THE PENNSYLVANIA STATE UNIVERSITY
SCHREYER HONORS COLLEGE

DEPARTMENT OF PSYCHOLOGY

MATERNAL CONCEPTIONS OF CHILD COMPETENCE AND PARENTING PRACTICES:
A CROSS-NATIONAL VIEW

SALVATORE JUDE AFFINITO
SPRING 2015

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
Liberal Arts Research Professor of Psychology
and Human Development and Family Studies
Thesis Supervisor

Richard A. Carlson
Associate Head and Professor of Psychology
Honors Adviser

* Signatures are on file in the Schreyer Honors College.
ABSTRACT
Although there is ample research on classifying cultures, there is limited research regarding the impact of culture on parenting. In particular, the relationship between maternal conceptions of child competence and their parenting behaviors is not fully understood. This thesis examined cultural differences in mothers’ conceptions of child competence by interviewing 502 mothers using an open-ended interview – the Criteria of Child Competence (CCC). These same mothers were then administered the Socializing Situation Scenarios (SoSit) in order to assess their anticipated parenting behaviors in various situations. The culture of the mother was based on the theoretical classification of culture as a function of self-construal – the way in which individuals perceive the world in relation to themselves (Markus & Kitayama, 1991). Mothers from five nations participated, representing three Cultural Orientations: India and Nepal as Interdependent, South Korea as Autonomous-Relational, and the United States and Germany as Independent nations. Hierarchical linear regressions were conducted to test predictions that specific Cultural Orientations and maternal criteria for child competence account for significant variance in mothers’ beliefs about the parenting practices they use. The results revealed that, across cultures, Problem-Focused parenting was the most commonly referenced, with Interdependent mothers referencing them most often. As predicted, mothers from Interdependent and Autonomous-Relational nations emphasized Power Assertion more than mothers from Independent nations. Moreover, an Interdependent Cultural Orientation and Obedience as a competence criterion predicted Power Assertive parenting practices. For Problem-Focused parenting practices, an Independent Cultural Orientation was a significant predictor and the criteria of Social Initiative and Cooperation was only a significant predictor when Independence was controlled for.
# TABLE OF CONTENTS

LIST OF TABLES ........................................................................................................... iii

ACKNOWLEDGEMENTS ............................................................................................... iv

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

   Culture ......................................................................................................................... 2
   Intuitive Theories ......................................................................................................... 5
   Child Competence ....................................................................................................... 6

Chapter 2 Methods ..................................................................................................... 13

   Participant Characteristics ......................................................................................... 13
   Sampling Procedures ................................................................................................. 13
   Demographics ............................................................................................................ 14
   Measures .................................................................................................................. 15

Chapter 3 Results ...................................................................................................... 20

   Overview of Data Analyses ......................................................................................... 20
   Mothers’ References to Power Assertive Parenting Practices .................................... 22
   Mothers’ Descriptions of Problem-Focused Parenting Practices .............................. 23

Chapter 4 Discussion ................................................................................................. 26

   Limitations and Future Research ............................................................................... 29
   Conclusion .................................................................................................................. 30

Appendix A SoSit Interview Questions ..................................................................... 31

Appendix B SoSit Coding Manual ............................................................................. 38

Appendix C CCC Interview Questions ..................................................................... 50

Appendix D CCC Coding Manual ............................................................................. 51

Appendix E Tables ...................................................................................................... 55

REFERENCES ............................................................................................................ 59
LIST OF TABLES

Table 1. *Descriptive Statistics and Zero-Order Correlations for Parenting Practices and Child Competence Criteria* ...........................................................................................................55

Table 2. *Descriptive Statistics for Power Assertion Parenting Practices by Cultural Orientation* .................................................................................................................................56

Table 3. *Descriptive Statistics for Problem-Focused Parenting Practices by Cultural Orientation* ..............................................................................................................................56

Table 4. *Hierarchical Linear Regression of Cultural Orientation and Criteria for Child Competence on Power Assertion Parenting Practices* ...........................................57

Table 5. *Hierarchical Linear Regression Results of Cultural Orientation and Criteria for Child Competence on Problem-Focused Parenting Practices* ...............................58
ACKNOWLEDGEMENTS

This thesis is not a function of my work alone. There are many people who helped make
this possible, all of whom deserve thanks. First off, I would like to thank Dr. Pamela Cole for
giving me the opportunity to work on this project. For the past three years, she provided
extremely generous amounts of time, wisdom, guidance, and support. This thesis would not have
been possible without her. I would also like to thank Dr. Gisela Trommsdorff – the principal
investigator of this project – as well as Mirjam Weis, Anika Faesche, and the rest of the research
team at the University of Konstanz, Germany for helping organize this project, collecting a large
portion of the data, and corresponding with our team throughout the project. Additionally, I
would like to thank our co-investigators in Nepal, India, and South Korea: Dr. Shanta Niraula,
Dr. Ramesh Mishra, and Dr. Seong-Yeon Park. This project would not have been possible
without their help with data collection and insight. I would like to thank Lauren Wood for
extensive work on the first major portion of this thesis. Her honors thesis, guidance, and work
ethic made this thesis possible. Hannah Baranov and Shengnan Chen also worked extremely hard
to accomplish the challenging coding process of the first portion of this study, so they deserve
substantial praise. I would also like to thank Conor Higgins for tirelessly helping with all aspects
of this thesis, ranging from data collection to the creation of this document. Finally, I would like
to thank all of the mothers involved in this study. This thesis would not exist without their
valuable insights.
Chapter 1
Introduction

Socialization is defined as the way in which individuals are aided in becoming members of social groups (Grusec & Hastings, 2008). This process helps humans learn rules, roles, standards, and values that are applied across the social, emotional, cognitive, and personal domains of a social group. Developmental research has indicated that socialization is especially important during children’s development as it helps children become successful members of the group. Parents, other caregivers such as educators, siblings, peers, and various forms of cultural institutions serve as socialization agents (Grusec & Hastings, 2008). Culture appears to be transmitted to young children through parenting practices. Research has shown that culture has a significant impact on parents’ socialization goals, which in turn guides their parenting practices, including their beliefs about which emotions and behaviors are acceptable for competent children (Joshi & MacLean, 1997). In our increasingly globalized society, understanding differences in cultural socialization goals is important, principally because developing a better understanding of these differences may improve the development of culturally sensitive education policies, child psychopathology treatments, and competent child rearing practices (LeVine et al., 1994).

Although there are many socialization agents, child development research has focused on parents, particularly mothers (Williams & Radin, 1993; Parke, 2000). Maternal beliefs organize their expectations, socialization goals and practices (Harkness & Super, 1996; Raval & Martini, 2009). Harkness and Super (1996) refer to these beliefs as parental ethnotheories, i.e. culturally influenced belief systems. These beliefs are not necessarily explicit in nature, and instead are
generally intuitive ideas about how children develop and the ways that parents foster that
development (Trommsdorff, Cole, & Heikamp, 2011). Whereas explicit beliefs are theoretical
and can be tested, intuitive beliefs are assumptions that are made about the nature of children and
child rearing. Parents acquire these assumptions through inference and generalization based on
experience, including observations of the practices of others in their cultural group, and not
through formal instruction. Many socialization practices are tacitly transmitted from generation
to generation, forming cultural standards. These intuitive theories then are ethnotheories
(Harkness & Super, 1996). The relation between intuitive theories and parental practices is not
well understood, but evidence suggests that culture influences each of them. Few studies
actually examine both, however.

Culture

There have been various attempts to conceptualize culture. Geert Hofstede (1980)
explained culture in terms of three unique, hierarchical levels of human mental programming:
universal, collective, and individual. At the base of this pyramid sits the universal level, which is
said to be shared by all of mankind, and represents more basic, expressive and aggressive
behaviors, which are also seen – to some extent – in other animals. At the top of the pyramid,
the individual level can be found, where aspects such as personality traits and other individual
differences are seen. This level is unique to all individuals. The middle level in the pyramid is
the collective level of mental programming. This level is shared by some groups of humans, but
not all and is the place in which cultural differences and values are seen, including their impact
on behaviors and norms. Hofstede (1983) later classified cultural variations on the basis of his
analysis of work-related value data from 116,000 employees across 50 different nations. He identified four dimensions by which cultures could be classified: power distance, uncertainty avoidance, individualism versus collectivism, and masculinity versus feminism. His research emphasized the work-context, with particular emphasis on explaining why cultures differed in terms of: how organizations were structured, what motivated individuals, and what issues people and organizations faced in society. Hofstede’s framework is well-established but was not intended to be a framework for conceptualizing socialization processes. Another closely related conceptual framework offers a means of applying similar concepts to socialization. Specifically, the approach of Markus and Kitayama (1991) focuses on cultural variations in self-construal, which can be applied to how selves develop within cultural contexts.

