socioeconomic status. $p < .05$, **$p < .01$; ***$p < .001$.

Discussion

The main objective of this study was to investigate relationships among socioeconomic status, parenting behavior and psychosocial factors in terms of independent, mediation and moderation effects within a Peruvian reality.

Throughout the study we have seen some results that are in line with our hypothesis and supported by our theoretical framework, as well as by previous empirical studies. We found (a) a moderation effect of SES over the association of negative behavioral control and total behavioral problems, and also with the behavior conduct scale; likewise, (b) complete mediation of negative behavioral control in the association between the self-worth subscale, social acceptance, and SES; (c) partial, or not full, mediation for both parental dimensions and the relationship of global self-worth and SES and (d) partial mediation for negative behavioral control and the link between behavior problem subscale, hyperactivity and SES.
Mediation Effects

We will start by tackling the mediation effects conducted in the study. There are relatively few studies that have investigated parenting as a mediator variable, as Deardorff et al. (2011) mentioned. Our results revealed the essential and pivotal role of parenting. First, we found that negative behavioral control fully mediates the relation between SES and the self-worth subscale social acceptance. Thus, the mediational hypothesis tested was that the association between SES and self-worth (high SES is related to higher feelings of social acceptance in the child; low SES is associated with low self-worth) would be mediated by negative behavioral control. Children with parents low in SES report lower scores on the self-worth domain ‘social acceptance” because there is a lot of negative parental control. Our results showed that once the relation between parenting and social acceptance was accounted for, there is a weaker association between the predictor and the outcome variable, which were socioeconomic status and social acceptance in this case. Our results show that despite the importance of SES, it is reduced in the presence of parenting dimensions (specifically negative behavioral control).

Second, there was a relationship between global self-worth and SES but this association was only partially determined by parenting (negative behavioral control and positive parenting). We found a negative association between harsh discipline and global self-worth and a positive association between positive parenting behaviors and global self-worth. Third, we found associations between hyperactivity and SES but again, it is partially determined by negative behavioral control. As we can see from these results, SES interacts significantly with self-worth as well as hyperactivity (subscale of behavioral problems). Furthermore, based on previous literature (Hoghugh & Long, 2004; Holden, 2010), we suggested that SES be related to parenting dimensions. Parents that come from different SES will raise their offspring differently in order to confront the specific circumstances in which they live (Hoff, Laursen & Tardif, 2002).

Overall, our study confirms the findings of Larzelere & Patterson (1990): parenting behavior plays an important role in the link between SES and psychosocial functioning.

Moderation and Independent Effects

Likewise, we found evidence for the research objective that stated the interaction between SES and negative behavioral control is a determinant in the prediction of children’s behavioral problems and also behavioral conduct, the latter being a self-worth subscale. Children that belong to high or medium socioeconomic strata present higher scores on behavioral problems when their parents tend to resort to more negative behavioral control such as punitive punishment or harsh discipline.

Contrary to our third research aim, we could not find evidence for an interaction between positive parenting and negative behavioral control as was formulated. One possible explanation for this lack of interaction may be due to sample size. Even in the previous cases, where we found significant interactions, the effect size was limited. It is very likely that a larger sample is necessary for sensitivity to the interaction we were looking for.

Regardless of the lack of significance in our last research goal we can refer to some important independent effects in line with previous studies. Research has shown that parents in South American countries are characterized by a tendency to resort to harsh discipline, although Latino parents have also been described as being warm and affectionate towards their children (López et al., 2000). Our study revealed a positive association between parents’ negative behavioral control and behavioral problems (Ngoc Sim & Ping Ong, 2005). The subscale prosocial behavior was negatively linked with negative parental control (Veenstra et al., 2008), meaning that the greater the use of punitive discipline and harsh punishment the lesser the child exhibits prosocial behavior. Eisenberg, Fabes and Spinrad (2006) stated in their review that parental punishment is either not associated, or is negatively related to prosocial behavior, suggesting a modest negative relationship between prosociality and punishment. There was also a positive association between positive parenting and child self-ratings of global self-worth (Deater-Deckard & Petrill, 2004), physical appearance and behavioral conduct. In contrast, the use of negative parental behavioral control was negatively related to scholastic competence.

Results also show an inverse relationship of prosocial behavior and negative behavioral control. Previous research demonstrated that strict parenting, which highlights compliance, is characterized by parental control and this has been associated with lower levels of prosocial behavior in children. Restrictive control and punishment invoke fear and stress which disturb the child from focusing on others parties’ distress or harm (Janssen & Gerris, 1992).

Regarding our contextual variable, a positive association between low SES and negative parental control was found. Economically disadvantaged families tend to resort to harsh punishment more, which is associated with the exacerbation of problem behavior. Our results confirm what has been found previously, but within a context that was not previously studied.

Finally, in relation to the control variable gender, results show that there is a tendency for boys to show less prosocial behavior than their female peers. Prosocial children are aware of the repercussions their behavior may have on others. These tendencies help prosocial children to elude problem behaviors (Parsell, Laursen, Rubin, Booth-LaForce & Rose-Krasnor, 2008). Girls tended to score higher than boys on indices of prosocial behavior (Chen, Li, Li, Li & Liu, 2000) and gender is usually associated with other variables such as agreeableness during early adolescence (Shiner, 2000). Results also showed higher levels of hyperactivity in boys than girls. Literature supports this fact by describing a much larger prevalence of hyperactivity in males than their
female peers (Biederman et al., 2002; Zalecki & Hinshaw, 2004).

Implications and Limitations

Overall, some tentative implications can be concluded. Firstly, we found an association of context and family processes. Bronfenbrenner (1977) gave a theoretical framework to acknowledge the pivotal role of contextual factors that can influence and shape a child's development. Secondly, external factors alone are not the only important aspect of parenting. Results have provided further evidence of how parenting can mediate and intervene in the relationship of socio-economic status and some psychosocial factors (behavioral problems and partially self-worth). Nonetheless, these results should be interpreted with caution. Specifically further research is needed to take other psychosocial variables (such as motivation, or internalizing problems) in early adolescence into consideration. A promising line of study would be to focus more on the effective long-term side effects of positive parenting, rather than using coercive strategies related to harsh and punitive discipline (McGilloway et al., 2009).

Lastly, this point is pivotal specifically in a South American context, where parents tend to use severe discipline as a strategy to correct the undesirable behavior of their children.

Although these results look promising for a better understanding of parenting in a Latino context, we must mention some limitations of the study. The first point concerns the nature of the data, which is cross-sectional. Collecting information at a single point in time can be disadvantageous because it does not allow us to discuss causal inferences on child development. A second limitation is due to the fact that the variables were rated by only one informant per variable. A multi-informant, multi-method design would provide more valid and reliable ratings. However, a strength of the study is that different informants participated (caregivers, teachers, and children) thus, we avoided the problem of common method variance in studying associations between variables. Another important point relates to sample composition. The majority of the respondents were characterized by a low SES and only a few belonged to high SES, having as its consequence a lack of representation from each socioeconomic stratum. However, it is highly valuable that low-income families were willing to participate in this study, because research on parenting often includes middle class families only (Vincent & Ball, 2008). Additionally, the fact that more low SES families took part in this research, can reflect a positive aspect regarding the eagerness of families and can be viewed as one step forward in learning more about alternative disciplinary strategies.

References


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