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Abstract

International research on parenting and child development can advance our understanding of similarities and differences in how parenting is related to children's development across countries. Challenges to conducting international research include operationalizing culture, disentangling effects within and between countries, and balancing emic and etic perspectives. Benefits of international research include testing whether findings regarding parenting and child development replicate across diverse samples, incorporating cultural and contextual diversity to foster more inclusive and representative research samples and investigators than has typically occurred, and understanding how children develop in proximal parenting and family and distal international contexts.

Keywords

child development; culture; international research; parenting

Although scholars have long recognized that child development is situated in broad cultural contexts (1-4), theoretical models of culture and child development have advanced recently. For example, ecocultural perspectives consider cultural pathways consisting of routines that are central to parenting and children's development in different settings (5). Although most empirical studies of parenting and child development include children primarily from North America and Western Europe (6-8), findings from diverse international contexts have challenged theories of parenting and child development. For example, some tenets of attachment theory rely on Western orientations of sensitivity, competence, and security that are regarded differently in non-Western settings (9).

In this article, we examine what international research on parenting and child development can teach us about how parenting is related to children's development as well as broader issues in the role of international research for understanding children's development. Embedded throughout the article and this body of research are complexities involved in situating families within cultures versus countries (10). International research draws on samples and scholars from different countries, yet those countries may share cultural

similarities, and many cultures can be represented within any given country. In explicating how international research on parenting can inform our understanding of children's development, we draw on our own research in the Parenting Across Cultures (PAC) project, a longitudinal study of mothers, fathers, and children from 13 cultural groups in 9 countries (China, Colombia, Italy, Jordan, Kenya, Philippines, Sweden, Thailand, and the United States), as well as findings from other international research. We also consider whether relations between predictors of parenting and children's development outcomes are similar across countries or whether culture and country moderate these relations. And we discuss challenges and next steps in international research.

Country as a Moderator of Links Between Parenting and Children's Outcomes

In international contexts, parenting can be conceptualized as a 2 X 2 matrix based on the forms and functions of parenting, which can be either the same or different across countries (11, 12). If both the form and function of parenting are the same across countries, we see cross-country similarity. If both the form and function of parenting differ across countries, we see country specificity. The same form of parenting may serve different functions in different countries, or different forms of parenting may serve the same function. In many respects, finding differences across countries is not surprising because such differences capture much of what we typically think of when considering cultural diversity. Yet despite these differences, a common parental goal across cultures is raising children to be productive and successful members of society, even if the definitions of what it means to be productive and successful, and the specific parenting strategies used to attain these goals, differ between countries (13).

One reason a particular form of parenting may relate to children's adjustment in different ways across countries is that the meanings delivered by the form of parenting may differ. We examined correlations between parents' warmth and behavioral control and found that some countries (Kenya and Jordan) had generally moderate to high positive correlations between these two forms of parenting, whereas other countries (Sweden and United States) had generally modest and sometimes negative correlations between the two (14). When children interpret their parents' controlling behaviors as indicating warmth, parental control may be associated with more positive developmental outcomes than when children interpret parental control as a sign of negativity.

Indeed, children interpret their parents' behaviors within the larger context in which they are used. For example, children's perceptions of mothers' hostility mediate the link between harsh verbal discipline and children's anxiety and aggression in China, India, the Philippines, and Thailand; these relations are moderated by children's perceptions of the normativeness of harsh verbal discipline so the effects of harsh verbal discipline were more adverse when children perceived that form of discipline as nonnormative than when they perceived it as normative (15). In addition, more corporal punishment predicts more anxiety among children across countries, but the adverse effect of corporal punishment is more pronounced in countries in which corporal punishment is less normative (16) and authoritarian parenting

attitudes are less common (17). In China, India, Italy, Kenya, the Philippines, and Thailand, mothers' use of corporal punishment, expressing disappointment, and yelling were related to more aggression in children, whereas giving a timeout, using corporal punishment, expressing disappointment, and shaming were related to greater symptoms of anxiety in children, with some moderation of these associations based on children's perceptions of the normativeness of each parental behavior (18).

