MOTHERS’ CRITERIA OF CHILD COMPETENCE ACROSS CULTURES

LAUREN E. WOOD
Spring 2012

A thesis
submitted in partial fulfillment
of the requirements
for a baccalaureate degree
in Psychology
with honors in Psychology

Reviewed and approved* by the following:

Pamela M. Cole
Professor of Psychology
Thesis Supervisor

William J. Ray
Professor of Psychology
Honors Adviser

* Signatures are on file in the Schreyer Honors College
ABSTRACT

The role of culture in child development remains poorly understood. Differences in parenting practices have been documented, but often the research fails to explain why those differences exist. One reason for differences in parenting practices may be that parents in different cultural contexts have different concepts of what constitutes competence in children. The present study examined cultural differences in maternal conceptions of child competence by using an open-ended format interview, the Criteria of Child Competency (CCC) interview, with mothers from nations that value individuality and independence (Germany, the United States), nations that value communality and interdependence (India, Nepal), and a nation with traditional values of communality and interdependence that is undergoing rapid modernization, which may call for also valuing individuality and independence.

Mothers from these five nations were administered the CCC interview in which they were asked to think of both a first grade child who was doing well and then a child of the same age but the other gender. They were further asked what it was about each child that led them to think the child was doing well and how the children behaved when they were not doing well. A system was developed for coding mothers’ descriptions that classified whether descriptors represented any of five domains of development: physical, cognitive, social, emotional, and self development. In addition, when possible, mothers’ descriptors of children were further classified into subdomains in each category. The frequencies for each domain and subdomain were analyzed as a function of cultural group to identify similarities and differences in maternal conceptions of child competence.
TABLE OF CONTENTS

List of Figures............................................................................................................iii
List of Tables................................................................................................................iv

Chapter 1  Introduction............................................................................................1

Chapter 2  Methods.................................................................................................9

Participants..............................................................................................................9
Measures..................................................................................................................11
Procedure...............................................................................................................12

Chapter 3  Results ................................................................................................16

Overview of Analyses .........................................................................................16
Differences in References to General Domains of Development ....................17
Differences in General Domains as a Function of Cultural Orientation ..........17
Differences in Subdomains of Child Development as a Function of Cultural Orientation ..................................................................................................................20
Comparisons of Nations within Cultural Orientations ....................................29

Chapter 4  Discussion ............................................................................................31

Overview ...............................................................................................................31
Physical Development .......................................................................................32
Social Development ..........................................................................................33
Self Development ...............................................................................................35
Cognitive Development .....................................................................................36
Emotion Development .......................................................................................37
Limitations and Suggestions for Future Research ........................................38

Chapter 5  References ..........................................................................................41

Appendix A  CCC Interview (Questions 1-7) ......................................................45
Appendix B  CCC Coding Manual .......................................................................46
LIST OF FIGURES

Figure 1: Percent of Maternal References to Subdomains within Physical Development........22

Figure 2: Percent of Maternal References to Subdomains within Cognitive Development........23

Figure 3: Percent of Maternal References to Subdomains within Social Development.............25

Figure 4: Percent of Maternal References to Subdomains within Emotional Development........26

Figure 5: Percent of Maternal References to Subdomains within Self Development..................27
LIST OF TABLES

Table 1: Demographic Data of Participants .................................................................................. 11

Table 2: Frequency and Percentage of Mothers within Each National Cultural Orientation Endorsing Each General Domain of Development ........................................................................ 20

Table 3: Frequency and Percentage of Mothers within each Cultural Orientation Endorsing Each Subdomain of Development ............................................................................................. 28

Table 4: Frequency in Percentage of Mothers for Subdomains of Development for Differences between Nations of Same National Cultural Orientation ................................................................. 30
ACKNOWLEDGEMENTS

I would first and foremost like to thank Dr. Pamela Cole for allowing me to work with her on the MECCA project. Her wisdom and guidance on this project, as well as her generous time commitment, have been immeasurable in the success of this research and my personal growth as a scholar. I also wish to thank Dr. Gisela Trommsdorff, principal investigator of the MECCA project, and her research team at the University of Konstanz, who corresponded with us throughout the year and generously allowed us to use their collected data. I would like to thank the investigators from India, Nepal, and South Korea: Dr. Ramesh Mishra, Dr. Shanta Niraula, and Dr. Seong-Yeon Park. Their continued correspondence and translation assistance with the project was incredibly helpful and informative. I would also like to thank Salvatore Affinito, Hannah Baranov, and Shengnan Chen, the incredible MECCA research team, who devoted so much time and intellect to the completion of the coding manual and coded data. Finally, I would like to thank the 504 mothers who contributed their thoughts about children they knew.
Chapter 1

Introduction

The study of culture is one that has been widely researched across many disciplines. Within the area of psychology, however, there has been a dearth of studies examining the role of culture in child development (Trommsdorff, Cole, & Heikamp, in press). Although it is well-appreciated that individuals around the world have differing beliefs, customs, and behaviors, less is known about how people become different. In general, it is assumed that people differ because they are raised in different cultural contexts, including the different practices of parents from different cultures.

The critical need for culturally-sensitive research on child development is well outlined in a Special Issue on minority children in the journal, Child Development, edited by Dr. Stephen Quintana and colleagues (2006). The editors express disappointment in the lack of studies on normative development of racial, ethnic, and cultural groups. They argue that well-known theories and models developed by and for one specific cultural group have been applied to other cultural groups by default, leading to a dearth of research on the normative development of children from different cultural backgrounds. The editors also raised important questions about the validity of study procedures that have been used when members of other cultural groups have been studied.

The importance of conducting culturally sensitive research with many different groups cannot be overstated. Research on culture and development has important implications for understanding psychopathology and directing educational policy, to name just two implications.
Moreover, an adequate understanding of child development requires examination of the variety of ways in which competent children are reared (LeVine et al., 1994). Therefore, the focus of the present study was to conduct a culturally sensitive examination of similarities and differences in maternal conceptions of child competence, with the goal that “understanding cultural variation in development can help the field probe the developmental processes that underlie the different cultural expressions” (Quintana et al., 2006).

Throughout various disciplines, a common way to study cultural differences has been to differentiate groups based on how they relate to themselves and others. Halberstadt and Lozada (2011) examined specific relational frames associated with different cultures in order to investigate infant emotional development. One well-known relational (or social) frame they discussed was that of individualistic versus collectivistic cultures. Members of collectivistic cultures value things such as identifying with a group, working with others toward a shared interest, and high respect and consideration for others above the self. Those in more individualistic cultures place higher preference on independence and personal development (Halberstadt & Lozada, 2011). Since many cultures have been categorized in terms of these two frames, it is possible to generate predictions of what behaviors and characteristics might be desired in different nations.

These social frames also correspond closely with the idea that nations differ in how the self is construed. Markus and Kitayama (2010) proposed that cultures differ in the degree to which they construe selves as independent or interdependent. Keller also (2003) used this framework to understand the socialization of competence in infants of different cultures. One who holds goals that increase personal well-being and achievement adopts an independent sense of self. One who primarily assumes goals in agreement with his or her social group or
community is said to have an interdependent self-concept (Keller, 2003). Although not mutually exclusive, these conceptions can exhibit cultural differences by identifying certain individuals or groups that internalize and act on behalf of one concept versus the other.

According to Keller and Otto (2009), all parents’ socialization practices are based on one common goal: to help their children develop in a way that will increase their survival. Yet, how parents accomplish their goals vary. Parents base their practices on what they have learned from their own experiences and implicit cultural ideals that are transmitted from generation to generation, defining what is acceptable and necessary within their group. As examples, Keller and Otto asserted that developed and undeveloped nations have very different goals in promoting survival that result from their distinctive socio-economic hierarchies. They demonstrated different maternal preferences in socialization goals between middle class German families and rural, farming Nso communities from Cameroon. Using a socialization goals questionnaire, they showed that middle class German mothers tended to emphasize goals of child autonomy, such as self-expression and development of personal talents, whereas agrarian Nso mothers tended to emphasize goals of children’s relatedness, such as respect for elders, obedience, and social harmony.

In addition to variations in the degree of emphasis placed on the development of a child’s autonomy and individuality versus a child’s understanding of its position relative to others, such as elders, different cultural values may influence expectations for emotion expression. Raval and Martini (2009) found that maternal socialization of emotions varies as a function of whether mothers are from individualistic or collectivistic societies. Certain emotions like anger and sadness are viewed as more negative in collectivistic cultures, because they are regarded as disrupting social harmony. Similarly, Keller and Otto (2009) found negative emotion expression
to be regarded as highly undesirable in Cameroonian Nso communities; the absence of negative expression was seen as a positive indication of both health and respect for elders. Novin, Rieffe, and Mo (2010) compared children from the Netherlands and South Korea in their types of reactions to upsetting situations. Interestingly, they found that the South Korean children felt higher intensity of emotions, but were less likely to verbally express these negative emotions. As expected, the Dutch children were more likely to report overall aggressive reactions to upsetting situations with a father present, whereas the South Korean children were more likely to report pro-social reactions. These results are indicative of the socialization goals of each country; South Korean’s tend to promote respect for authority in all situations, while the Dutch value personal emotional expression in troubling scenarios. These researchers also noted that cultural expectations for children in South Korea, a country that has experienced dissonance between traditional collectivistic values and new individualistic ideas brought in with the recent industrialization, might result in a mix of values; they found the main focus of South Korean socialization remained promoting self-control, social cooperation, and interdependence (Novin, Rieffe, & Mo, 2010).

