

Parenting and Positive Adjustment for Adolescents in Nine Countries

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Abstract This chapter describes the theoretical background, methodology, and select empirical findings from the Parenting Across Cultures project, a longitudinal study of mothers, fathers, and youth in nine countries (China, Colombia, Italy, Jordan, Kenya, Philippines, Sweden, Thailand, and United States). The design of the study is well suited to addressing questions regarding within-family, between-family within-country, and between-country predictors of youth outcomes. Positive development may be characterized in unique ways in different countries, but adjustment outcomes such as social competence, prosocial behavior, and academic achievement also share features and parenting predictors in different countries. Combining emic (originating within a culture) and etic (originating outside a culture) approaches, operationalizing culture, and handling measurement invariance are challenges of international research. Understanding culturally specific and generalizable features of positive youth development as well as how youth are socialized in ways to promote positive adjustment are advantages of comparative international research.

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Countries around the globe have made a great deal of progress in reducing infant and under-five mortality, increasing enrollment in primary school, and improving other aspects of child development, but adolescents between the ages of 10 and 19 years have lagged behind (UNICEF, 2012). Adolescents face many challenges related to sexual risk taking, substance use, and other problem behaviors, which may differ or show commonalities across countries. Despite these challenges, adolescents also represent a resource to be cultivated through educational opportunities and vocational training to move them toward economic independence, through initiatives to improve reproductive health, and through positive interpersonal relationships to help them avoid risky behaviors and make positive decisions about their futures. This chapter presents cutting-edge research on adolescent development that we have conducted as part of the Parenting Across Cultures (PAC) project. This research suggests aspects of positive adjustment during adolescence that are fostered by positive parenting across countries, as well as nuances in how to approach research on both parenting and youth adjustment in an international framework.

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Theoretical Framework, Goals, and Main Questions

The PAC project is a longitudinal study that began by recruiting a sample of 1417 children (who were 8 years old, on average) and their mothers and fathers from 13 cultural groups in nine countries (Jinan and Shanghai, China; Medellin, Colombia; Naples and Rome, Italy; Zarqa, Jordan; Kisumu, Kenya; Manila, Philippines; Trollhättan/Vänersborg, Sweden; Chiang Mai, Thailand; and African, European, and Hispanic Americans in Durham, North Carolina, United States). These countries were selected because they vary widely in parenting practices, cultural norms, and contexts for adolescent development. The families have been assessed annually through interviews with mothers, fathers, and children about the parent-child relationship, the child's adjustment, attitudes and beliefs, and cultural values. The children have transitioned into adolescence and are 16, on average, as of 2016. This project advances understanding of positive adjustment during adolescence by broadening the base of participants in research and enabling tests of how culture and parenting are jointly related to processes involved in adolescent adjustment.

Different aspects of the project have been guided by different theoretical frameworks. For example, analyses of how attributions and beliefs are related to subsequent behavior have been guided by social information processing theory (Crick & Dodge, 1994). This theory posits that individuals who encode relevant information from social situations, make benign attributions about others' intent, generate many possible competent responses to challenging social situations, and positively evaluate the benefits of avoiding aggressive responses are more likely to behave in socially competent, prosocial ways than are individuals who do not take in relevant information from social situations, make hostile attributions, generate few socially competent responses, and positively evaluate aggressive responses.

PAC analyses of how reward systems and cognitive control operate in relation to adolescents' behavior are guided by the dual systems model (Steinberg, 2008). This theory proposes that adolescence is a period of heightened risk-taking because of differences in the timing of development of brain regions responsible for processing rewards and regions responsible for controlling impulses. In the PAC project, we have been guided by this theory in proposing models of how puberty, parenting, and culture jointly affect adolescents' behavior. Analyses of how parents' warmth and acceptance are related to other aspects of parenting and youth adjustment have been guided by parental acceptance-rejection theory (Rohner, 2004). According to this theory, all children and adolescents need to feel loved and accepted by their parents, and love and acceptance are universally predictive of better youth outcomes. We have been guided by this theory in examining links between parental acceptance and other aspects of parenting such as control and expectations regarding family obligations and between parental acceptance and positive youth development.