In other research, cultural contexts shape how parenting relates to children's development. In Egypt, India, Iran, and Pakistan, maternal authoritarianism is not associated with mothers' negative thoughts and feelings about their children as it is in Western Europe; maternal negativity rather than authoritarianism is related to lower self-esteem among children in Egypt, India, Iran, and Pakistan (19). These examples suggest how country moderates the link between parenting and children's outcomes depending on the meaning children impart to parents' behavior. Children's conceptions derive at least in part from norms and expectations gleaned from the broader context in which families are situated.

Despite evidence that in some domains, country moderates the link between parenting and children's outcomes, overall we have found many similarities in the ways in which parenting is related to children's development. For example, in all nine countries in our PAC study, children who perceived their parents as being more rejecting had more internalizing and externalizing behavior problems and less optimal school performance and prosocial behavior across three years (20). Similarly, within countries as well as between countries, parents who were warmer, less neglectful, and more controlling, and who had attitudes that were more authoritarian also had greater expectations regarding children's family obligations (21). In other research, countries are similar in processes linking parenting and children's outcomes. For example, parental support, psychological control, and behavioral control were related consistently to adolescents' social initiative, depression, and antisocial behavior in Bangladesh, Bosnia, China, Colombia, Germany, India, Palestine, South Africa, and the United States (22). Similarly, in a meta-analysis of 43 studies in Africa, Asia, Europe, and North and South America, perceptions of parents as being rejecting rather than accepting were related to more psychological maladjustment among children in all countries (23). Thus, international research is as important in understanding which processes indicate similarities in parenting and child development as in understanding differences.

Challenges and Directions in International Research

Logistical, scientific, and conceptual challenges complicate international research. We highlight four challenges: operationalizing culture, handling measurement invariance and biases, disentangling effects within and between countries, and balancing emic and etic perspectives. First, knowing how to operationalize culture is an ongoing challenge (24). Because the field has fewer measures of culture than of parenting and child development outcomes, comparisons are often made between demographic groups such as countries or ethnic groups within a country. Representativeness of the samples presents additional challenges if the goal is generalizing and comparing across cultural groups (25). Some of the defining features of culture that characterized earlier research, such as focusing on individualism versus collectivism, have fallen out of favor because they are regarded as too

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simplistic to characterize entire groups, and because individuals within groups can have both individualist and collectivist qualities (26). One approach to defining and operationalizing culture is to assess beliefs and behaviors in specific domains that are the focus of the particular study. For example, parents' authoritarian attitudes or expectations regarding children's family obligations vary across groups and might be key cultural constructs. Even if these kinds of cultural dimensions vary between groups, it can also be useful to assess them to characterize variation within cultures. To the extent that variation between cultures is more common than variation within cultures, one could draw conclusions regarding how much that belief or behavior defines a particular cultural group.

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Comparisons across demographic or geographic categories can be problematic because they can lead to stereotyping members of a category (social address) and do not easily handle cross-group links (e.g., with immigrant families or marriages between members of different groups). The situation with international refugees, who now exceed 60 million worldwide (27), illustrates these complexities: In characterizing refugee populations, one could refer to their country of origin or country of destination, but many do not know if the country of destination is permanent (28). In addition, many children and parents are separated, leading to a sense of ambiguous loss (29) and adding further complexity to characterizing families as belonging to one country or another. In this way, *culture* may not be equated with *country*, and immigration (along with other factors related to ethnicity, socioeconomic status, religion, region, and the like) distributes many cultural groups throughout a given country. In addition, without clear hypotheses regarding why differences between groups would exist, researchers do not know how to interpret group differences when they find them and simply speculate.

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Instead, researchers should develop rich and nuanced measures of culture that allow us to examine a range of cultural factors (as opposed to categorical demographic groups) as moderators of links between parenting and children's outcomes. In addition, mixed-methods research that analyzes qualitative data on in-depth cultural dimensions will help us understand variations in parenting and children's development within and between countries. What constitutes *data* and *evidence* may also vary across groups, particularly in cultures that are oriented toward storytelling, where parents' recounting of personal narratives to children may be a tool of socialization (30). Therefore, attempts to operationalize culture should be sensitive to different groups' understanding of evidence.