One specific concern arises in that the traditional cultural values of South Korea may be changing with the rapid industrialization and modernization that the country is undergoing. Hyun (2001) addressed this concern by studying groups of Koreans from both South Korea and the United States to understand how their cultural values differed as a result of Western influence. She references a cross-cultural study (Hofstede, 1983) that found South Koreans at the time to score highly on the collectivistic side of the sociocultural scale. Hyun found in both groups that higher exposure to Western culture and ideals as associated with fewer adherences to traditional
values. With changes in economy, technology, and urbanization, we can expect that the goals and values of South Korea may be changing quickly as well.

Cognitive development and academic achievements are valued by most cultural groups, but to varying degrees. Julie Lee, Charles Super, & Sara Harkness’s research reflect that South Korean culture focuses on cognitive achievements and education, as well as social competence and the formation of good relationships with both adults and peers (2003). They note that due to such relational values, Korean parents view their children as extensions of themselves, and therefore strive to further their children in education by beginning their education earlier in life. The researchers reference another cross-national survey (Gallup, 1983) with results showing that Korean parents were more likely to pay for a college education than parents from the United States or Germany. We can expect these parental attitudes about advancement in education to be reflected in the children’s behavior within this culture (Lee, Super, & Harness, 2003).

While some nations and cultures do fit more closely into a collectivistic or individualistic frame, it is important to note that many cultures hold beliefs and exhibit practices of both; thus, a more dimensional approach much be considered when describing cultural differences. Kağıtçibaşı (1997) explains how at times, groups are imposed into one the two groups; however, not all of the characteristics between each group hold a perfect inverse relationship. She proposes a new type of self-concept, autonomous-related, combing both independent and interdependent views (2005). She explains the necessity for this type of cultural orientation to provide better description of traditional collectivistic nations undergoing industrialization and modernization. Additionally, she suggests that a better way to conceptualize these cultural types would be from a more individual and situational approach (Kağıtçibaşı, 1997). She asserts that a problem with using these models is that they differ on the cultural level versus the individual
level. The present study seeks to explore this medium by using individually offered examples to gain a more general understanding of what mothers in each of five cultures emphasize as expectations of a competent child.

Durbrow, Pena, Masten, Sesma, and Williamson (2001) maintain the importance of including competence as a medium for studying cultural variance, as aspects of competency relate directly to developmental socialization and are expected to be different across cultures. The semi-structured style of the Criteria of Child Competence (CCC) interview, which is used in the present study, allows respondents to answer questions freely and without limitations of language or expectations of an unfamiliar culture from pre-determined responses.

Cole, Tamang, and Shrestha (2006) also used the CCC interview to investigate cultural differences in conceptions of child competence in a study focusing on differences in emotion socialization of anger and shame between two ethnic groups in rural Nepal. They found that the interviewed elders from the Tamang community highlighted the importance of social competence in children, while the Brahman community elders also placed high preference of academic confidence in addition to social aspects. Moreover, although both groups stressed social competence, the specific aspects of social competence that were valued differed. Tamang emphasized social grace, the ability to speak and interact with all types of others in ways that made the others feel valued. Brahmans tended to emphasize obedience and duty. These differences highlight the value of free response formats in revealing culturally meaningful nuances even within broad domains of development.

The present seeks to identify the similarities and differences in maternal conceptions of child competency in five cultures: Germany, India, Nepal, South Korea, and the United States. The knowledge gained is of great importance, because the current literatures do not
comprehensively cover what is regarded in each culture as appropriate and desired behavior for a child, versus what is perceived as inappropriate or problematic. The value of exploring parental beliefs was articulated Harkness and Super’s (1996) book on parental ethnotheories. They explain the importance of using parents as references for studying cultural differences, as their ideas provide “the most clearly observable link between beliefs and behavior at the cultural level” (1996). They also state that parents’ long-term goals for their children are related to their short term expectations throughout development, which reveal thoughts and behaviors that are seen as culturally competent at certain ages. Similarly, other researchers suggest three reasons for parental acknowledgement of specific traits and qualities in their children: the frequency with which the traits are presented, knowledge from their own families and experiences, and cultural belief systems reflecting certain desirable traits (Kohnstamm et al., 1996). Although current collectivistic and individualistic groupings can give us an idea of what to expect or predict as responses from each sample population, the resulting data will be descriptive as to how the mothers of these specific cultural groups are thinking, setting aside cultural stereotypes.

In order to understand cultural differences in early socialization, our research team developed a coding system that included five broad domains of children’s development: physical, cognitive, social, emotional, and self. We expected that mothers from each cultural orientation and nation would desire their children to do well in each of these domains. In addition, we expected that their responses to open-ended interview questions would not only reveal those similarities but also reveal nuances in the specific ways that they viewed competence in each of these domains. We predict that we will see recognizable patterns of domain and sub-category frequency within each culture, which will uncover maternal references in specific areas of developmental competency for children. Our expectation is that these
findings will highlight the expectancies that mothers in each culture have for their children as they develop, which will help to explain those parents’ early socialization practices.

Across all five nations, we expect to see lower frequencies of emphasis on physical development as well as higher frequencies in social development than the other developmental domains. Within national cultural orientation, we predict that the data from Independent nations (Germany and the United States) will show higher frequencies than Autonomous Relational (South Korea) and Interdependent (India and Nepal) orientations of examples falling into curiosity, social initiative, emotional valence, and independence subdomains within the respective cognitive, social, emotional, and self development general domains. We also expect to see that the mothers from the Autonomous Relational orientation will highlight in their responses the intelligence within the cognitive domain more so than both Independent and Interdependent orientations, and will emphasize obedience and self-control subdomains within the social and self development domains more than Independent orientations. We predict that nations of Interdependent orientation will emphasize social sensitivity, obedience, and self-control subdomains within the social and self development general domains more than both Independent and Autonomous Relational orientations. With any of the predictions being met, we plan to further analyze any potential differences between individual nations within the cultural orientation pairings.
Chapter 2

Methods

Participants

Participants included 506 mothers of children between the ages of 6 and 7 years who were interviewed as part of a larger cross-national study. Two cases were eliminated from the German sample, and two cases from the United States sample, due to damaged or missing audio files and cases missing representativeness. This resulted in a total of 104 German mothers, 100 Indian mothers, 100 South Korean mothers, 100 Nepalese mothers, and 98 mothers from the United States (N = 502).

The mothers were recruited for the larger study through somewhat different methods in each country. In Germany and South Korea, mothers were recruited through advertising in community settings serving children. In the U.S., mothers were recruited from a University database of families that had indicated a desire to be contacted if their children were eligible for a study. In India and Nepal, mothers were recruited from communities through word of mouth.

Mothers were included if they had a child whose birth date fell within a specified range that would result in a sample of mothers with children who were between 6 and 7 years of age. The mother also had to be able to speak the language of the nation in which they were interviewed, but it did not have to be their native language.

The demographic data for participants is included in Table 1, listing averages of all participants and within each country of maternal age, maternal education in years of schooling,
economic status on a 1-5 scale, and number of children each mother had. Across all participants, the average maternal age was 35.45 years, average maternal education was 13.97 years of schooling, average economic status was 3.04 (indicating middle class), and average number of children mothered was 2.14.

Analysis revealed significant differences between nations in three of the demographic variables. The German mothers were found to be significantly older than mothers from the U.S., South Korea, Nepal, and India. Respondent mothers from the U.S. were significantly older than mothers from South Korea, Nepal, and India, and respondent mothers from South Korea were significantly older than those from Nepal and India. Mothers from Nepal and India did not differ significantly in age. For maternal education, both U.S. and South Korean mothers had on average significantly more years of schooling than Germany, Nepal, and India, but did not differ from each other. German, Nepalese, and Indian mothers also did not significantly differ from each other in years of schooling. Mothers from the U.S. had significantly more children on average than mothers in India, Nepal, South Korea, and Germany. Similarly, German mothers had on average more children than mothers in India, Nepal, and South Korea. Mothers from South Korea, India, and Nepal did not differ significantly in the number of children.