Markus and Kitayama (1991) conceptualize cultural differences in psychological functioning as reflecting different forms of self-construal – the way in which people perceive the world in relation to themselves. Their approach is typically characterized in terms of two ends of a continuum with the Independent self-construal at one end and the Interdependent at the other. For example, cultures that foster an Interdependent self-construal emphasize the interrelatedness of selves – the notion that individuals primarily perceive themselves in relation to others. This form of self-construal typifies traditional, agrarian communities as seen in the nations of India and Nepal. This emphasis on Interdependence influences behavior and emotion regulation in the sense that individuals feel a greater sense of connection with others and their environment. On the other end of the continuum, is the Independent self-construal, which is characterized by perceiving oneself as independent and autonomous from others. This form of self-construal is more closely associated with nations that emphasize uniqueness and separateness of selves, and typifies nations such as Germany and the United States – industrialized communities in which
individuals seek to gain economic independence from others. Theoretically, emphasizing the Independence of self influences individuals to consider themselves more separate from others and thus rely more on behaviors and emotion expression in order to communicate their thoughts, feelings, and emotions. This would have implications on children’s behaviors as well as the parenting practices employed by their caretakers.

This model offered a heuristic framework that has spawned considerable research and its fair share of criticism. The main critique of this model is that it fails to take into account that individuals may not identify with a single end of the continuum, and in fact all individuals may have both forms of self-construal and strive for a balance of these two aspects of the self. Kağıtçibaşi (1996) noted these concerns and developed a theory that individuals in rapidly developing nations with agrarian traditions may construe themselves as both Independent and Interdependent, a form of self-construal which she labeled as Autonomous-Relational. In this form of self-construal, the dimension of self that is emphasized depends on the situational context. Whereas previous models focused on the individual along a continuum, Kağıtçibaşi added a dimension to this in order to account for variations within individuals and groups. The inspiration for rejecting the continuum model comes from the perceived differences in family interactions across nations. In particular, Kağıtçibaşi (2005) outlines three prototypical family interactions, with each one stressing different values. The first is a fully Interdependent one, the second is a fully Independent one, and the third is a “dialectical synthesis of the previous two” (p.410). Kağıtçibaşi posited that families in nations with more traditional family values – what she deemed Interdependent families – are more common in nations that align with Markus and Kitayama’s (1991) Interdependent end of the continuum. The opposite can be said for Independent families. In terms of the third family model, Kağıtçibaşi concluded that emotional
interdependence and authoritative parenting represent a conceptual bridge between these two ends of the Interdependent-Independent continuum. Furthermore, this dialectical synthesis of the Interdependent and Independent families addresses the fact that some nations hold historically traditional values, yet must balance impending industrialization and a need for agentic behavior for economic success. As such, Kağıtçibaşı made the case that Turkey, especially in its Western regions, reveals Autonomous-Relational values in self-construal. Similarly, South Korea is also a nation that has undergone rapid industrialization and yet has maintained its historical family traditions (Amsden, 1992). South Korean mothers may want to socialize their children in a way that is consistent with their traditional relational values within the family context, but also prepare them to be Independent selves capable of navigating the modern, industrial global society.

**Intuitive Theories**

When cultural frameworks are examined, they often are not done within a developmental framework (Trommsdorff et al., 2011). However, the critical importance of understanding cultural values, including implicit maternal intuitive theories, was articulated in the concept of the developmental niche (Super & Harkness, 1986). The developmental niche is a conceptual framework for viewing the influences on children’s development, including the role of culture. It comprises three main elements: physical and social settings, customs and practices of child rearing, and parental ethnotheories. These parental ethnotheories – theories that underlie the values or practices of cultures – organize parental expectations of child development, as well as parental socialization goals and practices (Harkness & Super, 1996; Raval & Martini, 2009).
Thus, these theories are assumed to be mainly intuitive. This raises the interesting scientific question of the best approaches to their study. Because parental beliefs are typically implicit, they are difficult to measure directly. Even asking mothers about their parenting beliefs may require them to cognize about practices that they engage in spontaneously and that are guided by implicit beliefs. One intriguing approach is to measure maternal perceptions of child competence as a means of revealing maternal intuitive theories (Durrow & Masten, 2001).

**Child Competence**

Child competence has been conceptualized in different ways. Some scholars define child competence in terms of the absence of undesirable or deviant behaviors (Sameroff, Bartko, Baldwin, Baldwin, & Seifer, 1998). Other scholars criticize this approach because it explains what competence is not, rather than what competence is or how it can be explained (Masten & Coatsworth, 1998). For the purposes of this study, child competence is defined as “a pattern of effective performance in the environment, evaluated from the perspective of development in ecological and cultural context” (Masten & Coatsworth, 1995, p.724). That is, this conceptual approach emphasizes that the specific ways in which competence is expressed are, to a considerable degree, defined by cultural values. Therefore, it is logical to expect that culture plays an implicit role in mothers’ conceptions of child competence. Their expectations, goals, and practices are premised on values that are shared by their social group and communicated from generation to generation. Research supports the idea that the values of a society or nation influence what competencies are emphasized (Joshi & MacLean, 1997; Wood, 2012).
Therefore, there is a need to access mothers’ implicit beliefs in order to understand these cultural influences, and to do so in a culturally sensitive manner. Most often, questionnaires are used to assess parental beliefs. These require a mother to consciously reflect on items, and those items are usually written from a specific, culturally-bound theoretical framework. As they are translated from this conceptual framework into other languages there is further risk that the items constrain and even obscure nuanced cultural variations. To address these issues, the Criteria of Child Competence Interview (CCC) was developed by Eric Durbrow (1999). It uses an open-ended format that allows mothers to define competence in their own words, by describing a child whom they regard as doing well. That is, their conceptions of competence are implicit in the ways they describe a competent child and the open format avoids constraints imposed by the culture of a socialization theory.

In the first study using this method, mothers’ conceptions of child competence – in the context of poverty – was evaluated in three different cultures (Durbrow et al., 2001). The CCC interview allowed the researchers to measure these conceptions and view how they differed between Filipino, Caribbean, and U.S. mothers. The mothers’ open-ended responses were sorted by a research team based on the team’s estimation of the coherence of the criteria used. In this study, mothers were asked to think of competent children in two age brackets, 5 to 13 and 13 to 18. Durbrow, Peña, Masten, Sesma, and Williamson (2001) identified five categories of child competence in the descriptions of these competent children. The five categories derived from the descriptions were labeled: Positive Conduct, Academic Competence, Support Family, Good Peer Relations, and Other Descriptors, which was a general category for responses that did not fit the first four categories. The researchers found that, across the three nations, child helpfulness and obedience were the major criteria of competence. Furthermore, the mothers from the U.S.
cited academic competence more than mothers from other nations. All in all, this study revealed that the CCC interview was effective at revealing cultural differences in mothers’ criteria for child competence. Other studies that included the CCC further highlight its effectiveness.

In another study, Cole, Tamang, and Shrestha (2006) used the CCC interview to investigate cultural differences in emotion socialization between Brahman and Tamang communities in Nepal. Elders from these two ethnic groups in rural Nepal were interviewed in order to understand how criteria for child competence differed between the two cultures. The interviews revealed that both Brahman and Tamang communities emphasized social competence, but specific emphases on social subdomains varied. Specifically, Tamang communities highlighted the importance of “being friendly to others, using the proper kinship terms of address to convey respect and social grace, and promoting interpersonal goodwill and cheer” (p. 1246). Conversely, Brahman elders emphasized respect for elders in the home and village, but not the ability to make others feel happy. The differences found in this study indicated that richer information can be obtained from free-response items than forced-response items, and this information can help reveal subtle cultural differences. Although the study involved interviewing elders rather than mothers, it provides insight into the existence of within-culture variation, particularly within Nepal – an Interdependent nation.

The Cole et al. study included elders’ descriptions of competent children aged less than 12 that were not classified, and instead were described in terms of the most common, shared descriptions. More recent work, such as that of Friedlmeier and colleagues – who developed an unpublished coding system for their use of the CCC with mothers of toddlers – included specific categories of competence. These four categories were: Physical, Cognitive, Social, and Emotional domains of functioning. They also included subdomains which were specific to the
concerns of the toddler years, such as toilet training. In a study associated with the larger project from which the current thesis data was derived, Wood (2012) also created five a priori domains based on the work of previous scholars, particularly the unpublished manual provided by Friedlmeier. As with the work of other scholars, the assumption was made that caregivers share some universal goals of individuals raising children (Durbrow et al., 2001; LeVine et al., 1994; Whiting & Whiting, 1973). That is, caregivers seek to have healthy children who survive to learn, to get along with adults and peers, and to become competent adults in their social groups.

To Friedlmeier’s four basic domains Wood (2012) added one additional domain and then, based on mothers’ descriptions, differentiated a fifth domain – labeled Self Development – in which the emphasis of the mother focused on the child as a self. Specifically, Wood used five categories of competence—Physical, Cognitive, Social, Emotional, and Self Development domains. Conceptually, the research team sought to determine cultural differences in maternal conceptions of child competence by investigating samples that represented the major conceptualizations of the self-construal – as supported by the work of Markus and Kitayama (1991) and Kağitçibaşi (1999). As such, mothers from different nations represent various types of self-construal, with the samples ranging from Interdependent (Nepal and India), to Independent (Germany and the United States), and with Autonomous-Relational mothers (South Korea) conceptually representing a dialectical synthesis of the two. In order to standardize the samples as much as possible, mothers were asked to focus on descriptions of children who were in or had just completed first grade. This would minimize the possibility of age confounding developmental criteria. The investigators focused on first grade age children because of the wide cultural differences in the experiences and expectations of younger children. For example, not
all children in all nations attend preschool or day care, and the kindergarten educational goals vary widely from play in Germany to preliteracy and prenumeral in the U.S.