Selection of positive aspects of adolescent adjustment has been guided by the Five Cs theory of positive youth development (Lerner, Almerigi, Theokas, & Lerner, 2005). The five Cs included in this theory are competence, confidence, connection, character, and caring/compassion. In PAC, we have examined how different aspects

of parenting and culture are related to aspects of these five Cs such as academic and social competence, confidence in one's ability to regulate emotions, connection with parents and peers, and caring as evidenced in prosocial behavior. The entire project is grounded in bioecological theory, which situates the study of development over time within proximal family and more distal cultural contexts (Bronfenbrenner, 2005). Within this theoretical framework, PAC captures microsystems of parent-child relationships, macrosystems related to cultural norms, and chronosystems as the project has followed participants longitudinally from childhood to adolescence. Although many studies acknowledge the importance of these different systems of influence, few incorporate them empirically.

In the first 5 years of the PAC project, our goals involved understanding how corporal punishment operates across cultural groups, whether the association between corporal punishment and children's adjustment is moderated by its cultural normativeness or parental warmth, and whether the effect of corporal punishment on children's aggressive behavior and anxiety is mediated by children's cognitive and emotional appraisals regarding its use. In the next 5 years of the project, our goals turned to testing a model of how biological maturation and socialization interact in the development of adolescents' behavior; testing how psychological processes of reward-seeking, self-regulation, and social information processing patterns mediate the impact of puberty, parenting, and culture on adolescents' behavior; and testing the hypothesis that cultural normativeness of parenting behaviors and culturally shaped opportunities moderate the relation between parenting and adolescents' behavior.

Our main research questions have involved trying to understand both positive and negative aspects of parenting and youth adjustment. Although individuals in different cultures may define optimal development in different ways (Bornstein, 1995), we have addressed research questions regarding three main aspects of positive youth development (i.e., social competence, prosocial behavior, and academic achievement) that were relatively consistent across the nine countries in the PAC study. Interpersonal skills are an important part of youth adjustment and are related to subsequent outcomes into adulthood (Greenberg et al., 2003), suggesting the importance of social competence to positive youth development. Social competence may encompass different behaviors in different cultural groups, so our operationalization in PAC has included factors such as understanding others' feelings that are likely to be valued across groups, even if the way that the competence is demonstrated varies across groups. Prosocial behavior (i.e., voluntary, desirable actions aimed to help others) is important because these are positive deeds in their own right, and children's prosocial behavior promotes future positive adjustment (see Eisenberg, Spinrad, & Knafo-Noam, 2015). Academic achievement is emphasized more in some countries than in others; in Africa alone, the percentage of the population indicating that education is the most important resource for someone to succeed in life ranges from a low of 13% in Ivory Coast to a high of 73% in Botswana (Crabtree, 2014). Nevertheless, across countries, academic achievement is a marker of success in a major life domain during adolescence that predicts occupational and financial success as well as health into adulthood (e.g., Robert Wood Johnson

Foundation, 2013). Although we have focused on social competence, prosocial behavior, and academic achievement as positive youth outcomes, other research has demonstrated that particular cultural groups may highly value certain behaviors or skills that are perceived to indicate positive adjustment within that context, even if those behaviors or skills do not hold particular status in other contexts. For example, high jumping is a valued skill for adolescent and young adult Maasai males, with elevated status conferred on those males who can jump higher (Sobania, 2003). Anthropological, qualitative, or mixed methods research is important to identifying aspects of positive youth development that may not generalize across cultural groups.

Context: Cultural Distinctiveness of the PAC Sample

The countries represented in PAC vary in important ways that alter the context in which adolescents develop. First, they vary in access to opportunities for both risk-taking and experiences that would be expected to foster positive adjustment. For example, the legal age for driving and access to motor vehicles vary across countries, with opportunities for risky driving more prevalent in countries with younger driving ages and more access to motor vehicles. Second, the countries vary in terms of resources to prevent risky behavior and promote positive adjustment. For example, condoms and comprehensive school-based sex education are both more widely available to adolescents in Sweden than in the United States, providing different contexts of resources to promote reproductive health (United Nations Statistics Division, 2006). Third, the PAC countries differ in cultural norms about the acceptability of particular behaviors during adolescence. For example, alcohol use is relatively rare in Jordan, where Islamic principles forbidding the use of intoxicants are the norm (Haddad, Shotar, Umlauf, & Al-Zyoud, 2010). In contrast, the use of alcohol and illicit drugs is common among U.S. American adolescents (Johnston, O'Malley, Miech, Bachman, & Schulenberg, 2016). Fourth, the PAC countries differ in values, beliefs, and attitudes related to parents' relationships with their adolescent children, and these variations may alter the impact of parenting on adolescents' adjustment across countries (e.g., Lansford, Bornstein et al., 2016). Fifth, according to a Gallup poll, the countries vary in how, on average, they reply to the question "Is religion important in your daily life?" from a low of 17% yes in Sweden through 65% in the United States, 72% in Italy, and 83% in Colombia to highs of 96% in the Philippines and 97% in Thailand (Crabtree, 2010).