Economic status values were given on a 1 to 5 scale, with 1 indicating low economic status within that group’s society, 3 indicating middle, and 5 indicating upper level economic status. The average values did not differ significantly between any of the five countries; however, because mothers were asked to provide their economic ranking within their own cultural societal group, it is possible that the actual household income levels would differ.
### Table 1. Demographic Data of Participants

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>U.S.</th>
<th>South Korea</th>
<th>Nepal</th>
<th>India</th>
<th>ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Age (years)</td>
<td>M 40.07</td>
<td>37.86</td>
<td>35.76</td>
<td>31.16</td>
<td>32.43</td>
<td>35.45</td>
</tr>
<tr>
<td></td>
<td>SD 4.51</td>
<td>5.55</td>
<td>3.29</td>
<td>4.07</td>
<td>4.11</td>
<td>5.47</td>
</tr>
<tr>
<td></td>
<td>SD 1.31</td>
<td>2.58</td>
<td>1.83</td>
<td>3.38</td>
<td>.92</td>
<td>2.90</td>
</tr>
<tr>
<td>Economic Status</td>
<td>M 3.17</td>
<td>3.01</td>
<td>3.07</td>
<td>2.98</td>
<td>3.04</td>
<td>3.06</td>
</tr>
<tr>
<td></td>
<td>SD .66</td>
<td>.74</td>
<td>.74</td>
<td>.56</td>
<td>.31</td>
<td>.63</td>
</tr>
<tr>
<td>Number of children</td>
<td>M 2.32</td>
<td>2.73</td>
<td>1.94</td>
<td>1.82</td>
<td>1.93</td>
<td>2.14</td>
</tr>
<tr>
<td></td>
<td>SD 1.05</td>
<td>1.27</td>
<td>.52</td>
<td>.56</td>
<td>.71</td>
<td>.923</td>
</tr>
</tbody>
</table>

*Note.* Economic status was classified relative to status within nation and coded on a 1-5 scale (1 = low and 5 = upper).

**Measures**

Mothers’ views of child competence were assessed using the Criteria of Child Competence (CCC) interview developed by Eric Durbrow and Ann Masten (2001). This interview was created to gain information on how a competent child in each culture is perceived by mothers, based on their qualities and behaviors. The questions provided were to assess how each mother thought that each child would behave when they feel a certain emotion, how they feel during certain situations and why they would feel that way, and how they would behave in those situations. The goal was to gain descriptions of how a mother believes competent child
behaves in life, based on their feelings and reactions in situations. For the present study, mothers’ responses to the first seven CCC questions were coded and analyzed (Appendix A).

Each mother was asked to think of a child who was in the age range of her own child, i.e. 6 or 7 years old and in or having just completed first grade. They were not asked the name of the child or about their relationship with the child but were asked to specify if the child was a boy or a girl and the child’s age. They were then asked, “how, in what way, is that child doing okay?” and subsequently, “in what way that same child does not behave well, and what types of things he or she does?” (Durbrrow et al., 2001). After describing the first child, the mother was then asked to think of a child of the same age but opposite sex and the questions were repeated. If a mother was reticent or answered very briefly, the interviewer used standard queries to prompt more information. If a response was very general (e.g., the child does well in all things), the interviewer prompted by asking how the child was doing well at home, in school, or with other children. Additionally, if a mother’s response was unclear to the interviewer, the mother was prompted to explain.

Procedure

The CCC was the first component of an extensive interview for the larger study of mothers’ intuitive theories about child emotion socialization. The procedures for the full study included both qualitative and quantitative methods. The CCC, one of the qualitative methods, was administered first to avoid mothers’ open-ended responses from being influenced by structured questionnaires. That is, the structure of quantitative measures could have suggested to mothers that certain aspects of development were of interest to the researchers.
Some researchers have used free-response format for individuals from different cultures to describe their ideas or beliefs in culturally sensitive ways. In this way, researchers can collect culturally significant descriptors that can be used to define a population, instead of placing that group into a set category. One example is a study by Kohnstamm, Halverson, Havill, and Mervielde (1996). The procedures used in the beginning of their study, which tested the compatibility of parental descriptors of child characteristics against the Five Factor Model (FFM) for personality, were similar to those implemented in the present study. The researchers gathered free descriptions of personality characteristics of children from their parents, and then placed them into categories, which were embedded in one of the five dimensions of the FFM: extroversion, agreeableness, conscientiousness, emotional stability, and openness to experience. Within each of the categories, examples were given for both positive and negative descriptors. In the data analysis, the researchers generated proportions of the descriptors given in each culture across the five dimensions, as well as the average number of descriptors given during an interview in each country. They calculated the proportions of descriptors given across all of the subcategories, which is where the greatest patterns of cultural variations could be seen (Kohnstamm et al., 1996).

The interviews for the present study were conducted either by co-investigators or graduate level research assistants. The interviews were conducted in a mother’s home, over the phone, or at a room in a research facility. All interviews were audio-recorded for later transcription. The recorded interviews were transcribed word-for-word in the native language, and then translated into English by bilingual researchers. For the CCC coding, English translations that were unclear or confusing were sent to the co-investigators for clarification. This
procedure was used to increase the chances that potentially problematic translations were double-
checked and that meanings that may be lost in translation were preserved.

Each transcribed, translated interview was assigned a number code to maintain participant confidentiality. A U.S. team of undergraduate students adapted an unpublished coding system for the CCC (Friedlmeier, 2010). Mothers’ responses to each of the seven questions were classified using four different codes. First, each different example of competence that a mother provided was classified in terms of a broad domain of competence: physical, cognitive, social, emotional, or self development. As the mothers were not limited in the amount of examples they could provide, some mothers reported more criteria of competence than others, so the domains and subdomains were not mutually exclusive. In cases for which the response was general and could not be assigned to a specific domain, the response was classified as general. For responses that could be classified into a broad domain of competence, the coder then attempted to classify the response in terms of specific aspects of that domain. Next it was given a letter code (A, B, C, D, E) (Appendix B) for a subcategory within that domain, for example, Intelligence within Cognitive Development or Social Sensitivity within Social Development. Finally, the coder indicated whether the mother referred to the domain as a positive or negative attribute of the child. An example such as ‘she does what is requested of her’ in response to the question of how the child is doing well would be designated a positive code. Likewise, an example of ‘he does not comply when his parents ask him to do something,’ as a response to what types of things the child does when he does not behave well, would receive a negative code.

Often mothers made several comments that basically were different articulations regarding the same aspect of competence. In these cases, the response was treated as a whole
and assigned only one code. Therefore, each quantitative code of ‘1’ denotes a domain, or a sub-category within a domain for which a mother gave one or more representative examples. Each of the qualitative responses was also summarized and recorded in the data file for future reference.

Coders were trained until they achieved accuracy with a master coder. Inter-rater reliability, based on a random 20% of the interviews that were double-coded, reached 72% (based on agreement for domain and specific subdomain). The project is examining discrepancies between coders as a next step to increase inter-rater reliability of this new coding system.

The variables used in the present study were cultural orientation conceptualized as Independent (Germany, U.S.), Autonomous Relational (South Korea), or Interdependent (Nepal, India), individual nations at a more specific level of analysis, as well as general and specific developmental domains of competence (Appendix B).
Chapter 3

Results

Overview of Analyses

Four aims of the study are addressed in the data analyses. First, we were interested in patterns in mothers’ emphases on different general domains of development. We conducted a \( \chi^2 \) analysis to test the prediction that, regardless of cultural orientation, mothers would emphasize aspects of Social Development more than any other of the four domains when thinking of a competent 6 or 7 year old child. We used the same method to test the related prediction that mothers would emphasize aspects of Physical Development the least.

Second, we aimed to test predictions that the domains that mothers emphasized would vary as a function of cultural orientation. We conducted \( \chi^2 \) analyses to determine if endorsement of a general domain of Physical, Cognitive, Social, Emotional, and Self development varied as a function of cultural orientation. Third, we used \( \chi^2 \) analyses to test the study’s predictions that variation in cultural orientation would be associated with different emphases within each general domain, i.e. in subdomains of each aspect of development.

Fourth and finally, we aimed to document whether nations that are purported to share a particular cultural orientation (i.e. Independent or Interdependent) were similar in the subdomains that they endorsed. We again used \( \chi^2 \) analyses to compare each set of individual nations (Germany versus U.S. and India versus Nepal) to identify any significant differences between nations known to be similar in their cultural orientations.
First, we tested the prediction that, regardless of cultural orientation or nation, all mothers would emphasize Social Development more than any other developmental domain and would endorse Physical Development less in comparison to all other general domains. As seen in Table 2, mothers endorsed the general domains of development at different frequencies. In rank from highest to lowest, the most frequent references were to Social Development, Cognitive Development, Self Development, Emotional Development, and Physical Development, which was consistent with predictions. McNemar tests revealed significant differences in all pairs of domains of development (all $p$’s < .001), except for Cognitive versus Self Development, which approached but did not reach standard levels of significance ($p < .08$).

