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ADAPTIVE BEHAVIORS IN YOUNG CHILDREN: A UNIQUE CULTURAL COMPARISON IN ITALY

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Abstract

On account of a series of unique historical events, the present-day denizens of South Tyrol inhabit a cultural, political, and linguistic autonomous region that intercalates Italians and Austrian/German Italians. We compared contemporary Italian and Austrian/German Italian girls' and boys' adaptive behaviors in everyday activities in this region. Using the *Vineland Adaptive Behavior Scales*, we first interviewed mothers about their children's communication, daily living, socialization, and motor skills. Main effects of local culture (and no interactions with gender) emerged: Austrian/German Italian children were rated higher than Italian children in both adaptive daily living and socialization skills. Next, we explored ethnic differences in childrearing. Austrian/German Italians reported fostering greater autonomy in their children than Italians, and children's autonomy was associated with their adaptive behavior. Children living in neighboring Italian and Austrian/German Italian cultural niches appear to experience subtle but consequentially different conditions of development that express themselves in terms of differing levels of adaptive behaviors.

... the child is essentially and eternally a cultural invention ...

Kessen (1979, p. 815)

The adaptive behaviors of children in two co-existing but contrasting cultural, political, and linguistic ethnic groups -- Italian and Austrian/German Italian -- living side-by-side in South Tyrol, Italy, were explored in two coordinated studies. Study 1 compared multiple domains of adaptive behavior (communication, daily living, socialization, and motor skills) in young girls and boys from the two groups and sought to determine sources of their differences in mothers' acculturation, parenting knowledge, and social networks. Study 2 further explored the role of routine behaviors and habits of everyday life for group differences in child adaptive behaviors. In the following, we set this cultural contrast in the development of adaptive behaviors in its historical, political, linguistic, and psychological contexts.

South Tyrol

South Tyrol is the geographic area lying between the crest of the Alps and the “Salurner Klause” (Salurn Gorge; Figure 1A). South Tyrol occupies a unique historical position in Italy (Peterlini, 1997), and Italian and Austrian/German Italian groups have coexisted there for centuries (Eichinger, 1996; Riehl, 2000). Today, the area enjoys a special Autonomy Statute (see below) grounded in principles that safeguard the two ethnic groups.

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Up to the “Great War” (1914–18), this region was part of the County of Tyrol and was incorporated in the Austro-Hungarian Empire, which included: (a) “Welschtirol,” the Italian Tyrol corresponding to the Italian province of Trento; (b) Southern Tyrol lying south to the Brenner Pass, in which a large majority of the local population was German speaking; and (c) the Northern part of the Austrian Crownland of Tyrol, beyond the Alpine crest, called “Nordtirol.” At the outbreak of WWI, Italy remained neutral and carried on negotiations with Austria on the one hand, and on the other with Great Britain and France. As Austria did not want to cede South Tyrol, the secret London Treaty of April 1915 promised Italy the cession of South Tyrol up to the Brenner Pass in recompense for her entry into the war on the side of the Allies. At the conclusion of WWI, under the terms of the Treaty of Saint Germain (1919), Italy annexed South Tyrol. However, the division was not “along clearly recognizable lines of nationality” (Point 9), that is on the linguistic border as President Woodrow Wilson in the famous “Fourteen Points” suggested, but along the Alpine crest at Brenner. To Austrian and Tyrolean, clearly recognizable lines of nationality had existed for a thousand years which lay at the “Salurner Klause”: South was the Italian province of Trento and north the Austrian German-speaking Southern Tyrol including Meran and Bozen. Thus, Italy gained not only the district of Trento (Welschtirol), but also that part of the Austro-Hungarian Empire that was mainly populated by German speakers (South Tyrol). The transfer of this geographic area as well as its German-speaking citizens to Italy from Austria has been a continuing source of contention, debate, and ethnic controversy (Alcock, 2001).