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Second, international researchers are challenged by the need to demonstrate measurement invariance, which tests whether quantitative measures operate in the same way in each group (31, 32). Rigorously establishing invariance can be difficult even with two groups, and it becomes more complicated when dealing with many groups (33). We have used a meta-analytic approach as an alternative to demonstrating measurement invariance 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 (17). Furthermore, self-report data can be compromised by factors such as social desirability biases that might differ across countries. For both mothers and fathers in our PAC study, socially desirable responding was widespread in all nine countries and countries varied minimally (although China was higher than the cross-country grand mean

and Sweden was lower; 34). Measuring and controlling for social desirability biases is one way to address threats to the validity of self-report data.

Third, variance both within and between countries is important for many (perhaps most) parenting and child development variables. Nesting hierarchical data with families within countries makes it possible to conduct multilevel analyses that parse variance within and between countries, but tests between countries are often underpowered, even in studies with many countries (35). With few countries, only large effects between countries will be detected, but we have found such effects in a number of analyses of the PAC study as well as in analyses using other datasets. For example, using data from 24 low- and middle-income countries that participated in the UNICEF-sponsored Multiple Indicator Cluster Surveys, country of residence accounted for between 27% and 38% of the variance in mothers' belief in the necessity of using corporal punishment to raise a child properly, a large effect (36). Yet even with only nine countries in the PAC study, we detected differences between countries that diverged from differences within countries for predictors of physical abuse and neglect of children (37). Researchers beginning international studies should consider how many countries are enough and whether the disadvantages of low power at the country level are outweighed by disadvantages of lacking internationally comparable data to inform understanding of developmental processes.

Fourth, the field is challenged by balancing emic and etic perspectives (i.e., the views of individuals within the cultural group and individuals outside the cultural group, respectively). Adopting an emic perspective provides a cultural insider's understanding of processes that are important within that culture but that might not be fully appreciated by a cultural outsider. Such processes might be excluded from consideration if an outsider imposed a framework in one culture that was developed in another. For example, *guan* has been described as a way Chinese parents train children that is distinct from authoritarian parenting used by European American parents (38). Likewise, indigenous concepts of *hiya* (behaving with propriety and dignity with respect to the family) and *utang na loob* (referring to a lifelong debt stemming from respect and gratitude toward another person) shape family relationships in the Philippines (39). The concept of *omoluwabi*, derived from the Yoruba people of Nigeria, exemplifies a holistic approach to education that emphasizes loyalty to family obligations and traditions in interpersonal interactions (40). These indigenous concepts of parenting generated within specific cultural groups may not generalize well to other cultural groups and would not be understood by applying a frame of reference developed outside those groups. However, adopting an emic perspective can make it more difficult to investigate whether and how similar processes apply across diverse cultural groups. The PAC study has bridged emic and etic approaches by collaborating with scientists from different cultural groups who share their perspectives and cultural insights, translate, and jointly investigate constructs of common interest across countries.

Conclusions

Our work with the PAC study has helped us develop the following suggestions that can inform others' efforts in international, collaborative research. First, in addition to broadening the base of participants to include diverse families from around the world, researchers

should broaden the base of scholars contributing to developmental science to include researchers from around the world. It is not sufficient for researchers from one country to collect data in another and publish the findings without collaborators from that country because doing so risks losing the cultural insider's perspective in collecting data and interpreting findings. Second, although technological advances in videoconferencing and online collaboration have helped sustain international collaboration, the importance of face-to-face meetings cannot be underestimated. Meeting in person enables collaborators to build personal relationships that are vital for allowing each person to have a voice in the research process and keeps the research team on track by allowing opportunities to discuss issues such as in-depth cultural adaptation of measures; it is difficult to explain the subtleties of culture via email. In the PAC study, the entire investigative team meets annually, rotating sites among participating countries. Meeting in each country gives us the opportunity to engage with the local community through conferences we host at collaborating universities (to which faculty, students, and professionals who work with families are invited). We have also met with local families (some of whom have participated in our research). These steps also reduce cultural hegemony by distributing leadership responsibilities among the international team. Finally, in conducting international research, balancing standardization and flexibility is necessary to yield findings that can be compared (if that is the goal) and that are gathered in a way that is sensitive to local contexts. For example, bringing laptop computers into homes to conduct interviews may work in some locales but be dangerous to interviewers in others because they might be robbed; in these cases, having interviewers conduct their work with paper and pencil rather than computers, or allowing participants to come to a different setting rather than interviewing them in their homes, are possible solutions.