**Differences in General Domains as a Function of Cultural Orientation**

Next, we examined whether cultural orientation influenced the likelihood of mothers providing an example within a general domain of development in their descriptions of how competent children behaved well and how those children misbehaved. Specifically, we conducted a $\chi^2$ analysis to look at the probability with which mothers emphasized each of five general domains (Physical, Cognitive, Social, Emotional, and Self) as a function of cultural orientation (Independent, Autonomous Relational, and Interdependent). Again, Germany and the U.S. were classified as Independent, South Korea as Autonomous Relational, and Nepal and India as Interdependent. Table 2 displays the probability, in percentages, that mothers from each cultural orientation mentioned a domain, as well as percentages for all mothers. Note that the columns and rows do not add to 100% because the numbers reflect the percent of mothers in a
cultural orientation who did endorse the given domain, as the nature of the study allows for mothers to provide responses in more than one domain.

Within the Physical Development domain, significant differences emerged, $\chi^2=6.91(2), p < .031$. As seen in Table 2, references to a child’s physical development as an example of competence were more likely among mothers from nations of Interdependent orientation (28.0%) than mothers Autonomous Relational (19.0%) orientation, $\chi^2=5.76(1), p < .016$. Differences between Independent and Interdependent orientations approached but did not reach standard levels of significance, $\chi^2=3.50(1), p < .061$, and there was no difference between Independent and Autonomous Relational orientations, $\chi^2 < 1.0(1), ns$.

Similarly, significant differences also appeared within the Cognitive Development domain, $\chi^2=47.21(2), p < .001$. References to a child doing well in cognitive aspects of development appeared to differ among mothers from Interdependent (69.8%), Independent (48.5%) and Autonomous Relational (46.5%) orientations. Mothers from Interdependent orientations were significantly more likely to mention criteria of competency within the Cognitive Domain than mothers of Independent, $\chi^2=37.49(1), p < .001$, or Autonomous Relational orientations, $\chi^2=30.59(1), p < .001$; however, Independent and Autonomous Relational orientations did not differ, $\chi^2 < 1.0(1), ns$.

Differences also emerged for the Social Development domain, $\chi^2=25.27(2), p < .001$. References to a child doing well socially appeared to differ between mothers from nations of Interdependent (92.5%), Independent (90.8%) and Autonomous Relational (79.5%) orientations. There was no difference between Interdependent and Independent orientations, $\chi^2 < 1.0(1), ns$, but mother from both Interdependent, $\chi^2=21.60(1), p < .001$, and Independent orientations,
χ^2=15.30(1), p < .001, were significantly more likely to mention Social aspects of competency than mothers from Autonomous Relational orientations.

Differences within the Emotional Development domain were also significant, χ^2=85.05(2), p < .001. Mothers from Independent orientation (59.9%) appeared to endorse emotional development more than mothers of Interdependent (31.8%) and Autonomous Relational (28.5%) orientations. Significant differences emerged between Independent and Interdependent orientations, χ^2=64.15(1), p < .001, and Independent and Autonomous Relational orientations, χ^2=52.77(1), p < .001, but Interdependent and Autonomous Relational orientations did not differ, χ^2 < 1.0(1), ns.

Finally, differences emerged within the Self Development domain, χ^2=6.70(2), p < .035. References to how a child seeming to have a strong sense of individuality and/or self-control varied in frequency among mothers of Autonomous Relational orientation (56.5%), Independent (55.4%) and Interdependent (47.5%) orientations. Mothers from Autonomous Relational and Independent orientations did not differ, χ^2 < 1.0(1), ns, while those from Autonomous Relational and Interdependent orientations did, χ^2=4.32(1), p < .038, as well as those from Independent and Interdependent orientations, χ^2=5.08(1), p < .024.

Although mothers from all three orientations generally appeared to endorse developmental domains at several different proportions, a further aim of the study was to understand differences in subdomains of each aspect of child competence.
Table 2. Frequency and Percentage of Mothers within Each National Cultural Orientation Endorsing Each General Domain of Development

| Developmental Domain | Independent | | | Autonomous | | | Interdependent | | | Total |
|----------------------|-------------|-----------------|-----------------|-------------|-----------------|-----------------|-------------|-----------------|-----------------|-----------------|-----------------|
|                      | n           | %               |                  | n           | %               |                  | n           | %               |                  | n           | %               |
| Physical             | 90          | 22.3            |                  | 38          | 19.0            |                  | 112         | 28.0            |                  | 240         | 23.9            |
| Cognitive            | 196         | 48.5            |                  | 93          | 46.5            |                  | 279         | 69.8            |                  | 568         | 56.6            |
| Social               | 367         | 90.8            |                  | 159         | 79.5            |                  | 370         | 92.5            |                  | 896         | 89.2            |
| Emotional            | 242         | 59.9            |                  | 57          | 28.5            |                  | 127         | 31.8            |                  | 426         | 42.4            |
| Self                 | 224         | 55.4            |                  | 113         | 56.5            |                  | 190         | 47.5            |                  | 527         | 52.5            |

Note. n=number of response; columns and rows should not add to 100%.

Differences in Subdomains of Child Development as a Function of Cultural Orientation

Third, the main goal of the thesis was to test the prediction that cultural orientation would be associated with the specific types of competencies within each domain of development. For these analyses, we focused only on maternal descriptions of child characteristics that revealed a child was doing well. This approach was taken because inspection of the sums for all responses across all subdomains indicated substantially fewer descriptors for negative characteristics of a competent child. Therefore, for the remainder of analyses, we included only positive characteristics that were attributed to competent children.

To test the prediction that cultural orientation influenced specific aspects of domains of development in mothers’ descriptions of competent children, the next set of $\chi^2$ analyses examined the relation between cultural orientation (Independent, Autonomous Relational, and
Interdependent) and references to specific subdomains of development (within a general domain). That is, five sets of $\chi^2$ for analyses were conducted, one for each general domain’s subcategories or subdomains. There were different numbers of subdomains for each general domain of competence (see Table 3).

Physical Development Subdomains. Although not predicted, cultural orientation differences emerged for Nutrition and Sleeping, $\chi^2=25.68(2), p < .001$ and Health and Appearance, $\chi^2=8.79(2), p < .012$, but not for Physical Activity, $\chi^2 < 1.0(2), ns$.

As seen in Table 3, references to a child’s eating and/or sleeping well (Nutrition and Sleeping) appeared more likely among mothers from nations with an Interdependent cultural orientation (9.5%) than mothers from Independent (2.7%) or Autonomous Relational (1.5%) orientations. Indeed, mothers from Independent and Autonomous Relational orientations did not differ, $\chi^2 < 1.0(1), ns$, but mothers from Interdependent nations referred to this subdomain more than mothers from Independent, $\chi^2=16.13(1), p < .001$, and Autonomous Relational orientations, $\chi^2=13.4(2), p < .001$.

In contrast, references to a child’s Health or Appearance appeared from Table 3 values to be more likely among mothers from nations with an Independent (5.4%) or Interdependent (4.0%) cultural orientation than mothers from Autonomous Relational (0.1%). There was no significant difference between Independent and Interdependent orientations, $\chi^2 < 1.0(1), ns$, but both referred to child Health or Appearance more than mothers from Autonomous Relational nations, $\chi^2=8.93(1), p < .003$ and $\chi^2=5.93(2), p < .015$, respectively.
Cognitive Development Subdomains. Predicted cultural orientation differences appeared for Curiosity, \( \chi^2 = 44.86(2), p < .001 \), but contrary to prediction there were no orientation differences for Intellectual Ability, \( \chi^2 = 4.25(2), ns \). As seen in Table 3, references to a child displaying curiosity or having specific interests (Curiosity) appeared more likely among mothers from nations with an Independent cultural orientation (28.2%) than mothers from Autonomous Relational (13.5%) or Interdependent (10.8%) orientations, who did not differ from each other, \( \chi^2 = .98(1), ns \). Mothers from Independent orientations referred to children’s curiosity more than mothers from Autonomous Relational orientations, \( \chi^2 = 16.19(1), p < .001 \), and Interdependent orientations, \( \chi^2 = 39.03(1), p < .001 \).
Figure 2. *Percent of Maternal References to Subdomains within Cognitive Development*

![Bar chart showing cultural orientation differences in maternal references to subdomains within cognitive development.](chart)

*Social Development Subdomains.* Cultural orientation differences, as predicted, appeared for Social Sensitivity, $\chi^2=49.84(2), p < .001$, Social Initiative/Cooperation, $\chi^2=109.66(2), p < .001$, and Obedience, $\chi^2=52.34(2), p < .001$. Additionally, although not predicted, differences emerged for Prosocial Behavior, $\chi^2=16.39(2), p < .001$, and not for Communicative Skills, $\chi^2=5.279(2), ns$. As seen in Table 3, references to a child displaying helping or kind behavior toward another person (Prosocial) appeared more likely among mothers from nations with an Interdependent (19.8%) or Independent (16.3%) cultural orientation than an Autonomous Relational (13.5%) orientation. Significant differences were found between mothers of Interdependent and Autonomous Relational orientations, $\chi^2=16.55(1), p < .001$, and Independent and Autonomous Relational orientations, $\chi^2=10.15(1), p < .001$, and differences between Interdependent and Independent orientations were not significant, $\chi^2=1.58(1) ns$. 
As predicted, references to a child exhibiting empathy or consideration for others (Social Sensitivity) appeared more likely among mothers from nations with an Interdependent cultural orientation (33.0%) than mothers from an Independent (14.4%) or Autonomous Relational (14.0%) orientation. Mothers from Interdependent cultural orientations were more likely to refer to a child’s social sensitivity than mothers of Independent, $\chi^2=38.71(1), p < .001$, and Autonomous Relational orientations, $\chi^2=24.61(1), p < .001$. Mothers from Independent and Autonomous Relational orientations did not differ from each other, $\chi^2=.01(1) \ ns$.