In specific, this new political order led to two problems. The first was territorial. The cession of South Tyrol to Italy without a plebiscite, in open contradiction of President Wilson's Point 9, hindered international relations between Austria and Italy until the end of WWII. One argument used by Italians at the Peace Conference to overcome the problem of acquiring territory against the wishes of the vast majority of its inhabitants was that South Tyrol and Trento had to be considered “geographically one and since the Italian population of Trento was larger than the Austrian/German Italian population of South Tyrol the area as a whole, *Venezia Tridentina*, had an Italian majority and therefore should be given to Italy” (Alcock, 2001, pp. 1–2). Second was the problem of the protection of the Austrian minority within the Italian state. When Mussolini ascended to power in Rome in the early 1920s, his government instituted a program of “Italianization” of German speakers. German-speaking schools and churches were closed as expressions of German culture were banned (Eichinger, 2002), and the Austrian minority was forced to use Italian in public situations. Industrialization of the territory also eventuated in in-migration of Italian-speaking people of surrounding regions to the area. The repression of the Austrian minority reached a climax in 1939 during Hitler's visit to Rome. Mussolini and the German Führer agreed (in the so-called “Option”) to force Austrians in the Southern Tyrol to return to the Reich if they wished to declare themselves of German cultural heritage or to give up any protection as a minority group if they wished to stay in Italy.

After WWII, the Allies maintained that for political reasons Italy should retain South Tyrol, but at the same time recognized that the German-speaking population had been victimized by Fascist assimilation policies. For a second time, the right of self-determination and reunification with a restored Austria was denied. On 5 September 1946, the Italian Prime Minister Alcide De Gasperi and the Austrian Foreign Minister Karl Gruber signed the “Paris Agreement” to ensure protection of the ethnic and cultural heritage of the German-speaking minority in South Tyrol through a series of administrative prescriptive devices. The “South Tyrol question” – the consistent cultural group of Germanic heritage located in an Italian political state and claiming the preservation of its Tyrolean identity – reached adjudication only in 1972. After extensive negotiations between the Italian Republic and Austria (Alcock, 1982), an Autonomy Statute – known as *das Paket* or *il pacchetto* (“the package”) – assured provincial territorial self-government of South Tyrol free from Rome. South Tyrol (*Südtirol*

in German or *Alto Adige* in Italian) is today a multiethnic Italian province. The measures adopted to protect the Austrian/German minority of South Tyrol included: (a) equal treatment for Italian and German speakers through “parification” of the two languages in public offices and official documents as well as in bilingual topographic names; (b) the right to education in one's mother tongue, which led to the development of separate school systems for each group; and (c) equality of rights regarding entering public offices with appropriate proportions of employment between the two groups.

The Cultures of South Tyrol

This political historical solution still challenges neighbors in South Tyrol to solve many internal tensions and contradictions involved in integrating with one another without losing their specific cultural identity. The land where north and south meet (Dörrenhaus, 1959), where the Austrian/German and Italian cultures coexist, has from time to time piqued researchers interested in explaining intergroup relationships and conflict as well as the maintenance of ethnic identity through social, economic, and political processes (Capozza & Manganelli Rattazzi, 1999; Costarelli, 2006; Kirchler & Zani, 1989; Wolf & Cole, 1974). However, a developmental perspective on children's adaptation to the special social demands, values, and attitudes required in this unique cultural environment has never been addressed. Our studies aimed to take a step in this direction.

According to the 2001 Italian census, 69.38% of the inhabitants of South Tyrol belong to the German linguistic group, and 26.30% are Italian speakers (4.32% are Ladin speakers; Provincial Institute of Statistics ASTAT, 2001; Figure 1B). Italian speakers, who are first- or second-generation immigrants from other regions of Italy, are mostly concentrated along the rivers of Isarco (Eisack in German) and Adige (Etsch) and in the cities with greater industrial development. Historically, this circumstance arose from Italianization policies during the Fascist period that encouraged the settlement of Italians by offering employment in the main state industries. The rest of the region, mostly of rural and agricultural tradition, is a stronghold of the German-speaking population. The German linguistic group represents a majority minority within Italy that has always strongly fought to guarantee its cultural and ethnic identity even to the extent of organizing its own clandestine schools whenever any expression of German culture was banned from public life.