Given the challenges that conducting international research presents and the inconsistent patterns of findings across countries regarding links between parenting and children's outcomes, one may question whether the advantages of trying to understand parenting and child development from an international perspective outweigh the disadvantages. We conclude that they do, for at least three reasons. First, the importance of replicating findings is a hot topic in developmental and psychological science (41, 42); international research provides a meaningful way to test whether findings on parenting and child development replicate across diverse contexts. If the findings do not replicate, this suggests the need to dig deeper to understand what mechanisms account for the differences. Second, developmental scientists have become increasingly aware of the need to acknowledge cultural and contextual diversity and international perspectives that foster more inclusive and representative participants and investigators than has been typical in the past (see the Strategic Plan of the Society for Research in Child Development, www.srcd.org/about-us/strategic-plan/strategic-goals). Conducting international, collaborative research is one way to accomplish this goal. Finally, as with the adage from the intervention field that the best way to understand how something works is to try to change it, in the field of developmental science, the best way to understand how children develop may be to study them in proximal parenting and distal international contexts to understand the many levels of influence that scaffold development.

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References

1. Bronfenbrenner, U. *Making human beings human*. Sage; Thousand Oaks, CA: 2005.
2. Mead, M. *Coming of age in Samoa: A psychological study of primitive youth for Western civilization*. William Morrow and Co.; New York, NY: 1928.
3. Super CM, Harkness S. The developmental niche: A conceptualization at the interface of child and culture. *International Journal of Behavioral Development*. 1986; 9:545–569. doi: 10.1177/016502548600900409.
4. Whiting, BB.; Whiting, JWM. *Children of six cultures: A psycho-cultural analysis*. Harvard University Press; Cambridge, MA: 1975.
5. Weisner TS. Ecocultural understanding of children's developmental pathways. *Human Development*. 2002; 45:275–281. doi:10.1159/000064989.
6. Arnett JJ. The neglected 95%: Why American psychology needs to become less American. *American Psychologist*. 2008; 63:602–614. doi: 10.1037/0003-066X.63.7.602. [PubMed: 18855491]
7. Henrich J, Heine SJ, Norenzayan A. The weirdest people in the world? *Behavioral and Brain Sciences*. 2010; 33:61–135. doi: 10.1017/S0140525X0999152X. [PubMed: 20550733]
8. Tomlinson M, Bornstein MH, Marlow M, Swartz L. Imbalances in the knowledge about infant mental health in rich and poor countries: Too little progress in bridging the gap. *Infant Mental Health Journal*. 2014; 35:624–629. doi: 10.1002/imhj.21462. [PubMed: 25798511]
9. Rothbaum F, Weisz J, Pott M, Miyake K, Morelli G. Attachment and culture: Security in the United States and Japan. *American Psychologist*. 2000; 55:1093–1104. doi: 10.1037/0003-066X.55.10.1093. [PubMed: 11080829]
10. Cooper, CR. *Bridging multiple worlds: Cultures, identities, and pathways to college*. Oxford University Press; New York, NY: 2011.
11. Bornstein MH. Cultural approaches to parenting. *Parenting: Science and Practice*. 2012; 12:212–221. doi: 10.1080/15295192.2012.683359.
12. Darling N, Steinberg L. Parenting style as context: An integrative model. *Psychological Bulletin*. 1993; 113:487–496. doi: 10.1037/0033-2909.113.3.487.
13. Bornstein, MH.; Lansford, JE. Assessing early childhood development.. In: Britto, PR.; Engle, PL.; Super, CM., editors. *Handbook of early childhood development research and its impact on global policy*. Oxford University Press; New York, NY: 2013. p. 351-370. doi: 10.1093/acprof:oso/978019922994.001.0001
14. Deater-Deckard K, Lansford JE, Malone PS, Alampay LP, Sorbring E, Bacchini D, Al-Hassan SM. The association between parental warmth and control in thirteen cultural groups. *Journal of Family Psychology*. 2011; 25:790–794. doi: 10.1037/a0025120. [PubMed: 21875202]
15. Lansford JE, Malone PS, Dodge KA, Chang L, Chaudhary N, Tapanya S, Deater-Deckard K. Children's perceptions of maternal hostility as a mediator of the link between discipline and children's adjustment in four countries. *International Journal of Behavioral Development*. 2010; 34:452–461. doi: 10.1177/0165025409354933. [PubMed: 20823943]
16. Lansford JE, Chang L, Dodge KA, Malone PS, Oburu P, Palmérus K, Quinn N. Physical discipline and children's adjustment: Cultural normativeness as a moderator. *Child Development*. 2005; 76:1234–1246. doi: 10.1111/j.1467-8624.2005.00847.x. [PubMed: 16274437]