Additionally, as predicted, references to a child’s willingness to obey authority (Obedience) appeared more likely among mothers from nations with an Interdependent cultural orientation (30.8%) than mothers from an Independent (11.1%) or Autonomous Relational (15.9%) orientation, who, contrary to prediction, did not differ from each other, $\chi^2=1.83(2), ns$. Mothers from Interdependent orientations were more likely to refer to obedience than mothers from Independent orientations, $\chi^2=46.77(1), p < .001$, and Autonomous Relational orientations, $\chi^2=17.41(2), p < .001$.

In contrast, as predicted, references to a child’s outgoing, friendly, and cooperative nature (Social Initiative/Cooperation) appeared more likely among mothers from nations with an Independent cultural orientation (59.9%) than mothers from an Autonomous Relational (23.0%) or Interdependent (29.2%) orientation, who did not differ significantly from each other, $\chi^2=2.63(1), ns$. Significant differences were found between mothers from an Independent and Autonomous Relational orientation, $\chi^2=73.02(1), p < .001$, and mothers from an Independent and Interdependent orientation, $\chi^2=76.40(1), p < .001$. 
Emotion Development Subdomains. As predicted, there were cultural orientation differences for Emotional Valence, $\chi^2=99.84(2)$, $p < .001$, and differences also emerged for Emotion Regulation, $\chi^2=6.97(2)$, $p < .031$. As seen in Table 3, references to a child’s overall display of positive emotion (Emotional Valence) seemed more likely among mothers from nations with an Independent cultural orientation (31.4%) than mothers from an Autonomous Relational (9.0%) or Interdependent (6.5%) orientation who did not differ from each other, $\chi^2=1.23(1), ns$. Mothers from Independent orientations we more likely to mention a child’s positive emotion expression than mothers of Autonomous Relational, $\chi^2=36.91(1), p < .001$, and Interdependent orientations, $\chi^2=81.11(1), p < .001$.

References to a child’s ability to regulate their emotions in troubling situations (Emotion Regulation) were also appeared likely among mothers from nations with an Independent cultural
orientation (5.7%) than mothers from an Autonomous Relational (3.0%) or Interdependent (2.2%) orientation, who did not differ from each other, $\chi^2 < 1.0(1)$, ns. Additionally, mothers from Independent and Autonomous Relational orientations, $\chi^2=2.12(1)$, ns, did not differ, but mothers from Independent and Interdependent orientations, $\chi^2=6.24(1), p < .013$ did differ from each other.

Figure 4. Percent of Maternal References to Subdomains within Emotional Development

![Bar chart showing cultural orientation differences for Valence and Regulation subdomains of Emotional Development.]

**Self Development Subdomains.** Predicted cultural orientation differences also emerged for both Independence, $\chi^2=75.69(2), p < .001$, and Self-Control, $\chi^2=57.04(2), p < .001$. As seen in Table 3, references to a child’s autonomous behavior (Independence) appeared more likely among mothers from nations with an Independent cultural orientation (36.6%) than mothers from
an Autonomous Relational (20.0%) or Interdependent (11.0%) orientation. Differences were found between mothers from Independent and Autonomous Relational orientations, $\chi^2=17.27(1)$, $p < .001$, mothers from Independent and Interdependent orientations, $\chi^2=72.66(1)$, $p < .001$, and mothers from Interdependent and Autonomous Relational orientations, $\chi^2=8.97(1)$, $p < .003$.

Figure 5. *Percent of Maternal References to Subdomains within Self Development*

As predicted, references to a child’s ability to be organized, planful, or behaviorally well-regulated (Self-Control) appeared more likely among mothers from Interdependent cultural orientations (27.2%) than mothers from Independent (7.2%) or Autonomous Relational (17.0%) orientations. Differences were found between mothers of Interdependent and Independent orientations, $\chi^2=56.95(1)$, $p < .001$, and mothers of Interdependent and Autonomous Relational,
χ²=7.71(1), p < .005. In addition, predictions were met that mothers from Autonomous Relational orientations were significantly more likely to emphasize Self-Control than mothers from Independent orientations, χ²=13.81(1), p < .001.

Table 3. Frequency and Percentage of Mothers within each Cultural Orientation Endorsing Each Subdomain of Development

<table>
<thead>
<tr>
<th>Subdomain</th>
<th>Independent n</th>
<th>Independent %</th>
<th>Relational n</th>
<th>Relational %</th>
<th>Interdependent n</th>
<th>Interdependent %</th>
<th>Total n</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrition/Sleeping</td>
<td>11</td>
<td>2.7</td>
<td>3</td>
<td>1.5</td>
<td>38</td>
<td>9.5</td>
<td>52</td>
<td>5.2</td>
</tr>
<tr>
<td>Activity</td>
<td>50</td>
<td>12.4</td>
<td>25</td>
<td>12.5</td>
<td>44</td>
<td>11.0</td>
<td>119</td>
<td>11.9</td>
</tr>
<tr>
<td>Health/Appearance</td>
<td>22</td>
<td>5.4</td>
<td>1</td>
<td>0.5</td>
<td>16</td>
<td>4.0</td>
<td>39</td>
<td>3.9</td>
</tr>
<tr>
<td><strong>Cognitive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curiosity</td>
<td>114</td>
<td>28.2</td>
<td>27</td>
<td>13.5</td>
<td>43</td>
<td>10.8</td>
<td>184</td>
<td>18.3</td>
</tr>
<tr>
<td>Intellectual Ability</td>
<td>102</td>
<td>25.2</td>
<td>62</td>
<td>31.0</td>
<td>93</td>
<td>23.2</td>
<td>257</td>
<td>25.6</td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prosocial Behavior</td>
<td>66</td>
<td>16.3</td>
<td>14</td>
<td>7.0</td>
<td>79</td>
<td>19.8</td>
<td>159</td>
<td>15.8</td>
</tr>
<tr>
<td>Social Sensitivity</td>
<td>58</td>
<td>14.4</td>
<td>28</td>
<td>14.0</td>
<td>132</td>
<td>33.0</td>
<td>218</td>
<td>21.7</td>
</tr>
<tr>
<td>Initiative/Cooperation</td>
<td>242</td>
<td>59.9</td>
<td>46</td>
<td>23.0</td>
<td>117</td>
<td>29.2</td>
<td>405</td>
<td>40.3</td>
</tr>
<tr>
<td>Communicative Skill</td>
<td>55</td>
<td>13.6</td>
<td>24</td>
<td>12.0</td>
<td>73</td>
<td>18.2</td>
<td>152</td>
<td>15.1</td>
</tr>
<tr>
<td>Obedience</td>
<td>45</td>
<td>11.1</td>
<td>30</td>
<td>15.0</td>
<td>123</td>
<td>30.8</td>
<td>198</td>
<td>19.7</td>
</tr>
<tr>
<td><strong>Emotional</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Valence</td>
<td>127</td>
<td>31.4</td>
<td>18</td>
<td>9.0</td>
<td>26</td>
<td>6.5</td>
<td>171</td>
<td>17.0</td>
</tr>
<tr>
<td>Emotion Regulation</td>
<td>23</td>
<td>5.7</td>
<td>6</td>
<td>3.0</td>
<td>9</td>
<td>2.2</td>
<td>38</td>
<td>3.8</td>
</tr>
<tr>
<td><strong>Self</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td>148</td>
<td>36.6</td>
<td>40</td>
<td>20.0</td>
<td>44</td>
<td>11.0</td>
<td>232</td>
<td>23.1</td>
</tr>
<tr>
<td>Self-Control</td>
<td>29</td>
<td>7.2</td>
<td>34</td>
<td>17.0</td>
<td>109</td>
<td>27.2</td>
<td>172</td>
<td>17.1</td>
</tr>
</tbody>
</table>

Note. n=number of responses; columns and rows should not add to 100%.
Comparisons of Nations within Cultural Orientations

The fourth and final aim of the study was to investigate whether nations within cultural orientations were similar to each other in mothers’ criteria for child competence. For these analyses, we compared countries within the same cultural orientation on developmental subdomains that occurred most frequently and for which there were predicted cultural orientation differences. For each subdomain, we performed $\chi^2$ analyses using the percentages of mothers from each nation within either the Independent or Interdependent cultural orientation. Specifically, we compared the two Independent nations, Germany and the U.S., on the subdomains of Curiosity, Social Initiative/Cooperation, Emotional Valence, and Independence, and we compared the two Interdependent nations, Nepal and India, on Social Sensitivity, Obedience, and Self-Control. Table 4 displays the frequencies in percentages (% within nation) with which mothers from particular nation, within the same cultural orientation, endorsed specific subdomains of development. It also displays the proportions in percentages (% within orientation) of responses for a subdomain between the two nations of similar cultural orientation.