Persistent attention to linguistic preservation illustrates some of the ambivalent attitudes that characterize the situation. Although it is considered politically important in this territory for each cultural group to learn the language of the other group, resistance to change one's practices (watching television in one's own language, reading newspapers and books in one's own language, and so forth) is entrenched, fostering the perseverance of separate and dissimilar cultures. Baur (1983, 1994) distributed a questionnaire to 4000 German families with children in the elementary schools: 68% of parents declared that learning Italian was very important, and another 27% professed that it was quite important. (Their reasons ranged from its consequence for professional life to fostering social relationships with the other linguistic group.) For their part, Italians professed the same: Defloarian and Miclet (1992) reported that, in 1988/89 and 1989/90, 99% of Italian families in the region that had children in the first year of school believed that learning German is very or quite important. (Again, reasons were pragmatic, instrumental, and interpersonal.) Nevertheless, what people declare often does not coincide with their behaviors in everyday life. The Provincial Institute of Statistics (ASTAT, 2006, p. 149) published research conducted on identity and language use in the Province in 2004. Approximately 83% of Italians never or only occasionally read in German, and 75% of Germans never or only occasionally read in Italian. The vast majority of people of both groups stated that their everyday television viewing was also in their own language: 90% among Italians and 83% among Germans (ASTAT, 2006, p. 155).

Even today, miniscule numbers of children attend the kindergarten of the other linguistic group: 5.9% of Italians and 4.7% of Germans (Taverna, 2008).

This historical situation motivated our research. We evaluated adaptive behaviors of Italian and Austrian/German Italian children in these two co-existing but contrasting cultural, political, and linguistic ethnic groups. The case of different cultures living side-by-side conveys the important contrast between populations that inhabit common territories but grow and develop within long-standing, circumscribed, agreed upon, and clear (if invisible) ethnic and cultural boundaries. Basic psychological processes (perception, thought, language, and caregiving) are common to all individuals and cultures, but their expression, dynamics, and structure are often faithful to a particular culture (Axia & Weisner, 2002; Bornstein, 1991, 2009a; Cole, 2005; Greenfield, Keller, Fuligni, & Maynard, 2003; Kessen, 1979). Children grow up necessarily adapting to the demands of their local and larger cultural environments. Often these are singular and congruent; in this case they are not. Yet, cultural adaptation is vital to successful development. Understanding how ethnic and cultural identity relate to adaptive developmental outcomes in young children in an area in which two conflicting goals have to be achieved – the integration of two juxtaposed cultures and the maintenance of one's unique cultural identity – promised to throw light on both cultural and developmental processes. The substantive area in which we chose to study those processes was the realm of adaptive behavior.

Adaptive Behavior

Adaptation is a psychobiological construct that refers to the individual's active modifications to cope effectively with the demands of the natural, social, and designed environments. Adaptations normally encompass domestic activities as well as interpersonal relationships (Keith, Harrison, & Ehly, 1987). The origins of motor, cognitive, affective, and social adaptive competencies lie in early childhood, and adaptations reflect maturation in interaction with formal or incidental learning (Masten & Coatsworth, 1998). As a result of this co-determination, all adaptations relate to their contexts of development and improve with practice and application (Trivers, 1986). On this contextual construal, cultural factors play important roles in the development and expression of adaptive behavior.

Assessment of adaptive behavior shows how a person copes in daily living, and measures of adaptive behavior are designed to evaluate what the person actually does vis-à-vis life's everyday requirements and challenges. For Sparrow, Balla, and Cicchetti (1984, p. 6), “adaptive behavior is defined by typical performance, not ability. While ability is necessary for the performance of daily activities, an individual's adaptive behavior is inadequate if the ability is not demonstrated when it is required.” Furthermore, adaptive behavior is not measured by testing an individual directly; instead, someone who knows the individual well is asked to rate the individual's typical adaptive behaviors. Thus, for Sparrow et al. (1984, p. 6), “adaptive behavior is defined by the expectations or standards of other people. The adequacy of an individual's adaptive behavior is judged by those who live, work, and interact with the individual.” To assess prominent domains of adaptive behavior in Italian and Austrian/German Italian young children, we therefore interviewed the people who knew them best, the children's mothers, using the *Vineland Adaptive Behavior Scales* (VABS; Sparrow et al., 1984), the first well-normed and most technically advanced assessment of adaptive behavior (diSibio, 1993; Newmark, 1989). The VABS has been evaluated as foremost among 200 adaptive behavior instruments (Doucette & Freedman, 1980; Holman & Bruininks, 1985; Kamphaus, 1987).