Given the wide diversity of the countries in this project, the study contributes to new knowledge in understanding the role of culture and parenting in positive youth development. In contexts in which more opportunities for risk-taking exist, to keep their adolescents on a positive trajectory, parents may need to be more vigilant about monitoring their adolescents' activities and whereabouts than in contexts in which there are fewer opportunities for risk-taking. Similarly, in contexts where fewer protective resources exist, parents may need to be more individually respon-

sible for promoting positive youth adjustment. Parents who behave in ways that are more consistent with the values, beliefs, and attitudes that are normative within a particular cultural context may be more likely to promote positive youth adjustment than parents whose behavior is less aligned with the broader cultural context.

The design of our study, with family members nested within families nested within cultural groups, is well suited to addressing questions about the extent to which youth outcomes are predicted by factors that vary between cultural groups, between families within a cultural group, between family members within a family, or different combinations of these (Lansford et al., 2015). Although we have conducted between-group comparisons, we also have tried to “unpack” culture into measurable contextual components and to understand specific characteristics of culture (e.g., beliefs, values, norms) that affect parenting practices and children’s interpretations of them. Operationalizing culture is a key challenge of international, comparative research (Lansford, Bornstein et al., 2016). In some ways, individuals from different countries may be culturally distinct, but in other ways, individuals from different countries may share cultural similarities.

Why the Parenting Across Cultures Study Is Important

Given the range of topics we have investigated in the PAC project, the study reported in this chapter is important in several domains. We provide illustrations using our findings related to corporal punishment. Our research on corporal punishment in different cultural contexts is important given the international mobilization to promote the rights of children and adolescents and to protect them from all types of abuse and exploitation to maximize their positive development. For example, as of 2017, 53 countries have outlawed corporal punishment in all settings (including by parents in the home), and our work facilitates more informed policy-making, particularly in relation to potential barriers to child protection because of culture-specific definitions of child maltreatment. Central to legislation to outlaw corporal punishment has been the rights of children and adolescents to be treated with dignity and respect and scientific research demonstrating detrimental effects of corporal punishment on youth adjustment. Our research has shown that experiencing corporal punishment is related to more youth aggression and anxiety across countries, even though this link is weaker in countries where corporal punishment is more normative (Lansford et al., 2005). In addition, parental warmth does not attenuate the link between corporal punishment and worse youth outcomes (Lansford et al., 2014). Thus, interventions and legal movements to protect children and adolescents from corporal punishment have the potential to promote positive youth adjustment.

Furthermore, our findings regarding mechanisms through which parenting affects youth adjustment have the potential to influence interventions designed to promote positive parenting and optimal youth adjustment. Our study is well suited to addressing questions regarding what proximal family, parenting, and individual

mechanisms mediate links between more distal cultural factors and youth outcomes. For example, we have found that country differences in children's hostile attributions account for a significant portion of country differences in aggressive behavior problems (Dodge et al., 2015). We presented children with ten hypothetical vignettes depicting an ambiguous situation and asked them to attribute the likely intent of the provocateur (coded as benign or hostile) and to predict how they would respond in that situation (coded as non-aggression or reactive aggression). Mothers and children independently rated the child's aggressive behavior. In every cultural group, in those situations in which a child attributed hostile intent to a peer, that child was more likely to report that he or she would respond with reactive aggression than in situations when that same child attributed benign intent. Across children, hostile attributional bias scores predicted higher mother- and child-rated aggressive behavior problems, even controlling for prior aggression. Cultural-group differences in the tendency for children to attribute hostile intent statistically accounted for a significant portion of group differences in aggressive behavior problems, suggesting a psychological mechanism for group differences in aggressive behavior.