17. Lansford JE, Sharma C, Malone PS, Woodlief D, Dodge KA, Oburu P, Di Giunta L. Corporal punishment, maternal warmth, and child adjustment: A longitudinal study in eight countries. *Journal of Clinical Child and Adolescent Psychology*. 2014; 43:670–685. doi: 10.1080/15374416.2014.893518. [PubMed: 24885184]
18. Gershoff ET, Grogan-Kaylor A, Lansford JE, Chang L, Zelli A, Deater-Deckard K, Dodge KA. Parent discipline practices in an international sample: Associations with child behaviors and moderation by perceived normativeness. *Child Development*. 2010; 81:487–502. doi: 10.1111/j.1467-8624.2009.01409.x. [PubMed: 20438455]
19. Rudy D, Grusec JE. Authoritarian parenting in individualist and collectivist groups: Associations with maternal emotion and cognition and children's self-esteem. *Journal of Family Psychology*. 2006; 20:68–78. doi: 10.1037/0893-3200.20.1.68. [PubMed: 16569091]
20. Putnick DL, Bornstein MH, Lansford JE, Malone PS, Pastorelli C, Skinner AT, Oburu P. Perceived mother and father acceptance-rejection predict four unique aspects of child adjustment across nine countries. *Journal of Child Psychology and Psychiatry*. 2015; 56:923–932. doi: 10.1111/jcpp.12366. [PubMed: 25492267]
21. Lansford JE, Godwin J, Alampay LP, Uribe Tirado LM, Zelli A, Al-Hassan SM, Tapanya S. Mothers', fathers', and children's perceptions of parents' expectations about children's family obligations in nine countries. *International Journal of Psychology*. in press. Advance online publication. doi: 10.1002/ijop.1218.
22. Barber BK, Stolz HE, Olsen JA. Parental support, psychological control, and behavioral control: Assessing relevance across time, culture, and method. *Monographs of the Society for Research in Child Development*. 2005; 70:1–137. doi: 10.1111/j.1540-5834.2005.00365.x.
23. Khaleque A, Rohner RP. Perceived parental acceptance-rejection and psychological adjustment: A meta-analysis of cross-cultural and intracultural studies. *Journal of Marriage and Family*. 2002; 64:54–64. doi: 10.1111/j.1741-3737.2002.00054.x.
24. Shweder, RA.; Beldo, L. Culture: Contemporary views.. In: Wright, JD., editor. *International encyclopedia of the social & behavioral sciences*. 2nd ed.. Elsevier; New York, NY: 2015. p. 582-589.doi: 10.1016/B978-0-08-097086-8.12050-1
25. Norenzayan A, Heine SJ. Psychological universals: What are they and how can we know? *Psychological Bulletin*. 2005; 131:763–784. doi: 10.1037/0033-2909.131.5.763. [PubMed: 16187859]
26. Strauss, C. The culture concept and the individualism-collectivism debate: Dominant and alternative attributions for class in the United States.. In: Nucci, L.; Saxe, GB.; Turiel, E., editors. *Culture, thought, and development*. Erlbaum; Mahwah, NJ: 2000. p. 71-98.
27. UNHCR.. [May 10, 2016] 2015 likely to break records for forced displacement. 2015. from <http://www.unhcr.org/5672c2576.html>
28. Goodnow, JJ. Refugees, asylum seekers, displaced persons: Children in precarious positions.. In: Melton, GB.; Ben-Arieh, A.; Cashmore, J.; Goodman, GS.; Worley, NK., editors. *The SAGE handbook of child research*. Sage; Thousand Oaks, CA: 2014. p. 339-360.doi: 10.4135/9781446294758.n19
29. Boss, P.; Ishii, C. Trauma and ambiguous loss: The lingering presence of the physically absent.. In: Cherry, K., editor. *Traumatic stress and long-term recovery*. Springer International; Cham, Switzerland: 2015. p. 271-289.doi: 10.1007/978-3-319-18866-9_15
30. Miller PJ, Wiley AR, Fung H, Liang C-H. Personal storytelling as a medium of socialization in Chinese and American families. *Child Development*. 1997; 68:557–568. doi: 10.2307/1131678. [PubMed: 9249966]
31. Vandenberg RJ, Lance CE. A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*. 2000; 3:4–70. doi: 10.1177/109442810031002.
32. Widaman, KF.; Reise, SP. Exploring the measurement invariance of psychological instruments: Applications in the substance use domain.. In: Bryant, KJ.; Windle, ME.; West, SG., editors. *The science of prevention: Methodological advances from alcohol and substance abuse research*. American Psychological Association; Washington, DC: 1997. p. 281-324.doi: 10.1037/10222-009