For descriptions of competent first grade age children, Wood (2012) found that mothers from the five nations did not equally refer to all these dimensions in their descriptions of competent 6 to 7 year olds. Specifically, mothers from the Interdependent nations referenced the Physical and Cognitive domains more than mothers from other nations, while mothers from the Independent nations referenced the Emotion domain more than other mothers. Despite these differences, mothers across all five of the nations referenced social competence more often than any other domain of competence. Moreover, Wood found that increased references to the Emotion domain were a function of mothers referring to emotional development when describing how competent children misbehaved. Given that emotional development is an important domain for children of this age, and research evidence shows that children have experienced significant growth in their ability to understand and regulate emotions according to cultural values, vignettes from the CCC were used to flesh out how mothers perceived competent children would feel and react in emotion-eliciting situations. Trommsdorff, Cole, and Heikamp developed these vignettes in order to ensure cultural relevance was maintained for the situations across the nations (2012). Despite the interesting findings in relation to emotional development, mothers referenced the Social domain twice as often as other domains, so this thesis sought to determine whether mothers’ conceptions of social competence influenced parenting styles.

Extensive research has helped classify parenting styles, and determine their impact on child development (Spera, 2005). Common classifications of parenting styles and behaviors include: Power Assertion, Psychological Control, Problem-Focused, and Emotion-Focused (Trommsdorff, 2010). Power Assertive maternal behavior is characterized by aiming at
controlling a child through discipline and punishment (Kuczynski, 1984). Psychological Control is characterized by attempting to a direct a child by influencing their emotional state via inducing guilt or withdrawing positive emotions such as love (Barber, 1996; Morris, Steinberg, Sessa, Avenevoli, Silk & Essex, 2002; Trommsdorff & Rothbaum, 2008). Problem-Focused parenting is characterized by focusing on educating the child through guidance, reasoning, instrumental support, and modeling (Cheah & Rubin, 2003). Finally, Emotion-Focused parenting is typified by positively influencing the child’s emotions through comforting, distracting, and reappraisal (Fabes, Poulin, Eisenberg & Madden-Derdich, 2002; Davidov & Grusec, 2006).

The goal of this study is to present a cross-national view of maternal conceptions of child competence and maternal conceptions of their own parenting practices. Maternal conceptions of child competence were assessed in mothers from five nations (Nepal, India, South Korea, Germany, and the United States) that are believed to differ in terms of self-construal – the view of the self as a target or a referent in various contexts. This study predicts that mothers from nations with different emphases on self-construal (as determined by Markus and Kitayama and Kağıtçıbaşı’s framework) will exhibit different criteria for child competence and different parenting practices. Additionally, this study predicts that certain subdomains of Social competence will be more closely associated with specific parenting practices than other subdomains. Theoretically speaking, nations which emphasize an Interdependence of self value social harmony, therefore mothers from these nations would expect their child to be obedient and conform to the situations. As such, it is predicted that mothers from nations which emphasize an Interdependence of self will be more likely to reference Power Assertive parenting practices than mothers from other nations. It is also predicted that the Social subdomain of Obedience will be more associated with Power Assertive parenting behavior than other Social subdomains. In
terms of nations more oriented toward Independence of self, which emphasize self-advocacy and
the existence of the self as an individual who needs to communicate one’s emotions, it is likely
that mothers would be more likely to employ Problem-Focused parenting practices in order to
help socialize their child for a world where they must interact effectively with others as an
Independent being. Therefore, it is predicted that mothers from nations which emphasize an
Independence of self will be more likely to reference Problem-Focused parenting practice than
mothers from other nations. It is also predicted that the Social subdomain of Social
Initiative/Cooperation will be more associated with Problem-Focused parenting behavior than
other Social subdomains.
Chapter 2

Methods

Participant Characteristics

There were 506 mothers interviewed for this study. These mothers all had children between the ages of 6 and 7 years old. Due to poor quality audio recordings, four cases were excluded from the final sample (two from Germany and two from the United States). The final sample consisted of 502 subjects. Of those, 104 were German, 100 Indian, 100 South Korean, 100 Nepalese, and 98 were from the United States.

Sampling Procedures

Depending on the country, recruitment of participants varied. For the sample from the United States, mothers were recruited via a database from a large northeastern university. This database included families that indicated a desire to be contacted to participate in studies if their child was eligible. For the samples collected from Germany and South Korea, mothers were recruited through advertising in community settings that served children. For the Nepali and Indian samples, mothers were recruited from communities via word of mouth.

A mother’s eligibility was based on whether or not they had a child whose birth date fell within a range that would result in a sample of mothers with children aged 6 to 7 years old.
Mothers were also required to speak the language of the nation in which they were interviewed, but this language did not have to be the mother’s primary language.

**Demographics**

Data were collected regarding the participants, including: Maternal Age, Maternal Education (in years of schooling), Economic Status (on a scale from 1 to 5, with 5 being the highest score), and Number of Children mothered. On average, mothers in this study were 35.48 years of age, had received 13.97 years of education, belonged to the middle class (an average Economic Class of 3.05), and mothered 2.14 children. Between nations, significant differences were observed for three of these demographic variables.

In terms of Maternal Age, German mothers were found to be significantly older than mothers from the other four nations. Specifically, German mothers were older than mothers from the United States, $t(196) = 2.99, p = .002$, South Korea, $t(198) = 8.49, p < .001$, Nepal, $t(203) = 14.89, p < .001$, and India, $t(203) = 12.71, p < .001$. Mothers from U.S. were significantly older than mothers from South Korea, $t(196) = 3.25, p = .001$, India, $t(191) = 7.85, p < .001$, and Nepal, $t(191) = 9.70, p < .001$. Finally, mothers from India were significantly older than mothers from Nepal, $t(198) = 2.20, p = .015$.

In regards to Maternal Education, mothers from both the United States had significantly more years of education than mothers from South Korea, $t(191) = 2.22, p = .028$, Germany, $t(196) = 14.71, p < .001$, Nepal, $t(196) = 9.11, p < .001$, and India, $t(196) = 14.05, p < .001$. Additionally, South Korean mothers received significantly more years of schooling than mothers
from Germany, \( t(203) = 12.69, p = .001 \), Nepal, \( t(196) = 7.58, p < .001 \), and India, \( t(198) = 12.35, p < .001 \). Meanwhile, there was no significant difference between mothers from Germany, Nepal, or India.

Economic status was measured on a scale of 1 to 5, with 1 signifying low economic status within that nation’s respective society and 5 signifying high economic status. As mentioned previously, the mothers did not differ on this dimension. That being said, although mothers across nations indicated they belonged to the middle class, it is possible that their household income levels could differ.

In terms of Number of Children, mothers from the United States had significantly more children – on average – than mothers from South Korea, \( t(190) = 4.91, p < .001 \), India, \( t(190) = 4.78, p < .001 \), and Nepal, \( t(190) = 5.56, p < .001 \). Mothers from the United States did not have significantly more children than mothers from Germany, but German mothers had significantly more children than mothers from South Korea, \( t(203) = 3.30, p < .001 \), India, \( t(203) = 3.14, p = .001 \), and Nepal, \( t(203) = 4.285, p < .001 \). Finally, mothers from South Korea, Nepal, and India did not show significant differences in terms of Number of Children.

**Measures**

The larger study regarding mothers’ intuitive theories about child emotion socialization – headed by Gisela Trommsdorff – involved a compilation of quantitative and qualitative assessments. Of these assessments, the Socialization Situation Scenarios (SoSit – found in Appendix A) was included in this study in order to understand how a mother would parent her
own child in various situations. Specifically, mothers were asked how they would react to their child quarreling with a friend over a toy, coming home from school with a bad mark on a homework assignment, and ignoring a friend who falls and asks for help. In each of these situations, mothers were asked to explain what they thought (the “Speech Bubble” question) and then how they would parent the child (the “Behavior” question). Mothers’ responses were coded by a team of coders (manual in Appendix B) in terms of five categories of parenting behaviors: Power Assertion, Psychological Control, Problem-Focused, Emotion-Focused, and Non-Specific. If a mother never referenced a specific parenting practice for a situation, a score of 0 was assigned. If a mother referenced one specific parenting practice for a situation (whether for the Speech Bubble question or the Behavior question), a score of 1 was assigned. Finally, if a mother referenced a specific parenting practice in a situation for both the Speech Bubble question and the Behavior question, a score of 2 was assigned. For the purposes of this study, these two questions were combined to form one score due to the similarity in responses across the two questions. Therefore, since each mother was describing one child across three situations in the SoSit, scores ranged from 0 to 6. Although five types of parenting practices were coded by the German team, three of them had low frequencies: Psychological Control ($M = .042, SD = .211$), Emotion-Focused ($M = 1.001, SD = 1.118$), and Non-Specific ($M = 1.172, SD = 1.144$) – were infrequently referenced. Therefore, the predictions for this thesis were limited to the two more commonly occurring categories: Power Assertion and Problem-Focused practices.