Using the PAC sample, we also have been able to address research questions that are more salient in one locale than in others. For example, we added a detailed measure of child agency in Sweden, but not in the other countries, because child agency is a particularly important issue in Sweden, with widespread endorsement of children's equality with adults and belief in the rights of children. Using this measure, we found that Swedish parents' warmth is directly related to subsequent perceptions of children's agency, which in turn are related to subsequently lower child externalizing and internalizing problems and higher academic achievement (Gurdal, Lansford, & Sorbring, 2016). Thus, the PAC study is important both in cross-national comparative research as well as in single-country investigations around meaningful topics within a particular context.

Novelty: Insights into Culture-Specific and Universal Positive Psychological Outcomes

What constitutes positive parenting may be similar or different across countries (Bornstein & Lansford, 2010). In the PAC study, parental warmth and acceptance (as opposed to rejection, neglect, and hostility) have been found to predict more positive youth adjustment, including more prosocial behavior, better school performance, and fewer internalizing and externalizing behavior problems (Putnick et al., 2015). Children's prosocial behavior also elicits more positive parenting (Pastorelli et al., 2016). Others have also posited theoretically and found empirically that parental warmth and acceptance are universally related to more positive youth adjustment (e.g., Rohner, 2004). However, the specific ways in which warmth and acceptance are expressed may differ across countries. For example, Chinese immigrant mothers in the United States are more likely than European American mothers

to express warmth through meeting needs for daily routines (e.g., preparing favorite foods) and through providing learning opportunities, whereas European American mothers are more likely than Chinese immigrant mothers to use physical (e.g., hugging) and verbal (saying “I love you”) expressions of warmth (Cheah, Li, Zhou, Yamamoto, & Leung, 2015). Thus, although the form may differ, the function of warmth may be universally positive across cultures (Bornstein, 2012). One of the novel aspects of the PAC project is that with its multinational design, it is possible directly to compare relations between parenting and positive youth development across countries in a way that is not feasible with a single-country design.

Other aspects of parenting may have more culturally variable effects on youth adjustment. For example, in the PAC study, correlations between parental warmth and control are not the same across countries; rather, in Kenya and Jordan, parents who are warm are also likely to be controlling, whereas in Sweden and European American families in the United States, parental warmth and control are unrelated or negatively related (Deater-Deckard et al., 2011). This suggests one reason that in some cultural groups, more parental control may be related to better youth adjustment, whereas in other cultural groups, more parental control is related to worse youth adjustment. Part of the explanation for these differences may stem from parents’ and adolescents’ beliefs regarding what is expected and normative. For instance, increases in adolescents’ autonomy in decision making between seventh and eighth grades have been found to be related to more improvement in emotional functioning in the United States than in China, perhaps because increases in adolescents’ autonomy were more normative in the United States than in China (Qin, Pomerantz, & Wang, 2009). Therefore, universal versus culture-specific relations between parenting and positive youth adjustment may depend, in part, on the normativeness of particular beliefs and behaviors.

Operationalizing “culture” in international research is a challenge. One way we have attempted to handle this issue in PAC is by asking parents and youth to complete measures that assess attitudes and beliefs about a range of topics that have been conceptualized as construing cultural values. For example, parents completed a measure that assessed their expectations regarding children’s obligations to provide help, support, and respect to different family members, and children completed a comparable measure that asked them to report on their parents’ expectations regarding children’s family obligations (following from Fuligni, Tseng, & Lam, 1999). We found that parenting behaviors that were warmer, less neglectful, and more controlling as well as parenting attitudes that were more authoritarian were related to higher expectations regarding children’s family obligations (Lansford, Godwin et al., 2016). These effects held both between families within cultures as well as between cultures, meaning that, for example, parents within a cultural group who were warmer and less neglectful had higher expectations regarding their children’s family obligations than did parents within that cultural group who were less warm and more neglectful and that in cultural groups that were warmer and less neglectful, parents had higher expectations regarding children’s family obligations than in cultural groups that were less warm and more neglectful.