Comparing Germany and the U.S. U.S. mothers were significantly more likely to endorse Curiosity, $\chi^2=20.95(1), p < .001$ and Social Initiative/Cooperation, $\chi^2=10.03(1), p < .002$ than German mothers, and German mothers were significantly more likely to endorse Independence, $\chi^2=54.71(1), p < .001$. Mothers from the two nations did not differ, however, in references to the Emotional Valence subdomain, $\chi^2=.53(1), ns$.

Comparing India and Nepal. Mothers from India and Nepal did not differ on any subdomain. Our results showed no significant differences between nations for all three of the
subdomains: Social Sensitivity, $\chi^2=1.63(1), ns$, Obedience, $\chi^2=.95(1), p < .001$ and Self-Control, $\chi^2=3.65(2), ns$.

Table 4. Frequency in Percentage of Mothers for Subdomains of Development for Differences between Nations of Same National Cultural Orientation

<table>
<thead>
<tr>
<th>Nation</th>
<th>n</th>
<th>% Within Nation</th>
<th>% Within Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Germany versus US</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive: Curiosity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>German</td>
<td>38</td>
<td>18.3</td>
<td>33.3</td>
</tr>
<tr>
<td>U.S.</td>
<td>76</td>
<td>38.8</td>
<td>66.7</td>
</tr>
<tr>
<td>Social: Initiative/Cooperation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>German</td>
<td>109</td>
<td>52.4</td>
<td>45.0</td>
</tr>
<tr>
<td>U.S.</td>
<td>133</td>
<td>67.9</td>
<td>55.6</td>
</tr>
<tr>
<td>Emotion: Valence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>German</td>
<td>62</td>
<td>29.8</td>
<td>48.8</td>
</tr>
<tr>
<td>U.S.</td>
<td>65</td>
<td>33.2</td>
<td>51.2</td>
</tr>
<tr>
<td>Self: Independence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>German</td>
<td>112</td>
<td>53.8</td>
<td>75.7</td>
</tr>
<tr>
<td>U.S.</td>
<td>36</td>
<td>18.4</td>
<td>24.3</td>
</tr>
<tr>
<td><strong>India versus Nepal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social: Sensitivity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>72</td>
<td>36.0</td>
<td>54.5</td>
</tr>
<tr>
<td>Nepal</td>
<td>60</td>
<td>30.0</td>
<td>45.5</td>
</tr>
<tr>
<td>Social: Obedience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>66</td>
<td>33.6</td>
<td>53.7</td>
</tr>
<tr>
<td>Nepal</td>
<td>57</td>
<td>28.5</td>
<td>46.3</td>
</tr>
<tr>
<td>Self: Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>63</td>
<td>31.5</td>
<td>57.8</td>
</tr>
<tr>
<td>Nepal</td>
<td>46</td>
<td>23.0</td>
<td>42.2</td>
</tr>
</tbody>
</table>

*Note. n=number of responses; columns and rows should not add to 100%.*
Chapter 4
Discussion

Overview

This study was designed to provide insight into the aspects of development that mothers from different cultural backgrounds use to define child competence. With mothers from five nations (Germany, U.S. South Korea, India, and Nepal), representing three cultural orientations (Independent, Relational Autonomous, and Interdependent), we conducted an open-format interview that allowed mothers to freely describe first grade age children whom they regarded as doing well. The focus of this study was to examine the likelihood that mothers from different cultural orientations referred to general domains of development (Physical, Cognitive, Social, Emotional, and Self) and, more importantly, whether the likelihood differed for specific aspects of each domain. Overall, the findings support predictions. That is,

(a) Mothers as a group emphasized competent children’s Social Development most and Physical Development least,

(b) Mothers from nations with an Independent orientation emphasized competent children’s Curiosity, Social Initiative, Emotional Valence, and Independence more than mothers from Autonomous Relational and Interdependent orientations,

(c) Mothers from nations with an Autonomous Relational orientation emphasized competent children’s Self-Control more than mothers from Independent orientations, and
(d) Mothers from nations with an Interdependent orientation emphasized competent children’s Social Sensitivity, Obedience, and Self-Control more than mothers from Independent and Autonomous Relational orientations.

The findings are discussed in terms of each domain of development, linking the evidence from this study to the existing literature and suggesting future directions. Finally, limitations of this study are also discussed.

**Physical Development**

As predicted, mothers emphasized Physical Development the least of all the developmental domains, regardless of cultural orientation. This may be explained by the fact that mothers were explicitly asked to think of first grade children. By the time most competent children reach first grade, they are probably healthy, eat and sleep relatively well, and have normal activity levels, such that their physical development is not a salient feature of their competence. It is noteworthy, however, that when this domain was mentioned, it was most likely to be mentioned by mothers from the Interdependent cultural orientation, India and Nepal. This is unsurprising as the communities in which mothers lived can still be regarded as communities in developing nations in which infant mortality still occurs at a high rate. According to the World Health Organization’s 2011 statistical report, the probability of dying by age 5 per 1000 live births is 4% for Germany, 8% for the United States, and 5% for the Republic of Korea; however, the probability is 66% for India and 48% for Nepal (2011). Therefore, it is expected that health in childhood would be much less taken for granted in the Interdependent nations.
As predicted, mothers from all nations referred to Social Development more than any other domain of development. This finding is also consistent with the age group of the children mothers described. The children were in their first year of primary/elementary school, a time when the ability to get along with their teachers, parents, and other children may be particularly salient and perhaps more so than aspects of cognitive development. That is, competence may be more determined by the ability to get along with others than by school performance. The transition to primary school involves an important social transition; mothers may focus on children’s competencies in relating to other people, as their social networks and number of contacts with both adults and peers widens beyond the family and neighborhood. Gifford-Smith and Brownell (2003) mention that during the primary school years children’s social contacts increase and over 30% of their interactions involve peers by middle childhood. Yet a more interesting comparison lies at the deeper level at which the specific aspects of social development that mothers mentioned differed in terms of the mothers’ cultural orientation.

As predicted, mothers from Interdependent nations emphasized Social Sensitivity and Obedience more than other mothers did. The literature shows that individuals from nations such as Nepal and India highly value behaviors that contribute to social harmony and the well-being of a group as a whole (Cole, Tamang & Shrestha, 2006; Halberstadt & Lozada, 2011; Raval & Martini, 2009; Keller & Otto, 2009). Appreciating that Obedience and Social Sensitivity may underlie other aspects of social development, e.g. Prosocial Behavior and Cooperation, our approach to coding mothers’ responses was to infer what aspect of social development was emphasized. Social Sensitivity and Obedience highlighted a child’s respect for authority and
adherence to social hierarchies, which are known values of communities that are described as Interdependent (Markus & Kitayama, 2010; Keller, 2003). Also, India and Nepal, both putatively Interdependent nations, appeared equivalent in their emphases on Social Sensitivity and Obedience. Mothers in Varanasi India and Kathmandu Nepal share the Hindu tradition, which prescribes a clear social hierarchy, and they also have large, closely knit, extended families in common, in which elders are respected. These factors are two examples of proximal circumstances that may underlie their communities’ “Interdependent” values and explain how mothers define child competence (Raval & Martini, 2009). Future research should delve more deeply into these issues, including examining the specific statements mothers made, to determine if there are subtle differences between Indian and Nepalese mothers’ responses.