Mothers’ conceptions of child competence were assessed using the Criteria for Child Competence (CCC) interview, developed by Eric Durbrow (1999). As mentioned previously, this interview (Appendix C) has an open-ended format, which allows for greater cultural sensitivity and does not influence mothers’ responses as much as forced-response interviews.
Forced-response questionnaires could have alerted the mothers to which developmental domains the research team were investigating, and thus skewed the results. The mothers were interviewed either by co-investigators or graduate level research assistants. The interviews themselves were conducted in the mother’s home, over the phone, or in a room at a research facility. All of the interviews were recorded for subsequent transcription. The interviews were transcribed in the native language of the mother, and then translated into English by bilingual researchers. Furthermore, each transcribed interview was assigned a number to ensure participant confidentiality, but the nation was noted. A team from the United States devised a coding scheme for the CCC data (Appendix D), and carried out all of the relevant coding. Sometimes questions regarding the translations arose, in which case the relevant excerpt from the transcription was sent to the respective co-investigative team for clarification. Since the mothers were asked multiple types of questions, multiple coding schemes were devised.

Mothers were asked two sets of questions: one set focused on understanding the mother’s general criteria for a competent child, while the other set – composed of vignettes – focused on the mother’s perceptions of how she would react to her own child’s behavior in various emotion-eliciting situations. To begin, each mother was asked to think of a child aged 6 to 7, who had just entered or completed first grade. Ideally, a younger age range would have been selected, but educational expectations vary significantly for children in pre-school or kindergarten between countries. For example, educational expectations of kindergarten children in Nepal emphasize rote learning of the alphabet, while children in Germany are encouraged to develop social skills through playtime. The mother was not requested to think of her child, rather any child that fit the specified age range. The mother was than asked to state the gender and age of the child. The mother was then asked, “How (in what way) is that child doing okay?” followed by, “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?” Once the mother had answered both of these questions, she was asked to think of a child of the same age but opposite gender, and the questions were repeated. If the mother’s answer was too brief or vague, generic follow-up questions were asked in order to better understand her response.

The responses to the first set of questions were classified using four different codes. First, the mother’s response was classified in terms of five broad domains of competence: Physical, Cognitive, Social, Emotional, and Self Development. Within each domain, responses were then classified as either general or specific. Specific domains differed based on the domain it was under. For example, Intellectual Ability was a subdomain of Cognitive Development, while Emotional Regulation was a subdomain Emotional Development. Furthermore, each response was classified as either a positive or negative attribute of the child. For example, “the child is slow to learn new information” would be classified as a negative instance of Intellectual Ability. On the other hand, “the child adjusts her emotions well” would be a positive example of Emotional Regulation. Coding was mutually exclusive in the sense that a single response warranted a single code. On the other hand, if a mother responded with two distinct answers that qualified for two separate codes, her response could receive two codes.

Coders for both the CCC data sets were trained until they achieved a high level of accuracy with a master coder. Each week, the team would meet and discuss any particular responses that were ambiguous or troublesome, without revealing any specifics or details that would reveal the participant number or country. As mentioned previously, translation questions were sent to the respective nation as needed. In order to determine inter-rater reliability, 20% of
The interviews were selected at random to be double coded. Each coder was blind to which cases were double coded. Based on agreement for the domains and specific subdomains of child competence, as well as the parenting practices, reliability exceeded 83% agreement.
Chapter 3

Results

The results section is organized in the following manner. First, an overview of the statistical approach to data analyses is described. Second, descriptive statistics for all study variables, and their zero-order correlations, are reported. Third, results of hierarchical linear regressions testing the study hypotheses are presented separately for each maternal beliefs about parenting practices outcome: Power Assertive practices and Problem Focused practices.

Overview of Data Analyses

Scores from the SoSit (maternal beliefs about parenting practices) and CCC (maternal beliefs about child competence) were used in the data analyses. As a reminder, the SoSit score used for the analyses was the frequency with which mothers referred to Power Assertive and Problem-Focused parenting practices in describing how they believe they would respond to their children in different hypothetical situations, and the CCC score was the number of references the mother made to two specific subdomains of social competence—Obedience or Social Initiative/Cooperation—in describing competent first grade age children.

The descriptive statistics for all of the scores were first examined to understand their ranges and distributions (see Tables 1-3). Next the correlations between all pairs of variables were examined to check for multicollinearity; no multicollinearity was found. Then, the SoSit scores were analyzed using analysis of variance (ANOVA) to generate and test predictions that
there would be group differences in each parenting practice as a function of Cultural Orientation (Interdependent, Autonomous-Relational, and Independent).

Finally, to test the main study hypotheses that maternal beliefs about specific parenting practices (Power Assertion and Problem-Focused) were accounted for by Cultural Orientation due to maternal beliefs about specific child competencies (Obedience and Social Initiative/Cooperation), two hierarchical linear regressions were conducted. Prior to conducting the regressions, vectors were created to allow for orthogonal comparisons using the categorical variable, Cultural Orientation. For each vector, the sum of the three terms for Cultural Orientation equaled 0, and contrasts were defined to test specific predicted comparisons. The first vector was defined by Interdependence = 2 and Autonomous-Relational and Independence each = -1. The second vector was defined by Independence = 2 and Autonomous-Relational and Interdependence each = -1. In each regression, the first step involved entering the Cultural Orientation vector and the specific child competence predictor was entered in the second step. In this way, the unique contribution of maternal values about child social competence in accounting for variance in maternal beliefs about parenting practices was tested. A reduction in the significance of Cultural Orientation contrasts after entering the specific maternal values about child competence would imply mediation. Specifically, four hypotheses were tested: (1) Interdependent Cultural Orientation, more than Autonomous-Relational or Independent Cultural Orientation, would account for variance in maternal references to Power Assertive parenting (2) maternal references to Obedience as a main feature of child social competence would account for unique variance in maternal references to Power Assertive parenting, and that Obedience will reduce the significance of Cultural Orientation as a predictor, (3) Independent Cultural Orientation, more than Autonomous-Relational or Interdependent Cultural Orientation, would
account for variance in maternal references to Problem-Focused parenting, but (4) maternal references to Social Initiative/Cooperation would predict unique variance that would reduce the significance of Cultural Orientation as a predictor. The significance of the $F$ values for the full model’s $R^2$, for each predictors standardized regression coefficient ($\beta$), and for the $F_{\text{change}}$ of Step 2, were used to interpret the regression results.

**Mothers’ References to Power Assertive Parenting Practices**

The first hypothesis was that mothers from nations that emphasize Interdependence in self-construal, namely India and Nepal, would tend to refer to Power Assertive practices more than mothers from nations that emphasize an Autonomous-Relational or Independent style of self-construal. A one-way ANOVA yielded evidence of group differences, $F(2,498) = 6.892, p = .001$. Follow-up mean comparisons using $t$-tests to compare all pairs of groups indicated that, as predicted, mothers from nations with an Interdependent orientation referenced Power Assertive practices ($M=2.300, SD=1.734$) more than mothers from nations with an Independent orientation, $t(397) = 3.133, p = .002$. Additionally, mothers from nations with an Autonomous-Relational orientation also referenced Power Assertive practices ($M=2.350, SD=1.158$) significantly more than mothers from nations with an Independent orientation ($M=1.834, SD=1.442$), $t(297) = 3.580, p < .001$. However, contrary to prediction, there was no significant difference between mothers from Autonomous-Relational and Interdependent Cultural Orientations, $t(297) = 0.261, p = .795, ns$.

The second hypothesis was that Obedience as an emphasized feature of maternal descriptions of child competence would account for variance in references to Power Assertive
parenting, over and above the influence of Cultural Orientation contrasts. Because previous research indicated that this aspect of child social competence was associated with Cultural Orientation (Wood, 2012), the hypothesis was that greater maternal emphasis on Obedience would account for unique variance in maternal references to Power Assertive practices.

The full model yielded a modest but significant $R^2$ of $.146, F(491)=5.367, p = .005$. Analyses of the standardized regression coefficients for each predictor indicated that in Step 1, the Cultural Orientation contrast was significant. $\beta = .096, t = 2.141, p = .033$. Consistent with the group differences found in the ANOVA, the significant standardized regression coefficient indicated that an Interdependent Cultural Orientation accounted for variance in Power Assertive practices. However, the entry of Obedience in the second step predicted unique, additional variance in Power Assertive practices, $F_{change}(491) = 6.102, p = .014$. Furthermore, as expected, this variance appeared to account for the effect of Cultural Orientation (see Table 4). Specifically, the standardized regression coefficient for Cultural Orientation was no longer significant, $\beta = .065, t = 1.400, p = .162, ns$ whereas that for Obedience was, $\beta = .115, t = 2.470, p = .014$, supporting the hypotheses for Power Assertive practices.