33. Huang L, Malone PS, Lansford JE, Deater-Deckard K, Di Giunta L, Bombi AS, Bacchini D. Measurement invariance of mother reports of discipline in different cultural contexts. *Family Science*. 2012; 2:212–219. doi: 10.1080/19424620.2011.655997.
34. Bornstein MH, Putnick DL, Lansford JE, Pastorelli C, Skinner AT, Sorbring E, Oburu P. Mother and father socially desirable responding in nine countries: Two kinds of agreement and relations to parenting self-reports. *International Journal of Psychology*. 2015; 50:174–185. doi: 10.1002/ijop.12084. [PubMed: 25043708]
35. UNICEF.. [May 10, 2016] Multiple Indicator Cluster Survey manual 2005: Monitoring the situation of children and women. 2006. from http://www.childinfo.org/files/Multiple_Indicator_Cluster_Survey_Manual_2005.pdf
36. Lansford JE, Deater-Deckard K. Childrearing discipline and violence in developing countries. *Child Development*. 2012; 83:62–75. doi: 10.1111/j.1467-8624.2011.01676.x. [PubMed: 22277007]
37. Lansford JE, Godwin J, Uribe Tirado LM, Zelli A, Al-Hassan SM, Bacchini D, Alampay LP. Individual, family, and culture level contributions to child physical abuse and neglect: A longitudinal study in nine countries. *Development and Psychopathology*. 2015; 27:1417–1428. doi: 10.1017/S095457941500084X. [PubMed: 26535934]
38. Chao R. Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development*. 1994; 65:1111–1119. doi: 10.1111/j.1467-8624.1994.tb00806.x. [PubMed: 7956468]
39. Alampay, LP. Parenting in the Philippines.. In: Selin, H., editor. *Parenting across cultures: Childrearing, motherhood and fatherhood in non-Western cultures*. Springer; Dordrecht, The Netherlands: 2014. p. 105-121.doi: 10.1007/978-94-007-7503-9_9
40. Akinsola, EF. “Omoluwabi’s approach” to educating the African child.. In: Nsamenang, AB.; Tchombe, TMS., editors. *Handbook of African educational theories and practices: A generative teacher education curriculum*. Human Development Resource Centre; Bamenda, Cameroon: 2011. p. 221-232.
41. Duncan GJ, Engel M, Claessens A, Dowsett CJ. Replication and robustness in developmental research. *Developmental Psychology*. 2014; 50:2417–2425. doi: 10.1037/a0037996. [PubMed: 25243330]
42. Open Science Collaboration. Estimating the reproducibility of psychological science. *Science*. 2015; 349:aac4716–1-aac4716-8. doi: 10.1126/science.aac4716. [PubMed: 26315443]