Expectations regarding family obligations are grounded in larger cultural contexts. In research with immigrant families in the United States, Wu and Kim (2009) found that Chinese American adolescents who were language brokers for their family (i.e., served as interpreters) were more likely to experience this obligation as a burden if they felt disconnected from their Chinese heritage and that they did not matter to their parents; however, adolescents who felt connected with their parents and their heritage were more likely to perceive language brokering as a source of efficacy rather than a burden. In a study of Ngecha children in Gikuyu, Kenya, children were more likely to demonstrate prosocial behavior in situations involving family obligations, such as caring for younger siblings, doing household chores, and engaging in other types of labor for the benefit of the family, than in situations that did not involve family obligations (de Guzman, Edwards, & Carlo, 2005). Therefore, youth without family obligations may be deprived of an important arena in which to develop prosocial behaviors and competence in tasks that are important for family functioning.

Method, Procedures of Data Collection, and Adaptation of Measures in New Cultures

Since recruiting the PAC sample through schools when children were 8 years old, on average, we have conducted annual quantitative interviews with mothers, fathers, and children. Initially, the interviews were conducted in homes, schools, community centers, or other places convenient to the families, with each family member interviewed privately so they could not hear or see one another's responses. As the children have matured into adolescence, the interviews have increasingly been conducted in writing rather than orally and online when possible. Interviews are still conducted orally for parents and youth for whom literacy is a concern. Because institutional review boards (IRB) that have reviewed the ethical treatment of participants in each site as well as the logistics of different local environments have differed, we have needed to balance standardization and flexibility in data collection. For example, IRBs in the different countries have distinct guidelines for the payment of research participants, so in some PAC countries, families are paid modest amounts or children are given small gifts as compensation for their time, whereas in other sites, payments to families have not been allowed, so instead, compensation is paid to children's schools. Allowing this kind of flexibility within the project enables us to be appropriately sensitive to the needs of local communities while also maintaining a great deal of similarity across sites in the procedures and measures.

In the PAC project, measures have been administered in the predominant language of each country, following forward- and back-translation and meetings to resolve any item-by-item ambiguities in linguistic or semantic content (Erkut, 2010). In addition to translating the measures, translators note items that do not translate well, are inappropriate for the participants, are culturally insensitive, or

elicit multiple meanings and suggest improvements. Country coordinators and the translators review discrepant items and make appropriate modifications.

These procedures are fairly standard in international, comparative studies, but they do lead to two primary concerns. First, to what extent are the most important factors related to parenting and adolescent development in a given cultural context captured by measures that originate in one place and are adapted for use in another? In essence this concern raises the issue of taking an emic versus etic approach to data collection. Using an emic approach, researchers from within a particular cultural group create measures that are specific to that group, which has the advantage of being sure to characterize aspects of parenting and development that may be culture specific but the disadvantage of making it more difficult to generalize or compare across groups. Using an etic approach, researchers from one cultural group apply concepts and measures developed elsewhere to study new cultural groups, which has the advantage of lending itself to the search for cross-cultural similarities and universals but the disadvantage of risking the loss of concepts that are unique to particular cultural groups. In PAC, we have attempted to balance these two approaches by creating a collaborative team of researchers from all nine countries who meet in person annually (rotating the meetings among the nine participating countries) so that we have an emic perspective provided by colleagues from each country but also an etic approach in trying to administer a set of adapted measures in each of the nine countries.

A second concern raised by translating measures to use in many different groups is that methodologically, it is important to demonstrate that the measures are operating similarly across groups (Vandenberg & Lance, 2000; Widaman & Reise, 1997). Establishing measurement invariance is challenging even with just two groups and becomes much more difficult with a large number of groups (Huang et al., 2012; Putnick et al., 2015). Standard tests may be too restrictive, particularly when attempting to establish invariance across 13 cultural groups as in PAC (e.g., Borsboom, 2006; Marsh et al., 2009). As an alternative, we have used a meta-analytic approach because meta-analyses do not assume that the same measures have been used in all studies, making it possible to obtain an overall effect as well as variance of the effect that might be attributable to measurement (Lansford et al., 2014). We also have assessed measurement invariance with the alignment method in Mplus V.7.31 (Asparouhov & Muthén, 2014), which uses an iterative procedure to determine the largest “set” of groups that contains no significant difference on a given parameter (Icenogle et al., 2017).