**Mothers’ Descriptions of Problem-Focused Parenting Practices**

The third hypothesis was that mothers from nations that emphasize Independence in self-construal, namely Germany and the United States, would tend to refer to Problem-Focused practices more than other mothers. An analysis of variance indicated a significant group difference, $F(2,498) = 16.615, p < .001$. Follow-up mean comparisons using $t$-tests, however, revealed that the findings did not support the hypothesis. Contrary to prediction, mothers from
nations with an Interdependent orientation referenced Problem-Focused practices (M=4.650, SD=1.189) significantly more than mothers from nations with an Independent orientation (M=4.241, SD=1.199), \( t (397) = 3.420, p = 0.001 \) and with an Autonomous-Relational orientation (M=3.820, SD=1.234), \( t (297) = 5.627, p = 0.001 \). Additionally, mothers from nations with an Independent orientation referenced Problem-Focused parenting practices more than mothers from nations with an Autonomous-Relational orientation, \( t (297) = 2.839, p < .005 \).

The fourth hypothesis was that specific Social Initiative and Cooperation as a feature of maternal descriptions of child competence would account for variance in references to Problem-Focused parenting, over and above the influence of Cultural Orientation contrasts. Because previous research indicated that this aspect of child social competence was associated with Cultural Orientation (Wood, 2012), we tested the prediction that greater maternal emphasis on Social Initiative and Cooperation would account for unique variance in maternal references to Problem-Focused practices.

The full model yielded a modest but significant \( R^2 \) of .021, \( F(491)=5.155, p = .006 \). Analyses of the standardized regression coefficients for each predictor indicated that in Step 1, the Cultural Orientation contrast was not significant. \( \beta = -.060, t = -1.327, p = .185 \). The entry of Social Initiative and Cooperation in the second step added unique prediction of variance in Problem-Focused practices, \( F_{\text{change}}(491) = 8.523, p = .004 \) (see Table 5). In addition and unexpectedly, Cultural Orientation also reached significance once the predicted competence criterion was entered, \( \beta = -.120, t = -2.433, p = .015 \); Social Initiative and Cooperation was also a significant predictor of Problem-Focused practices, \( \beta = .143, t = 2.919, p = .004 \). This indicates that Independent Cultural Orientation is a significant predictor of Problem-Focused parenting only when criteria for Social Initiative and Cooperation is controlled for. Notably, the
interaction between Independence and Social Initiative and Cooperation was tested, but was not significant.
Chapter 4
Discussion

The aim of the thesis was to investigate whether cultural differences in maternal beliefs about emotion socialization of children could be explained on the basis of mothers’ cultural priorities, as inferred by their descriptions of competent first grade age children. Using interview data from mothers from five different nations (India, Nepal, South Korea, the United States, and Germany), three Cultural Orientations were represented for this thesis – Interdependence, Autonomous-Relational, and Independence. Previous research revealed that social competence was referenced more than any other domain of competence (Wood, 2012), and that the emphasis on specific subdomains of social competence varied across cultures (Cole, Tamang, & Shrestha, 2006), therefore social competence was most relevant to this study. The focus of this thesis was to compare mothers’ responses regarding criteria for child Social Competence, to mothers’ responses regarding parenting behaviors.

Specifically, four hypotheses were tested: (1) Interdependence, more than Autonomous-Relational or Independence, would account for variance in maternal references to Power Assertive parenting (2) Maternal references to Obedience as a main feature of child Social Competence would account for unique variance in maternal references to Power Assertive parenting, and that Obedience will reduce the significance of Interdependent Cultural Orientation as a predictor, (3) Independence, more than Autonomous-Relational or Interdependence, would account for variance in maternal references to Problem-Focused parenting, but (4) Maternal
references to Social Initiative/Cooperation would predict unique variance that would reduce the significance of Independent Cultural Orientation as a predictor.

The results indicated that maternal beliefs about child competence predicted modest but significant variance in maternal references to particular forms of parenting practices. Specifically, the hypothesis that Interdependence would be a less significant predictor of Power Assertion than Obedience, was supported. The results showed that, for mothers from nations emphasizing an Interdependent self-construal, a cultural emphasis on Obedience as an aspect of child competence is a better predictor than Cultural Orientation of nation, and suggests mediation. This suggests that although Cultural Orientations are associated with varying aspects of child competence, the two constructs are not synonymous. This can be explained using two different theories of classifying cultures. According to Hofstede’s theory of Cultural Orientation, various levels of human programming may be used to classify individuals. Cultural differences and values are both theorized to reside at the collective level; however, values (such as criteria for competence) vary across individuals as well. As such, criteria for Social Competence would vary between individuals – even if individuals shared the same Cultural Orientation.

Furthermore, although Markus and Kitayama (1991) indicated that cultures vary in terms of which aspects of competence are desired across cultures, the specific subdomains within competences may vary. For example, mothers from nations emphasizing Interdependence value social harmony and respect for elders (Cole, Tamang & Shrestha, 2006; Halberstadt & Lozada, 2011; Raval & Martini, 2009), but the specific subdomain of social competence that they associate with these values may differ, resulting in different views on the best parenting behaviors to use in order to socialize a child in a specific way.
Contrary to prediction, the results indicate that an Independent Cultural Orientation was a significant predictor of Problem-Focused parenting behaviors, but only when cultural emphasis on Social Initiative and Cooperation was controlled for. The prediction was that the criteria of child competence would account for unique variance in parenting behaviors, and the significant of Independence as a predictor would decrease when an emphasis on Social Initiative and Cooperation was added to the model. The interaction between these two constructs was tested, but was not significant, therefore there is no moderating relationship. Furthermore, the results did not fully support the hypotheses that mothers from nations with an Interdependent Cultural Orientation would be more likely to reference Power Assertive parenting behavior or that mothers from nations with an Independent Cultural Orientation would be more likely to reference Problem-Focused parenting behaviors. Specifically, Problem-Focused parenting practices are more associated with an Interdependence of the self than the Independence or Autonomous-Relational self, and Power Assertion is more closely associated with both the Autonomous-Relational and Interdependent self. Additionally, Problem-Focused parenting practices were the most referenced of all parenting practices. Furthermore, despite cultural variation in terms of maternal goals and criteria for child competence, mothers are most likely to use Problem-Focused parenting practices. This could indicate that, regardless of Cultural Orientation, mothers view Problem-Focused parenting practices as the most common means of socializing their children in the way they see fit.
Limitations and Future Research

Although the present study provides insight into how culture influences parenting goals and practices, there are limitations to the method. First off, no assessment of self-construal was included in the method; therefore, a mother’s self-construal was assumed based on her nation of inhabitance. Despite extensive literature in support of a theoretical, cultural framework of the self-construal, variance within nations is possible. Considering how large and diverse these nations are, it is possible that socioeconomic status or other confounding factors could have influenced our operationalization of culture. Further studies could benefit from the inclusion of a self-construal survey in order to classify mothers based on self-construal, rather than relying solely on a theoretical framework, albeit a well-supported one.

This study compared mothers’ conceptions of child competence with conceptions of parenting practices. A major limitation lies in the child each method asked the mother to think of. Specifically, the CCC asked mothers to think of a competent child, whereas the SoSit asked mothers to think specifically of their child. It is possible that mothers thought their child was not competent, therefore the data gained from the CCC and SoSit would not correspond as much as intended. Furthermore, this study only assessed criteria for child competence and expected parenting practices through two measures. The CCC assessed multiple domains of competence, and many subdomains of social competence. Inclusion of a measure that included many items aimed as assessing a specific subdomain of competence – such as obedience – would provide better insight into mothers’ perceptions and criteria for child competence. Future studies would benefit from the inclusion of more measures, and measures that assess specific perceptions of competent children.
Conclusion

This study provides a cross-cultural view to the literature on maternal conceptions of child competence and parenting practices. The findings from this study provide insight into how culture influences parenting beliefs and practices, but more importantly, revealed that Cultural Orientation did not mediate the relationship between maternal conceptions of child competence and parenting practices. This information shows that although cultural differences are evident in maternal conceptions of child competence, parenting practices are more influenced by criteria for competence than culture. The findings from this study should be considered in future studies that attempt to study cultural differences in parenting goals and practices. Furthermore, the data from this study should be used to help guide cross-cultural, developmental programs for training parents on how to use effective parenting practices.
Appendix A

SoSit Interview Questions

*Version for boys

A procedure for recording parent-child interactions from the mother’s point of view

Place of Investigation: ________________ Date: __________________
Name: ________________________________ Age of the child: ________________
Year of birth: ________________________ Age of brothers & sisters: __________
Occupation: __________________________ Occupation of your
partner: ______________________________

In the course of our cross-cultural research program we would like to get to know how mothers from different countries react during interactions with their children, how they feel, how the child reacts and which aim the mothers are pursuing with their behavior.

On the following pages we will present you some situations that you might have experienced in this or in a similar way during interactions with your child. Each episode comprises a short description of a certain situation which is illustrated by means of a picture.

Please try to imagine how you would react in such a situation and how you would feel. Please write your answer into the balloons.