In contrast, mothers from Independent nations emphasized Social Initiative/Cooperation more than other mothers as predicted. Because these nations construe and value selves as unique individuals with their own personalities, goals, and abilities, mothers may be more concerned that their children are able to initiate social contacts appropriately and manage their own behavior such that they are cooperative with others (Markus & Kitayama, 2010; Rothbaum & Trommsdorff, 2007). That is, they feel that children are competent if they are outgoing and able to assert themselves but still cooperate with others. However, the two Independent nations differed in their emphasis on this subdomain of social development. U.S. mothers offered a higher proportion of responses than German mothers. A possible reason for this, as summarized in Barber, Chadwick, and Oerter (1992), may be that in the process of socialization, German parents tend to exert more control over their children, even regarding their social interactions. Again, future research can examine wherein these differences lie, as the examples given from each nation may be broken into further categories for analysis.
Whereas Social Sensitivity, Obedience, and Social Initiative/Cooperation distinguished the responses of mothers from Interdependent and Independent cultural orientations, Prosocial Behavior did not. Mothers from both orientations were equally likely to mention references to the types of behaviors in this subdomain, such as loving and helping behaviors. Although all mothers around the globe value these behaviors, it is noteworthy that the emphasis was not equivalent for the South Korean mothers, who were classified as having the Autonomous Relational orientation. Some South Korean mothers mentioned this quality in competent first graders but others mentioned Self-Control, a difference discussed further below.

Finally, one aspect of social development was equally emphasized by mothers from all cultural orientations, Communicative Skills. Again, within the target age of children, these types of skills should be expected by the first grade level of school, and therefore may be taken for granted and are less salient in defining child competence.

**Self Development**

The Self Development domain provided interesting variations between both cultural orientations and individual nations. Within the subdomains, mothers from Independent nations referred to children’s Independence as a criterion of competency more than mothers from Interdependent nations; mothers from Interdependent nations, however, referred to Independence more than mothers from Autonomous Relational. Certainly it can be expected that mothers from Independent nations would value Independence in children, especially the ability to grow in confidence and assert oneself as an individual (Markus & Kitayama, 2010). Independent criteria also tended to be endorsed more by German mothers than U.S. mothers. This finding is
consistent with results from Keller et al. (2006), who found German mothers in their sample to score lower than U.S. mothers on relational measures, thus supporting German preference for autonomy. As this Independent subdomain included a variety of examples such as being able to take care of oneself to being a self-confident individual, more descriptive analyses could be conducted to determine which types of examples were given most frequently by each nation.

One of the most interesting comparisons occurred within the Self-Control subdomain, as each cultural orientation group differed from the others, with Interdependent nations emphasizing it the most and Independent nations emphasizing it the least, as per our predictions. Mothers from Interdependent nations would be expected to place high value on Self-Control, as the ability to keep oneself organized and on-task greatly contributes to maintaining harmony within a group (Cole, Tamang & Shrestha, 2006; Halberstadt & Lozada, 2011; Raval & Martini, 2009; Keller & Otto, 2009). Additionally, Autonomous Relational nations such as South Korea would be expected to place high value on this criteria of competence, but more so for the because they value achievement as an individual and as an extension of others- something that results from diligent work and organizational behaviors (Novin, Rieffe, & Mo, 2010; Lee, Super, & Harkness, 2003). Within this subdomain, India and Nepal were compared, and again no significant differences were found, adding to the further necessity for more specific study of these two nations.

Cognitive Development

Cognitive Development as a general domain was more likely to be endorsed by Interdependent nations, but when broken into more specific subdomains, we see a different
variation. Intellectual Ability was equally likely to be referred to by mothers of any cultural orientation. Although this may be a fair comparison, limitations discussed below may have contributed to the lack of significant differences between orientations in this subdomain. Of greater significance, Independent nations were more likely to endorse Curiosity than Interdependent or Autonomous Relational orientations. Similar to Social Initiative behaviors, this category involved the ability to advance oneself as an individual by taking on interests and trying new things (Markus & Kitayama, 2010; Rothbaum & Trommsdorff, 2007). Within the Independent orientation, U.S. mothers were more likely to refer to Curiosity than German mothers. It could be hypothesized that the slightly stricter lifestyle of German families may provide less encouragement of exploring individual interests (Barber, Chadwick, & Oerter, 1992); more research should be conducted at a greater level of specificity before this assertion can be made.

**Emotion Development**

Unsurprisingly, the Emotion Development domain was generally endorsed at a higher frequency by Independent nations. This result was expected, given that the literature has stated that mothers from these nations desire to foster positive emotional expression and to allow even negative emotion expression when it is constructive (Keller, 2003). Likewise, within both Emotional Valence and Emotion Regulation subdomains, mothers from Independent nations were more likely to provide examples than mothers from Interdependent or Autonomous Relational nations. Also, within the Independent orientation, both German and U.S. mothers were equally likely to contribute to the frequency of responses. Although much research has
been done on the development and socialization of emotions across cultures, this study still
provided a clear comparison in preferences of the three cultural orientations.

**Limitations and Suggestions for Future Research**

Several limitations occurred in the design of this study, which could be improved upon
for future research. As with any type of research involving free-response interviewing, it is
difficult to attain complete accuracy and reliability between interviewers and coders. In the initial
recorded interview step, response prompts were not given consistently by each interviewer and
across every country. This would be an important distinction to make in the early stages, to
ensure that each participant is responding in a similar way to the same probes. It is likely that this
inconsistency may have caused some slight differences in the length and detail of responses
between countries. In this study, the interviews were conducted as part of a larger project, and
the CCC was administered before a distinct plan for coding the responses was in place; thus,
greater response consistency could be achieved if the study were replicated with more specific
end goals in mind.

Similarly, with a set coding scheme and goals in mind, probes could be offered for
certain responses that are more ambiguous across the five domains. Responses such as “good in
school,” “well-adjusted,” and “well-behaved” were given frequently but were too general to be
accurately placed in any one domain or category. For example, the response “good in school”
could convey meanings such as a child’s cognitive-based academic achievements, a child’s
capacity for daily functioning in a social environment, or a child’s ability to control himself in a
structured setting. Each of these meanings are embedded in different developmental domains;
thus, we lost responses due to their ‘too general’ nature. A future step would be to prepare interviewers to probe for specific meaning from such ambiguous responses.

Another limitation to this study, which is an issue for similar research (Kohnstamm et al., 1996), is the task of separating the given responses into individual descriptors for coding. In this study, this task was made difficult by differences in the steps transcription, translation, and coding; specifically, this task is likely the one that most negatively affects reliability estimates across coders. Again, in future research this problem could be reduced by training researchers at each step of the process on the final coding system, so that each individual is aware of the format of desired responses.

A limitation in the analyses of this study in particular is that in the more specific subdomain analyses, mothers responses to the questions of what types of things each child does when they are not behaving well were not included. Although these responses provide a slightly different type of information, they are nevertheless important in determining what qualities of an individual child are valued in each culture. For instance, many mothers from each nation provided examples within the Emotion Regulation subdomain as undesirable behaviors, but fewer mothers provided positive examples within that subdomain. We can hypothesize then that good emotion regulation is important to these mothers, because lack thereof is seen as undesirable. Steps for future research might be to conduct analyses of positive and negative both responses separately and combined within a subdomain.

Another limitation and suggestion for future research would be to examine more closely the specific articulations the mothers used in their descriptions, and to develop new categories that capture deeper cultural meanings, as opposed to fitting them into existing domains and
subdomains. Adding another level of specificity to our coding system would allow for more cultural differences to emerge and more comparisons to be made.

Research on culture and development is heading in a positive direction, and the need for this type of clinical study is becoming more widely acknowledged. For this specific type of study on child competence in cultures, the procedures and goals could be given slight changes to produce different knowledge. For instance, in addition to asking mothers to express how a child is doing well, a parallel interview could be conducted with one or both of the mentioned children to assess their self-evaluation of their competence. This would provide an interested comparison between the socialization values of the mothers and their children. In particular, it would be interesting to test differences in how closely correlated the ideas between mothers and children are across different cultures.

Another interesting step would be use the given procedure to do a study similar to that of Cole, Tamang, and Shrestha (2006), looking at two different social groups within a culture. This type of analysis could provide important information on particular areas of development that are most likely to show differences within a culture, based on social hierarchies or levels of economic standing.

The results of this study were consistent with the overall goal to provide information about how mothers in different cultures expect competent children to behave, and the qualities they desire them to possess. It also suggests directions in specificity and methods for future research in culture and child development. Moving forward with the information provided, we can promote greater cultural sensitivity among all researchers and practitioners in the field, as well as people everywhere.
Chapter 5

References


Appendix A

CCC Interview (Questions 1-7)

1. Is the child you are thinking of a boy or a girl?

2. How old is that child?

3. How (in what way) is that child doing okay?

4. In general, in what way does this child not behave well? When this child does not behave well, what types of things does s/he do?

OK. You told me about a child (of age, of gender). Now let’s talk about a boy/girl (select child of same age by of opposite gender) this same age.

5. How old is that child?

6. How (in what way) is that child okay?

7. In general, in what way does this child not behave well? When this child does not behave well, what types of things does s/he do?
Appendix B

CCC Coding Manual

In each Criteria of Child Competence (CCC) interview, a case will be coded separately for both the male child and the female child.

For each of the children discussed, the mother interviewed is asked ‘How (in what way) is that child doing okay?’ and ‘In general, in what way does this child not behave well? When this child does not behave well, what types of things does s/he do?’