Another methodological challenge is that self-report data can be compromised by factors such as social desirability biases that might differ across countries. For both mothers and fathers in all nine PAC countries, we found that socially desirable responding was in the upper half of the possible distribution, and countries varied minimally (although China was higher than the cross-country grand mean and Sweden lower; Bornstein et al., 2015). Measuring and controlling for social desirability biases is one way we have tried to address this concern.

Most of the publications that have resulted from PAC are cross-site papers that include data from all nine countries, but sometimes the emic perspective results in site-specific papers that reflect issues that are important in one place but not others

(e.g., Alampay, 2014). For example, a disputed political election in Kenya in 2007 resulted in widespread community violence. In PAC, we added a measure of parents' and children's exposure to the political violence that we did not add in the other sites because the issue was not relevant there. As a result, we learned that children's exposure to short-term but severe politically motivated violence was related to more child externalizing behavior problems (Skinner, Oburu, Lansford, & Bacchini, 2014).

Take Home Message and Recommendations

Findings from the PAC project suggest at least three conclusions regarding positive outcomes and well-being of youth across cultures. First, social competence, prosocial behavior, and academic achievement are aspects of positive development that are fostered by parental warmth and acceptance across countries. Second, positive youth adjustment elicits more positive parenting. Third, some aspects of positive youth adjustment are more salient in particular cultural groups than in others.

Moving forward, it will be important for the field of developmental science to grapple with both methodological and conceptual issues to advance understanding of positive youth development across countries. Methodologically, ongoing challenges involve handling measurement invariance and biases, disentangling within- and between-country effects, balancing emic with etic perspectives, and operationalizing culture to move beyond social address models of simply comparing one group with another to understanding how values, beliefs, and behaviors that constitute "culture" are related to positive youth adjustment. Conceptually, future research will benefit from attempting to understand both culturally specific and generalizable features of positive youth development, as well as what parents and other members of a culture do to socialize youth to be well adjusted within that culture.

In practice, interventions designed to promote positive youth development will benefit from consideration of socialization goals within particular cultural contexts as well as understanding of culturally-grounded parenting beliefs and behaviors. Previous research has demonstrated that using culturally-tailored interventions can promote positive parenting (Coard, Foy-Watson, Zimmer, & Wallace, 2007). Building specifically on the PAC findings, for example, interventions might focus on helping parents demonstrate warmth and acceptance in ways that will be perceived by adolescents as being loving within the broader cultural context and to exercise control in ways that provide structure and guidance in ways that will be consistent with adolescents' expectations based on the norms of their culture. At times, intervening to change parents' beliefs is a precursor to changing parents' behaviors, but at other times, it may be possible to change parents' behaviors directly, particularly with an understanding of the cultural context in which parents and adolescents are situated. The robustness of theories of parenting and positive youth development, as well as theories related to behavior change, can be tested by assessing the degree to which the theories hold in diverse cultural contexts around the world.