© Prof. Dr. H.-J. Kornadt, Saarbrücken, 1986 – adapted by Kornadt & Trommsdorff, 1990
Situation 1

Your son comes home from school. You ask to see his copy book. Your son tells you that his work was not good and that the teacher marked it with a big black X.
Please answer the following questions (Situation 1):

1. How do you feel?

2. Why do you feel like this?

3. How does your child feel and how is he going to react?

4. What will you do in this situation?

5. Which aim are you pursuing with your behavior? How will the situation end?

6. How often do such or similar situations happen?
   (Please tick the answer with a cross)

   never  rarely  sometimes  often  very often  always
   [ ]     [ ]     [ ]         [ ]     [ ]  [ ]
Situation 2

Anil, who lives in your neighborhood, has come to your house to play with your son. Suddenly you hear loud voices, yelling. You see that Anil tried to take a toy that your son was playing with. This led to the children fighting and your son pushed Anil, who fell down.

It’s Anil’s fault!
Please answer the following questions (Situation 2):

1. How do you feel?

2. Why do you feel like this?

3. How does your child feel and how is he going to react?

4. What will you do in this situation?

5. Which aim are you pursuing with your behavior? How will the situation end?

6. How often do such or similar situations happen?

   (Please tick the answer with a cross)

<table>
<thead>
<tr>
<th>never</th>
<th>rarely</th>
<th>sometimes</th>
<th>often</th>
<th>very often</th>
<th>always</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Situation 3

You and your son are walking to the shop. You meet another child, whom you know, on the way and that child wants to play with your son. Suddenly this other child falls down and seems to need help. Your son saw his friend fall but does nothing. He pulls on your hand and says let's go Mother.
Please answer the following questions (Situation 3):

1. How do you feel?

2. Why do you feel like this?

3. How does your child feel and how is he going to react?

4. What will you do in this situation?

5. Which aim are you pursuing with your behavior? How will the situation end?

6. How often do such or similar situations happen?
   (Please tick the answer with a cross)

<table>
<thead>
<tr>
<th>never</th>
<th>rarely</th>
<th>sometimes</th>
<th>often</th>
<th>very often</th>
<th>always</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix B

SoSit Coding Manual

This coding scheme is prepared for the analysis of the SoSit-Questionnaire (Kornadt & Trommsdorff, 1990) and was developed within the work group Developmental and Cross-Culture Psychology, University of Konstanz, for an international cooperation project on “Mothers’ Naïve Theories – Children’s Capabilities and Parent’s Sensitivity”.

The used SoSit-Questionnaire consists of three situations:

– The first situation (Sit1) describes a mother-child interaction, in which the child comes home with a bad mark for its school work (achievement situation).

– In the second situation (Sit2) the child quarrels with a friend over a toy and the mother joins the situation (peer-conflict situation).

– In the third situation (Sit3) the mother interacts with her child after she observes him/her omitting help to a friend (helping situation).

In general, four different categories are coded:

I. Maternal behavior
II. Quality of maternal emotions
III. Mothers’ attributions of their emotions
IV. Maternal parenting goals

Each category and the corresponding subcategories are coded according to their appearance frequency. The scale value is 1, if the corresponding category occurs, and 0, if the category does not occur in the answers during the interview.

The SoSit coding occurs category by category. That is, each category is rated completely for all cases before the next category is focused, instead of rating each situation as a whole per case. This approach simplifies the rating procedure by constraining the rater to focus on each category separately. More precisely, the rater codes, first, the maternal behavior for all cases, secondly, the maternal emotions for all cases, then the maternal attributions for all cases, and finally the maternal parenting goals for all cases he or she has to code. In case of necessity, a
mother’s responses to all questions can be used to clarify the specific rating of the relevant category. It is explained below in more detail, when the latter strategy applies.

Furthermore, due to the essential contextual discrepancies between the described situations *not every category can be applied to all of the situations*. The exceptions are clarified for each category respectively.

Please note, that a single answer may involve *more than one content unit* (i.e., a self-contained and self-explanatory maternal statement). Then, each unit of one answer can be coded separately. A mother, for instance, states that she aims with her reaction at teaching her child to be always obedient and helpful (i.e., “I want my child to learn that she always has to behave well. I will teach her to help others in need.”). Concerning the purpose of socialization of the parenting goal, the first content unit (i.e., to behave well) is coded as “meeting role expectations” and the second unit (i.e., to help others in need) as “reciprocity”. Moreover, alternative answers of a single mother to a question (usually connected by conjunction “or”; e.g., “I will feel sad or frustrated.”) are always coded separately. But it is crucial that each unit can only be coded once to avoid double coding and corresponding misinterpretation of the results.

Please note, not every statement can be captured by the listed subcategories. If an answer, however, cannot be rated in any way, there is always the possibility to code “non-specific” (see examples below). Additionally, if the impression occurs that the problematic coding is due to a *translation problem*, this has to be noted separately and discussed with the corresponding cooperator. All “non-specific” ratings have to be checked afterwards with regard to possible translation errors. That means as well that it is crucial to avoid too much interpretation of the statements. They have to be explicitly classified into the categories.

Special attention has to be paid to a mother’s use of *direct or indirect speech*. Thus, the rater has to read the answers attentively, whether similar sounding answers are coded in the same way or rather in different categories (e.g., “I will explain my daughter that she always has to help other persons in need.” vs. “Let’s go and help your friend!”). For instance, in the first example the mother says that she is explaining to the child which behavior is considered to be appropriate. Thus, the category “reasoning” for maternal behavior is rated here, whereas she only says what she would do in the second example. She does not mention, however, that she would explain the
rationale of her behavior to the child. Therefore, the category “creation of positive role models” is rated here.

**Overview of SoSit categories**

I. Maternal behavior
   a. Power assertive techniques
      – disciplining
      – reprehension
      – punishment
   b. Psychological control
   c. Problem-focused behavior
      – guidance
      – reasoning
      – modeling
      – instrumental support
   d. Emotion-focused behavior
      – comforting (emotional support)
      – distraction
      – reappraisal
   e. Non-specific behavior

Reference frame of maternal behavior
a. Reference to the entity
b. Reference to others

II. Quality of maternal emotions
a. Expression of a specific emotion quality
   – anger
   – sadness
   – disappointment
   – frustration
   – shame
III. Mothers’ attributions of their emotions

a. Attribution to child
   – reference to child’s emotions
   – reference to child’s behavior
   – reference to child’s motives

b. Attribution to the mother
   – reference to mother’s emotions
   – reference to mother’s behavior
   – reference to mother’s motives

c. Attribution to others

d. Non-specific attributions

IV. Maternal parenting goals

a. Time perspective
   – short-term goals
   – long-term goals
   – non-specific time perspective

b. Long-term goals: purpose of socialization
   – harmony orientation
   – prosociality
   – empathy
   – respect for other’s needs
   – coping with disappointment
- meeting role expectations
- achievement orientation (promotion vs. prevention focus)
- non-specific purpose of socialization

c. Long-term goals: Rationale/ reference to
- own child
- other persons
- society/ community/ culture
- non-specific rationale
For mother’s behavior, the subcategories power assertive techniques, psychological control, problem-focused and emotion-focused behavior are distinguished. Furthermore, the reference frame of maternal behavior is assessed (i.e., reference to own child/ to others). Mother’s emotions are evaluated according to the expressed quality (e.g., anger, disappointment, sadness). If a mother expresses general positive, general negative or no emotions at all, this is coded accordingly. The mothers’ attributions of their emotions is assessed concerning to whom or what the mother refers in explaining her emotions (i.e., to the child, to herself, to others). Furthermore, it is rated, whether a mother refers to emotions, behavior, or motives in her explanation for her emotional reaction in the particular situation. Finally, the parenting goals of the mother are analyzed. On the one hand, the time perspective of the mentioned parenting goal (long-term vs. short-term goal) is coded. On the other hand, the contained socialization purpose (e.g., prosociality, empathy, achievement orientation) and the frame of reference (individual-oriented vs. group-oriented) are assessed singly for the long-term goals.

SoSit categories in detail

I. Maternal behavior

Definition

The concrete behavior is recorded, which the mother describes as a first spontaneously reaction to the child’s behavior in the respective situation. It is important whether the mother supports her child’s self-regulation with her own behavior. In a first step, the maternal behavior is divided into four subcategories, focusing on the strategy behind the behavior (cf. Bugental & Grusec, 2006):

a. Power assertive techniques: Maternal reactions aiming at control of the child’s behavior (i.e., disciplining; criticism; verbal or physical punishment) (Kuczynski, 1984). Thus, the mother disciplines, criticizes her child, or punishes with negative consequences in order to assert rules and goals.
b. **Psychological control**: This category relates to a type of intrusive parental control behavior with which parents try to direct children by influencing their emotional state (e.g., inducing guilt, withdrawal of love) (Barber, 1996; Morris, Steinberg, Sessa, Avenevoli, Silk & Essex, 2002; Trommsdorff & Rothbaum, 2008).

c. **Problem-focused behavior**: Sensitive maternal behavior that is directed to cope with the present problem (e.g., a peer-conflict) and that focuses on education of the child (Cheah & Rubin, 2003). Among that is guidance (i.e., proposing a solution), reasoning (i.e., giving reasons for maternal behavior, and of explanation for the consequences of the child’s behavior), modeling (i.e., mother acts as role model), and instrumental support (i.e., offering assistance in solving the problem).

d. **Emotion-focused behavior**: Mother's sensitive child-directed behavior that is intended to change the emotional experience of the child (i.e., to calm the child down) (Fabes, Poulin, Eisenberg & Madden-Derdich, 2002; Davidov & Grusec, 2006). Concretely the subordinate categories, comforting (e.g. to soothe, to cheer up), distraction (e.g., to play something else with the child), and reappraisal (e.g., find another explanation for the behavior of the other peer) are evaluated as emotion-focused behavior.