For each question, each different response example will be coded as a level one domain (I, II, III, etc.), or a level two subdomain (A, B, C, etc.), and a positive (+) or negative (-) response. For example, if a mother responds to the question ‘How is that child doing okay?’ with ‘she plays well with friends,’ that response will be given a 1 under the column III.C.specifc.+ and the specific response will be written in the ‘Qualitative’ data column.

In the case of two or more similar words or phrases being given for a particular question, those items will be coded and given a ‘1’, and will be listed separately in the qualitative column with a lowercase letter in parentheses to note separate examples. For example, if a mother responds that a child never throws tantrums and is good at controlling his anger it would look like: (a) never throws tantrums (b) good at controlling anger.

*If a mother indicates that a child displays “too much” of a criterion, in the case that it is not further elaborated on, it can be assumed that the mother means to convey a negative context and it can be coded as a negative criterion

*If a mother gives a statement that is too general to be reasonably placed in any of the five domain categories, the statement remains “uncodable,” and can be documented in the appropriate column at the end of the coding sheet.

-For example: “well-adjusted,” “consistent behavior,” “open-minded,” “well-behaved,” or resilience,” “open” without any other elaboration towards a particular domain

Country Codes:
1=Germany  
2=India  
3=Korea  
4=Nepal  
5=United States

Gender Codes:
1=boy  
2=girl
I: Physical Development

A: Nutrition and Sleeping (the child’s diet, food intake, and sleeping patterns are normal)
   [+]: he sleeps the whole night, he takes naps when none of the other kids are taking naps when they’re supposed to, he eats well
   [-]: he doesn’t eat, he doesn’t sleep the whole night, he doesn’t take naps

B: Activity (the child’s energy level, child’s physical coordination)
   [+]: he is energetic, he is active, he is athletic, she is good at dancing
   [-]: he is restless, he is lethargic

C: Health and Appearance (the child’s physical health and appearance)
   [+]: he is strong, she/he is beautiful/handsome, he is healthy
   [-]: she is weak, she is usually sick, he is unattractive

II: Cognitive Development

[When general statement is made of child’s learning or schoolwork, code as II.General]

Examples: “does schoolwork well,” “learns well”
*“Okay/Good at school” will be placed in the uncodable column

A: Curiosity (child’s desire to learn and be inquisitive)
   [+]: she is excited about going to school, she is curious, has interests and hobbies, motivated to do well in school
   [-]: she has no desire to learn or go to school, bored, not interested in studying

B: Intellectual Ability (the child’s scholastic achievement, self-application, and creativity)
   [+]: she is very smart, ahead of her age group, logical, witty, very aware of what’s going on, makes up stories, creative, imaginative, studies easily
   [-]: slow to learn new information and concepts, he was held back in school
III. Social Development *(How the child deals with others, also her conformity to social rules)*

[When general statement is made about how child is doing at home, code as III.General]

Example: “good at home” “good with others” “troublesemaker”

A: Prosocial Behavior/Antisocial Behavior *(when the child performs an action with others in mind or for another’s benefit/when the child performs an action that hurts or harms others)*

[+] she helps her younger siblings, a good sharer, affectionate, loving, compassionate, accepting of younger siblings, helping, sharing

[-] he is a bully, very aggressive, unfriendly, doesn’t share, violent, doesn’t help siblings, sassy, lying

B: Social sensitivity *(the child’s knowledge of other’s emotions)*

[+] she considers other people’s feelings or how something is going to make someone feel before doing it, she can read the emotion in the air, polite, respectful, respects elders (when no other context is given) empathetic, can see from others’ point of view, comforting

[-] inconsiderate of other’s feelings, rude

C: Social Initiative/Cooperation- *(the child’s ability to act/interact constructively in social contexts)*

[+] extroverted, outgoing, funny, plays with other kids, gets along with others, compromises, has a lot of friends, tolerance, greets others

[-] introverted, too reserved, quiet, she is a loner, plays by herself, she has no friends, she doesn’t connect with friends at school, talks too much, social withdrawal, doesn’t play well with others

D: Communicative Skills *(the child’s overall ability to express what they wish meaningfully)*

[+] he is articulate, he tells me what he wants, good at diffusing arguments, talks well

[-] he struggles to express what he wants

E: Obedience *(the child’s ability to listen to and follow directions from an elder)*

[+] she listens to grown-ups, follows directions well, obeys her elders

[-] he doesn’t listen, ignores parents, wouldn’t follow instructions, testing his limits, disagreeing, testing boundaries, back-talking, stubborn, naughty, mischievous
IV: Emotional Development

A: Emotional valence (emphasis on the child's moods, happy/unhappy, good/bad mood)
   [+]: likes going to parks and museums, calm, enthusiastic
   [-]: doesn’t get excited like other kids, overly exuberant, anxious, complaining

B: Emotional regulation (the consistency or sudden fluctuation in the child’s emotions)
   [+]: he is stable, never throws temper tantrums, she adjusts her emotions well
   [-]: temper tantrums, cries, she has meltdowns, has a hard time when he doesn’t get his way, is difficult to soothe

V: Self Development (How the child sees and deals with herself)

A: Independence/Dependence (the child’s individuality; physical and emotional reliance on others; the influence of others on the child)
   [+]: she has individuality, becoming her own person, confident, do things without being asked to, secure, accepting her identity, doesn’t allow others to roll over her, she is strong-willed, asks for help when needed, brave
   [-]: she is a bit of a mamma’s girl, little needy, needs attention, seeks attention via negative ways, he carries a blanket everywhere, insecure, boasts, acts entitled

B: Self-control (the child’s ability to control him/herself physically and mentally)
   [+]: she stays still, she has self-control, initiates studying, completes homework timely, works hard, neat and tidy
   [-]: he can’t focus, he doesn’t stay in seat, she’s always running around, he can’t stop himself from grabbing others and hugging them, messy, he is lazy (watches too much tv)
Lauren E. Wood
Curriculum Vitae

Contact Information
318 West Nittany Avenue, Apt 8
State College, PA 16801
Cell Phone: (814) 421-8486
Email: lwood173@gmail.com

Education
Pennsylvania State University
Schreyer Honors College
Bachelor of Science, Psychology
Focus on Biological and Evolutionary Science
Graduation: May 2012

Honors thesis, “Mothers’ Criteria of Child Competence Across Cultures”
Thesis Supervisor: Pamela M. Cole, Ph.D.

Research Experience
Children and Emotion Regulation Lab
Lab Director: Pamela M. Cole, Ph.D.
Research Assistant
- Developed coding system for Criteria of Child Competence interview
- Transcribed interviews to prepare for coding
- Wrote honors thesis using data from five nations

Relationship Research Lab
Lab Director: Amy D. Marshall, Ph.D.
Research Assistant
- Collected qualitative, quantitative, and biomedical data from human subjects in research assessments
- Prepared ePrime computer software for electronic data collection
- Entered and checked data in SPSS statistical software
- Conducted literature searches using scholarly databases
Lab Coordinator
- Coordinated schedules of lab members for meetings
- Renewed online classified advertisements for LOVE study subject recruitment
- Organized application information for the recruitment of new research assistants

Professional Experience
Quantum Learning Network SuperCamp
Team Leader
- Facilitated learning experiences, group discussions, and team-building with junior high and high school campers
- Enforced camp rules of safety and discipline
- Provided physical and emotional support for campers and co-workers

Providence, RI
July 2010, 2011
### Awards and Honors

<table>
<thead>
<tr>
<th>Award/Grant</th>
<th>Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wisniewski Family Enhancement Fund in the Department of Psychology</td>
<td>Fall 2011</td>
</tr>
<tr>
<td>Honors Thesis Research Grant</td>
<td>Fall 2011</td>
</tr>
<tr>
<td>$300 awarded from Psychology Department, College of Liberal Arts,</td>
<td></td>
</tr>
<tr>
<td>and Schreyer Honors College</td>
<td></td>
</tr>
<tr>
<td>College of Liberal Arts Dean’s List</td>
<td>Fall 2011, Spring 2011,</td>
</tr>
<tr>
<td></td>
<td>Fall 2010, Spring 2010,</td>
</tr>
<tr>
<td></td>
<td>Fall 2009, Spring 2009,</td>
</tr>
<tr>
<td></td>
<td>Fall 2008</td>
</tr>
<tr>
<td>College of Liberal Arts</td>
<td>Spring 2011, Fall 2010,</td>
</tr>
<tr>
<td>Certificate of Superior Academic Achievement</td>
<td>Spring 2009, Fall 2009,</td>
</tr>
<tr>
<td></td>
<td>Fall 2008</td>
</tr>
</tbody>
</table>

### Research Certifications and Skills

- Collaborative Institutional Training Initiative (CITI) certification in The Protection of Human Research Subjects, Biomedical Focus
- Familiarity with SPSS statistical software and ePrime experiment software
- Proficiency in Microsoft Word, Powerpoint, and Excel