References

- Alampay, L. P. (2014). Parenting in the Philippines. In H. Selin (Ed.), *Parenting across cultures: Childrearing, motherhood and fatherhood in non-Western cultures* (pp. 105–121). Dordrecht, The Netherlands: Springer.
- Asparouhov, T., & Muthén, B. (2014). Multiple-group factor analysis alignment. *Structural Equation Modeling: A Multidisciplinary Journal*, *21*, 1–14.
- Bornstein, M. H. (1995). Form and function: Implications for studies of culture and human development. *Culture & Psychology*, *1*, 123–137.
- Bornstein, M. H. (2012). Cultural approaches to parenting. *Parenting: Science and Practice*, *12*, 212–221.
- Bornstein, M. H., & Lansford, J. E. (2010). Parenting. In M. H. Bornstein (Ed.), *The handbook of cross-cultural developmental science* (pp. 259–277). New York, NY: Taylor and Francis.
- Bornstein, M. H., Putnick, D. L., Lansford, J. E., Pastorelli, C., Skinner, A. T., Sorbring, E., ... Oburu, P. (2015). Mother and father socially desirable responding in nine countries: Two kinds of agreement and relations to parenting self-reports. *International Journal of Psychology*, *50*, 174–185.
- Borsboom, D. (2006). When does measurement invariance matter? *Medical Care*, *44*, S176–S181.
- Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks, CA: Sage.
- Cheah, C. S., Li, J., Zhou, N., Yamamoto, Y., & Leung, C. Y. (2015). Understanding Chinese immigrant and European American mothers' expressions of warmth. *Developmental Psychology*, *51*, 1802–1811.
- Coard, S., Foy-Watson, S., Zimmer, C., & Wallace, A. (2007). Considering culturally relevant parenting practices in intervention development and adaptation: A randomized control trial of the Black Parenting Strengths and Strategies (BPSS) Program. *The Counseling Psychologist*, *35*, 797–820.
- Crabtree, S. (2010). *Religiosity highest in world's poorest nations. Results of Gallup poll*. Retrieved from <http://www.gallup.com/poll/142727/religiosity-highest-world-poorest-nations.aspx>
- Crabtree, S. (2014). *Value Africans place on education varies widely by country. Results of Gallup poll*. Retrieved from <http://www.gallup.com/poll/174332/value-africans-place-education-varies-widely-country.aspx>
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, *115*, 74–101.
- Deater-Deckard, K., Lansford, J. E., Malone, P. S., Alampay, L. P., Sorbring, E., Bacchini, D., ... Al-Hassan, S. M. (2011). The association between parental warmth and control in thirteen cultural groups. *Journal of Family Psychology*, *25*, 790–794.
- de Guzman, M. R. T., Edwards, C. P., & Carlo, G. (2005). Prosocial behaviors in context: A study of Gikuyu children of Ngecha, Kenya. *Journal of Applied Developmental Psychology*, *26*, 542–558.
- Dodge, K. A., Malone, P. S., Lansford, J. E., Sorbring, E., Skinner, A. T., Tapanya, S., ... Pastorelli, C. (2015). Hostile attributional bias and aggressive behavior in global context. *Proceedings of the National Academy of Sciences*, *112*, 9310–9315.
- Eisenberg, N., Spinrad, T. L., & Knafo-Noam, A. (2015). Prosocial development. In M. E. Lamb & C. Garcia Coll (Vol. Eds.), R. M. Lerner (Series Ed.), *Handbook of child psychology, Vol. 3, Social, emotional, and personality development*, 7th ed. (pp. 610–656). New York, NY: Wiley.
- Erkut, S. (2010). Developing multiple language versions of instruments for intercultural research. *Child Development Perspectives*, *4*, 19–24.
- Fulgini, A. J., Tseng, V., & Lam, M. (1999). Attitudes toward family obligations among American adolescents with Asian, Latin American, and European backgrounds. *Child Development*, *70*, 1030–1044.