**Limitation**: The subcategories distraction and reappraisal can only be coded in situation 1 and 2. More precisely, the third situation describes a child behavior that the mother hardly expects and mostly tries to change, but not by strategies as reinterpretation or distraction.

In an additional step, the same maternal behavior mentioned in the speech bubble is rated with regard to the mother’s reference frame. That is, the maternal behavior has to be examined, whether the mother refers to her own child (i.e., reference to entity), or to other persons (i.e., reference to others; e.g., teacher in situation 1, child’s friend in situation 2 and 3). In doing so, the focus of the maternal behavior is further distinguished (e.g., situation 3: does a mother primarily aim to help the other child, or is she focusing on her own child’s inadequate behavior), which allows for an evaluation of the rationale behind it.
Further explanation and examples of the subcategories

<table>
<thead>
<tr>
<th>(1) Maternal behavior</th>
<th>Explanation &amp; examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Power Assertive techniques</strong></td>
<td></td>
</tr>
</tbody>
</table>
| disciplining | The mother intervenes without involving her child in the problem solving process.  

  “I will take away the toy for which they were fighting.”  

  “I will tell my child to wait and I bring the other boy back to his mother.”  |
| criticism | The mother dictates the dos and don’ts for the child in the situation. Criticism has to be clearly related to the child’s behavior and expresses the mother’s disapproval of it.  

  “I will tell her that her behavior was not good.”  |
| punishment | Punishing behavior contains verbal as well as physical harming behavior.  

  “I will scold my daughter.”  

  “I will beat him.”  |
| **b. Psychological control** | The mother attempts to control her child through guilt induction, restrictive communication and unpredictable affection. |
| Problem-Focused | **guidance** | The mother suggests another way to handle the problem by explaining an alternative behavior or by suggesting a solution to help her child to deal with the situation appropriately.  

“I let them shake hands, and then they can play together again.”  

“I will counsel my daughter for helping the other child.” |
|---|---|
| c. Problem-Focused | **reasoning** | The mother explains to her child, why the child’s behavior is not adequate.  

“I will make him understand that he always has to help others.”  

“Give it to her [friend] just for a minute, and then you can get it back. Andrea hasn’t anything like this and you have it all the time.” |
| | **modeling** | The mother shows through her behavior what she expects her child to do in the situation.  

“I will tell my daughter: Come and look what
happened to your friend. We will lift her, and we will go and drop her at her home.”

*Exclusively applicable to Situation 3!*

<table>
<thead>
<tr>
<th>instrumental support</th>
<th>The mother offers assistance to help her child to solve the problem.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“I will help to correct his mistakes.”</td>
</tr>
<tr>
<td></td>
<td>“What’s wrong? Let’s do it again.”</td>
</tr>
</tbody>
</table>
Maternal behavior – continued

<table>
<thead>
<tr>
<th>(1) Maternal behavior</th>
<th>Explanation &amp; examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>comforting</td>
<td>The mother emotionally supports her child. This can be expressed through verbal comments as well as through physical action.</td>
</tr>
<tr>
<td>(emotional support)</td>
<td>“It's O.K. You can do better next time.”</td>
</tr>
<tr>
<td></td>
<td>“I will comfort my child.”</td>
</tr>
<tr>
<td></td>
<td>“I will sooth my child and take her/ him on my lab.”</td>
</tr>
<tr>
<td>d. Emotion-focused</td>
<td>The mother distracts her child by refocusing her/ his attention to a different subject.</td>
</tr>
<tr>
<td>distraction</td>
<td>“‘Let’s play something else together.’ I try to distract and to calm them down.”</td>
</tr>
<tr>
<td></td>
<td>“Before we think further about your next homework, let’s do something fun!”</td>
</tr>
<tr>
<td></td>
<td>[Exclusively applicable to Situation 1 and 2!]</td>
</tr>
<tr>
<td>reappraisal</td>
<td>The mother provides a reinterpretation of the situation and/or of the other child’s behavior.</td>
</tr>
<tr>
<td></td>
<td>“That is not right. You have hustled him and he still can get your teddy. That just means he likes</td>
</tr>
<tr>
<td>e. Non-specific behavior</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td></td>
</tr>
<tr>
<td>An answer is coded as <em>non-specific</em>, when it is not clear which category is applicable, or further interpretation is needed for coding.</td>
<td></td>
</tr>
<tr>
<td>“I would ask what happened.”</td>
<td></td>
</tr>
<tr>
<td>“Let's go and see.”</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

CCC Interview Questions

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 D

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

Domains & Subdomains

I: Physical Development

A: Nutrition/Sleep (child’s diet, food intake, sleeping patterns)
   [+]: sleeps whole night, takes good naps, good appetite
   [-]: doesn’t sleep whole night, picky eater, doesn’t rest when needed

B: Activity (energy level, physical skill)
   [+]: energetic, active, athletic, coordinated
   [-]: restless, lethargic

C: Health/Appearance (physical wellness, beauty)
   [+]: strong, beautiful/handsome, healthy
   [-]: weak, often or usually sick, unattractive

II: Cognitive Development (child’s skill at thinking, learning, motivation to learn)

A: Curiosity (desire to learn, be inquisitive)
   [+]: excited about going to school, curious, has interests/hobbies,
   motivated to do well in school
   [-]: no desire to study, learn, go to school, bored, not interested in
   studying

B: Intellectual Ability (scholastic skill, achievement, self-application, creativity)
   [+]: very smart, ahead of age group, logical, witty, makes up
   stories, creative, imaginative, studies easily
   [-]: slow to learn new information/concepts, held back in school
III. Social Development (quality/skills in interpersonal matters, including following rules)

A: Prosocial (acts with others in mind, for another’s benefit)
   [+] helps younger siblings, good sharer, affectionate, loving,
      compassionate, accepting of younger siblings, helping, sharing
   [-] bully, aggressive, unfriendly, doesn’t share, violent, doesn’t help siblings, lying

B: Social sensitivity (emphasis on understanding others’ needs/emotions)
   [+] considers others’ feelings, anticipates how other might feel, reads others’ emotions, polite, respectful, respects elders (when no context is given), empathic, can see from others’ point of view, comforting
   [-] inconsiderate of other’s feelings, rude

C: Social Initiative/Cooperation (starts or maintains good social interactions)
   [+] extroverted, outgoing, plays with other kids, gets along with others, compromises, has a lot of friends, tolerance, greets others
   [-] introverted, too reserved, quiet, loner, plays by self, has no friends, doesn’t connect with friends at school, talks too much, social withdrawn, doesn’t play well with others

D: Communicative Skill (expresses needs, ideas meaningfully)
   [+] articulate, tells well, says wants clearly, good at diffusing arguments
   [-] struggles to express wants

E: Obedience (listens to and follows directions from elders)
   [+] listens to grown-ups, follows directions well, obeys elders
   [-] doesn’t listen, ignores parents, won’t follow instructions, tests limits, disagrees, back-talks, stubborn, naughty, mischievous
IV: Emotional Development (*explicit reference to emotion skill/problems*)

**A:** Emotional valence (*emphasis on moods, happy/unhappy, good/bad mood*)

[+] calm, enthusiastic, happy-go-lucky

[-] doesn’t enjoy, overly exuberant, anxious, complaining

**B:** Emotional regulation (*emphasis on control of emotions*)

[+] emotionally stable, never throws temper tantrums, adjusts emotions well

[-] temper tantrums, cries, has meltdowns, upset when not getting his/her way, difficult to soothe

V: Self Development

**A:** Independence (*individuality; self-reliance; influence of others on child*)

[+] has individuality, becoming her own person, confident, does things without being asked, doesn’t allow others to roll over her, is strong-willed, asks for help when needed, brave

[-] bit of a mamma’s girl, needy, needs or seeks attention in negative way, carries a blanket everywhere, insecure, boasts, acts entitled

**B:** Self-control

[+] self-control, initiates studying on own, completes homework in timely way, works hard, neat and tidy, plans well

[-] can’t focus, doesn’t stay in seat, can’t stop from grabbing or hugging others, lazy, watches too much TV
Appendix E

Tables

Table 1. Descriptive Statistics and Zero-Order Correlations for Parenting Practices and Child Competence Criteria