Because each cultural context fixes standards of social and practical abilities that are expected for living in a certain environment, inquiring into adaptive behaviors in normal individuals belonging to different ethnic groups by itself constitutes research on cultural

communities' social expectations about the acquisition of competencies in taking care of oneself and proper interactions with others. The present study therefore aimed at testing the hypothesis that adaptive behavior is differently developed and expressed in two neighboring ethnic and linguistic groups in response to very local cultural contexts organized to preserve the specificity and identity of each community.

The Present Study

The present study is rooted in two basic assumptions. The first concerned the fact that, despite their prolonged coexistence, Italian and Austrian/German Italian ethnic groups have maintained separate cultural heritages that themselves reflect divergent cultural developmental models. In a long line of research on child care, childrearing strategies, and parental socialization goals, New and her colleagues (1988, 1989, 1994; New & Richman, 1996; Welles-Nyström, New, & Richman, 1994) have pointed out that Italian mothers generally tend to “discourage autonomous behaviour or independent daily routines” (New, 1988, p. 62), like sleeping alone, exploring the environment, or playing without an adult, and they do not believe that didactic activities, such as object play and exploration of the environment, are necessary to enhance child development but work with their young children to promote an interdependent family lifestyle. Similarly, Harkness et al. (2007, p. 24) observed that Italian mothers tend to accommodate to their children's inborn sleeping and feeding schedules without imposing any rules because children “learn to regulate themselves” (see also Milan, Snow, & Belay, 2007). By contrast, an extensive literature of cultural models in German-speaking countries represents mothers as promoting children's early personal independence, separateness, autonomous self-regulation, and personal agency (Friedlmeier & Trommsdorff, 1999; Keller & Lamm, 2005; Keller et al., 2006). According to Valentin (2005), German childrearing practices reflect parental desires to rear self-reliant children, because autonomy and independence are valued to succeed later in life. Distancing behaviors that seem to reinforce “an actual ‘cult’ of independence” and shape children's characters (Valentin, 2005, p. 270) include non-presence at bedtime, allowing and facilitating the child to find self-soothing strategies, and avoiding co-sleeping practices considered tantamount to spoiling the child. Germans set an extreme independent cultural model for children (Friedlmeier & Trommsdorff, 1999; Keller & Lamm, 2005; Keller et al., 2006) to the extent that it has been hypothesized that children in Germany are more often classified as having anxious-avoidant attachment because of the greater emphasis placed on independence at a very early age (Colin, 1996).

Our second assumption, therefore, was that children grow up and, adapting to local cultural demands, develop skills and express competencies expected by their ethnic group. We expected that Italian and Austrian/German Italian children would therefore differ in the development of certain adaptive behaviors. Specifically, we expected that Austrian/German Italians would score higher than Italians in adaptive domains measuring children's personal autonomy and social independence, namely daily living and socialization skills. As the developmental functions for communication and motor domains are perhaps more canalized by middle childhood, we were agnostic vis-à-vis them and hypothesized no differences in the two groups.

In Study 1, we evaluated and compared four domains of adaptive behavior (communication, daily living, socialization, and motor skills) in young girls and boys from this contrasting pair of ethnic/cultural groups living side-by-side in the same geographical area. Because different cultures may have different requirements for adaptive success, we expected that children living in Italian and Austrian/German Italian cultural niches, even though they were interdigitated, experience subtle but consequentially different conditions of development and so would express themselves differently in terms of their adaptive behaviors. The singular geographical and historical region of South Tyrol permitted us to test hypotheses about

culturally adaptive development holding general environment constant. In Study 1, we also investigated mothers' acculturation, parenting knowledge, and social networks as explanations for any ethnic differences. In Study 2, we further explored routine behaviors and habits of everyday life in these two groups that could also account for ethnic differences in child adaptive behaviors.

STUDY 1: Method

Participants

The participants were 138 mothers of firstborn, healthy children aged 2 to 5 years living in Bolzano/Bozen, in the autonomous province of South Tyrol. Mothers were equally distributed between Italian, $n = 69$, and Austrian/German Italian, $n = 69$. All mothers and fathers were born in South Tyrol, and couples belonged to the same respective linguistic and cultural group. Italian or Austrian/German Italian group membership was defined in accordance with self-reports of linguistic group membership and the language used with the child (Marín & Marín, 1991). In this region, mother tongue and membership in a linguistic group are the same for 95.1% of Italians and 98.6% of Austrian/German Italians (ASTAT, 2006, p. 26). Demographic characteristics of the sample are presented in Table 1. There were no differences in the average ages of mothers or fathers in the two groups, $F(1, 129) = 1.05$, ns , and $F(1, 118) = .19$, ns , respectively. Mothers and fathers had achieved relatively high levels of education, and the two groups were equally educated, $F(1, 133) = .91$, ns , and $F(1, 129) = .51$, ns , respectively. Parents were generally employed outside the home. Child age was similar across groups, $F(1, 136) = .12$, ns ; 51.4% of the two samples was female and 48.6% male, with approximately equal numbers of girls and boys in the two groups, $\chi^2(1, N = 138) = .61$, ns .