- Greenberg, M. T., Weissberg, R. P., O'Brien, M. U., Zins, J. E., Fredericks, L., Resnik, H., & Elias, M. J. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist, 58*, 466–474.
- Gurdal, S., Lansford, J. E., & Sorbring, E. (2016). Parental perceptions of children's agency: Parental warmth, school achievement and adjustment. *Early Child Development and Care, 186*, 1203–1211.
- Haddad, L., Shotar, A., Umlauf, M., & Al-Zyoud, S. (2010). Knowledge of substance abuse among high school students in Jordan. *Journal of Transcultural Nursing, 21*, 2143–2150.
- Huang, L., Malone, P. S., Lansford, J. E., Deater-Deckard, K., Di Giunta, L., Bombi, A. S., ... Bacchini, D. (2012). Measurement invariance of mother reports of discipline in different cultural contexts. *Family Science, 2*, 212–219.
- Icenogle, G., Steinberg, L., Olino, T. M., Shulman, E. P., Chein, J., Alampay, L. P., ... Uribe Tirado, L. M. (2017). Puberty predicts approach but not avoidance behavior on the Iowa Gambling Task in a multinational sample. *Child Development, 88*, 1598–1614.
- Johnston, L. D., O'Malley, P. M., Miech, R. A., Bachman, J. G., & Schulenberg, J. E. (2016). *Monitoring the Future national survey results on drug use, 1975–2015: Overview, key findings on adolescent drug use*. Ann Arbor, MI: Institute for Social Research, The University of Michigan.
- Lansford, J. E., Bornstein, M. H., Deater-Deckard, K., Dodge, K. A., Al-Hassan, S. M., Bacchini, D., ... Zelli, A. (2016). How international research on parenting advances understanding of child development. *Child Development Perspectives, 10*, 202–207.
- Lansford, J. E., Chang, L., Dodge, K. A., Malone, P. S., Oburu, P., Palmérus, K., ... Quinn, N. (2005). Physical discipline and children's adjustment: Cultural normativeness as a moderator. *Child Development, 76*, 1234–1246.
- Lansford, J. E., Godwin, J., Alampay, L. P., Uribe Tirado, L. M., Zelli, A., Al-Hassan, S. M., ... Tapanya, S. (2016). Mothers', fathers', and children's perceptions of parents' expectations about children's family obligations in nine countries. *International Journal of Psychology, 51*, 366–374.
- Lansford, J. E., Godwin, J., Uribe Tirado, L. M., Zelli, A., Al-Hassan, S. M., Bacchini, D., ... Alampay, L. P. (2015). Individual, family, and culture level contributions to child physical abuse and neglect: A longitudinal study in nine countries. *Development and Psychopathology, 27*, 1417–1428.
- Lansford, J. E., Sharma, C., Malone, P. S., Woodlief, D., Dodge, K. A., Oburu, P., ... Di Giunta, L. (2014). Corporal punishment, maternal warmth, and child adjustment: A longitudinal study in eight countries. *Journal of Clinical Child and Adolescent Psychology, 43*, 670–685.
- Lerner, R. M., Almerigi, J. B., Theokas, C., & Lerner, J. V. (2005). Positive youth development: A view of the issues. *Journal of Early Adolescence, 25*, 10–16.
- Marsh, H. W., Muthén, B., Asparouhov, T., Lüdtke, O., Robitzsch, A., Morin, A. J. S., & Trautwein, U. (2009). Exploratory structural equation modeling, integrating CFA and EFA: Application to students' evaluations of university teaching. *Structural Equation Modeling, 16*, 439–476.
- Pastorelli, C., Lansford, J. E., Luengo Kanacri, B. P., Malone, P. S., Di Giunta, L., Bacchini, D., ... Sorbring, E. (2016). Positive parenting and children's prosocial behavior in eight countries. *Journal of Child Psychology and Psychiatry, 57*, 824–834.
- Putnick, D. L., Bornstein, M. H., Lansford, J. E., Malone, P. S., Pastorelli, C., Skinner, A. T., ... Oburu, P. (2015). Perceived mother and father acceptance-rejection predict four unique aspects of child adjustment across nine countries. *Journal of Child Psychology and Psychiatry, 56*, 923–932.
- Qin, L., Pomerantz, E. M., & Wang, Q. (2009). Are gains in decision-making autonomy during early adolescence beneficial for emotional functioning? The case of the United States and China. *Child Development, 80*, 1705–1721.
- Robert Wood Johnson Foundation. (2013). *Why does education matter so much to health?* Retrieved from http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2012/rwjf403347

- Rohner, R. P. (2004). The parental “acceptance-rejection syndrome”: Universal correlates of perceived rejection. *American Psychologist*, *59*, 830–840.
- Skinner, A. T., Oburu, P., Lansford, J. E., & Bacchini, D. (2014). Childrearing violence and child adjustment after exposure to Kenyan post-election violence. *Psychology of Violence*, *4*, 37–50.
- Sobania, N. (2003). *Culture and customs of Kenya*. Westport, CT: Greenwood Press.
- Steinberg, L. (2008). A social neuroscience perspective on adolescent risk taking. *Developmental Review*, *28*, 78–106.
- UNICEF. (2012). *Progress for children: A report card on adolescents*. New York, NY: UNICEF.
- United Nations Statistics Division. (2006). *Demographic yearbook 2006*. New York, NY: United Nations.
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, *3*, 4–70.
- Widaman, K. F., & Reise, S. P. (1997). Exploring the measurement invariance of psychological instruments: Applications in the substance use domain. In K. J. Bryant, M. E. Windle, & S. G. West (Eds.), *The science of prevention: Methodological advances from alcohol and substance abuse research* (pp. 281–324). Washington, DC: American Psychological Association.
- Wu, N. H., & Kim, S. Y. (2009). Chinese American adolescents’ perceptions of the language brokering experience as a sense of burden and sense of efficacy. *Journal of Youth and Adolescence*, *38*, 703–718.