<table>
<thead>
<tr>
<th>Measure</th>
<th>Prosocial</th>
<th>Sensitivity</th>
<th>Initiative/Cooperation</th>
<th>Communicative</th>
<th>Obedience</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Assertion</td>
<td>.000</td>
<td>.002</td>
<td>.239*</td>
<td>.028</td>
<td>-.161</td>
<td>2.122</td>
<td>1.442</td>
</tr>
<tr>
<td>Psychological Control</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.042</td>
<td>0.211</td>
</tr>
<tr>
<td>Problem-Focused</td>
<td>.181*</td>
<td>.066</td>
<td>.054</td>
<td>.054</td>
<td>.095</td>
<td>4.322</td>
<td>1.239</td>
</tr>
<tr>
<td>Emotion-Focused</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1.001</td>
<td>1.118</td>
</tr>
<tr>
<td>Non-Specific</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1.172</td>
<td>1.144</td>
</tr>
<tr>
<td>M</td>
<td>0.320</td>
<td>0.450</td>
<td>0.804</td>
<td>0.238</td>
<td>0.398</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>SD</td>
<td>0.568</td>
<td>0.667</td>
<td>0.779</td>
<td>0.471</td>
<td>0.642</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

*p < .05
Table 2. *Descriptive Statistics for Power Assertion Parenting Practices by Cultural Orientation*

<table>
<thead>
<tr>
<th>Cultural Orientation</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interdependent</td>
<td>2.300</td>
<td>1.734</td>
</tr>
<tr>
<td>Autonomous-Relational</td>
<td>2.350</td>
<td>1.158</td>
</tr>
<tr>
<td>Independent</td>
<td>1.834</td>
<td>1.184</td>
</tr>
</tbody>
</table>

Table 3. *Descriptive Statistics for Problem-Focused Parenting Practices by Cultural Orientation*

<table>
<thead>
<tr>
<th>Cultural Orientation</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interdependent</td>
<td>4.650</td>
<td>1.189</td>
</tr>
<tr>
<td>Autonomous-Relational</td>
<td>3.820</td>
<td>1.234</td>
</tr>
<tr>
<td>Independent</td>
<td>4.241</td>
<td>1.199</td>
</tr>
</tbody>
</table>
Table 4. Hierarchical Linear Regression of Cultural Orientation and Criteria for Child Competence on Power Assertion Parenting Practices

<table>
<thead>
<tr>
<th>Measure</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interdependence</td>
<td>.096</td>
<td>2.141</td>
<td>.033</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interdependence;</td>
<td>.065</td>
<td>1.400</td>
<td>.162</td>
</tr>
<tr>
<td>Obedience</td>
<td>.115</td>
<td>2.470</td>
<td>.014</td>
</tr>
</tbody>
</table>

*Note: Total F(491) for Step 2 = 5.367, Adjusted $R^2 = .146$, $F_{\text{change}} = 6.102$*
Table 5. Hierarchical Linear Regression Results of Cultural Orientation and Criteria for Child Competence on Problem-Focused Parenting Practices

<table>
<thead>
<tr>
<th>Measure</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td>-.060</td>
<td>-1.327</td>
<td>.185</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence;</td>
<td>-.120</td>
<td>-2.433</td>
<td>.015</td>
</tr>
<tr>
<td>Initiative/Coop.</td>
<td>.143</td>
<td>2.919</td>
<td>.004</td>
</tr>
</tbody>
</table>

* Note: Total $F(491)$ for Step 2 = 5.155, Adjusted $R^2 = .021$, $F_{change} = 8.523$
REFERENCES


ACADEMIC VITA
Salvatore J. Affinito
sja5206@psu.edu

Education

2011–2015  The Pennsylvania State University
Schreyer Honors College
Bachelor of Science: Psychology – Business Option
Minor in Business and the Liberal Arts

Research Experience

2013–present  Research Assistant: PNC Leadership Assessment Center – Dr. Rick Jacobs
• Assisted in development of exercises to assess participants’ leadership skills
• Aided in training of professional assessors, e.g., developed training video
• Organized participants’ assessment outcomes, assessor feedback forms, assessor consolidation forms, and leadership competency-exercise matrices

2013–present  Lab Coordinator: Leadership and Innovation Lab – Dr. Samuel Hunter
• Interviewed research assistant applicants and selected qualified candidates
• Coded qualitative data for two different leadership studies
• Collected data for experimental lab studies
• Coded data for a historiometric study
• Aided in piloting and study for two different leadership studies
• Organized professional development and social events for lab members
• Provided direction and mentoring for lab members

2011–present  Research Assistant: Mothers, Emotional Competence, and Cultural Attitudes Lab – Dr. Pamela Cole
• Coded open-ended interviews of mothers from 5 nations on child competence
• Redesigned two coding manuals
• Conducted reliability estimates using Cohen’s kappa
• Trained incoming lab personnel in coding processes
• Analyzed data using SPSS and managed data in Excel
• Collaborated on research presentations & papers with PI and other students
• Conducted an independent study relating cultural variations in maternal beliefs about child competence to maternal reports of parenting practices
Papers and Presentations


Teaching Experience

Fall 2014  Undergraduate Teaching Assistant to Dr. Lovscky: PSU Psychology Dept.
- Selected by instructor to serve as teaching assistant for Psych 482, Selection and Assessment in Organizations
- Reviewed job analysis and validity reports to develop questions for in-class assignments, quizzes, case-study, and midterm exams
- Prepared and delivered lecture in place of professor

Spring 2014  Undergraduate Teaching Assistant to Dr. Skattebo: PSU Psychology Dept.
- Selected by instructor to serve as sole teaching assistant for Psych 484: Work Attitudes and Motivation
- Held regular office hours to teach and review material
- Assessed group projects in terms of study design and quality

Awards and Honors

2014  
Liberal Arts College Conference Travel Grant ($3,200)  
Child Study Center Conference Symposium Grant ($1,000)  
Schreyer Honors College Conference Symposium Grant ($600)  
Office of Undergraduate Education Symposium Grant ($400)

2013  
College of Liberal Arts Internship Enrichment Funding ($2,500)  
Schreyer Honors College Internship Funding ($1,700)  
Schreyer Honors College Research Funding ($500)

2011 – present  
Schreyer Honors College Academic Excellence Scholarship ($1,750)  
Gerard L. Bayles Memorial Scholarship ($1,750)

2012 – present  
Dean’s List (min. 3.5 GPA)
Professional Experience

2014 – present  **PSU I/O Psychology Practicum Consultant – Assessment Center for Bryn Mawr College**
- Reviewed literature relevant to leadership competencies
- Developed definitions for competencies and relevant behavioral criteria
- Interviewed alumnae regarding goals for education and development
- Designed exercises for assessing cultural competency and other leadership skills

2013  **Management Consulting Intern – Kaya Consulting, Australia**
- Collaborated with team of I/O psychologists to streamline communication channels
- Created and delivered presentations for managers of $56 billion venture
- Facilitated reorganization process for branch of three multinational corporations
- Developed and ran team/leadership workshops

2012  **Summer Conference Assistant – Pennsylvania State University**
- Served as liaison between summer camp guests and staff
- Responsible for health and safety of residence hall overnight
- Filed incident reports for emergency situations

Service and Leadership

2014 – present  **Schreyer Honors College Student Council Vice President**
2012 – present  **Penn State Dance Marathon (THON) Finance Committee Member**
2013 – 2014  **PSU Industrial/Organizational Psychology Society Vice President**
2012 – 2013  **Schreyer Honors College Freshman Orientation Mentor**
2011 – present  **Schreyer Honors College Student Council Academic Chair**
2011 – present  **Manager and Captain of Intramural Volleyball Team**

Relevant Coursework

**Psychology**
- Honors Research Methods in Psychology
- Selection and Assessment in Organizations
- Senior Seminar in Psychology: Assessment Centers
- Work Attitudes and Motivation
- Introduction to Industrial/Organizational Psychology
- Introduction to Social Psychology
Relevant Coursework Continued

Statistics  
- Applied Regression Analysis  
- Elementary Statistics

Mathematics  
- Calculus with Analytic Geometry 1

Philosophy  
- Ethical Leadership

Finance  
- Introduction to Finance

Additional Skills

- SPSS (three years)  
- Qualtrics (two years)  
- Minitab (two years)  
- Extensive training in Microsoft Excel  
- Brazilian Portuguese (basic proficiency)  
- Second degree black belt in Taekwondo and Hapkido

Professional Memberships

- Society for Industrial and Organizational Psychology  
- Academy of Management  
- International Association for Cross-Cultural Psychology  
- Society for Personality and Social Psychology

References

Pamela M. Cole, Ph.D.  
Liberal Arts Research  
Professor of Psychology & Human Development and Family Studies  
The Pennsylvania State University  
210 Moore Building  
University Park, PA 16802  
(814) 863-1746  
pmc5@psu.edu

Samuel T. Hunter, Ph.D.  
Associate Professor of Psychology  
The Pennsylvania State University  
615 Moore Building  
University Park, PA 16802  
(814) 865-0107  
sth11@psu.edu

Rick R. Jacobs, Ph.D.  
Professor of Psychology  
The Pennsylvania State University  
618 Moore Building  
University Park, PA 16802  
(814) 865-4820  
rj@psu.edu