Procedures

Report research in child development has relied almost exclusively on mothers in recognition of the fact that mothers have traditionally and across cultures assumed primary – if not exclusive – responsibility for early childcare, mothers participate in childrearing activities at significantly higher rates than do fathers or others, and motherhood is principal to the general health and development of young children (Barnard & Solchany, 2002; Parke, 2002; Weisner & Gallimore, 1977). Given societal dictates that it is mothers who are ultimately responsible for their young children's lives and well-being, women have also traditionally become more “expert” than men in caregiving, connecting with networks outside the home to gain child-relevant information and advice during the early stages of childrearing (Stern, 1995).

Mothers were interviewed by a trained staff member at their home, and they also completed questionnaires pertaining to sociodemographic information about the family, acculturation, parenting knowledge, and social networks. With the exception of the Italian version of the adaptive behavior assessment (Balboni & Pedrabissi, 2003), all instruments used in the study were rendered appropriate to both Italian and German using standard forward- and back-translation techniques and were evaluated for “adapted equivalence” by bilingual and bicultural researchers (van de Vijver & Leung, 1997). German and Italian professional psychologists and pediatricians checked all instruments for preservation of meaning and cultural and ethnographic validity of item content. All items of the instruments were also pretested with an independent sample of parents living in South Tyrol ($N = 14$).

Adaptive Behaviors

We used the Vineland Adaptive Behavior Scale (VABS; Sparrow et al., 1984; Italian *Expanded Form* of Balboni & Pedrabissi, 2003) asking mothers to assess their children's

actual adaptive behavior (not ability) in four areas: communication, daily living skills, socialization, and motor skills. The VABS interview focuses on overt and concrete behaviors and developmental milestones that are obvious and that parents are likely to notice (e.g., “feeds self with a fork,” “addresses at least two familiar people by name”). Validity of the original VABS is well supported: Sparrow and Cicchetti (1978) and Tombokan-Runtukahu and Nitko (1992) reported high correlations between primary caregivers' estimates of levels of child adaptive behavior and independent teachers' assessments. Both adaptive behavior and, for example, cognitive ability are influenced by general development (Keith, Fehrman, Harrison, & Pottebaum, 1987): Children with normal intelligence score higher than children with mental retardation on adaptive behavior tests (e.g., Sparrow et al., 1984, Tombokan-Runtukahu & Nitko, 1992). Moreover, adaptive behavior is conceptualized as developmentally incremental in that older children exhibit more adaptive behaviors than younger children (Sparrow et al., 1984, Tombokan-Runtukahu & Nitko, 1992). The construct of adaptive behavior generally, and the VABS specifically, have shown good validity both in Western cultures, such as Italy (Bornstein, Giusti, Leach, & Venuti, 2005), and in nonWestern countries, such as Indonesia (Tombokan-Runtukahu & Nitko, 1992). The VABS have been used in Italy previously to assess normal child behavior (e.g., Balboni, Dantoni, & Pedrabissi, 2000; Bornstein et al., 2005; Calvo, Mazzeschi, Zennaro, & Lis, 2002) and individuals with cognitive disabilities (e.g., De Stasio, Gentile, Labonia, & Masi, 2002) or mental retardation (e.g., Balboni, Pedrabissi, Molteni, & Villa, 2001).

The VABS Expanded Form consists of 540 items organized into 4 domains and 11 subdomains. The Communication domain (133 items divided into Receptive, Expressive, and Written subdomains) assesses the individual's verbal understanding, ability of expression, and elementary competencies of reading and writing indispensable for living in the community. The Daily Living Skills domain (201 items in three subdomains of Personal, Domestic, and Community) measures skills needed for eating, dressing, and practicing personal hygiene, which household tasks the individual performs, and respect for basic safety rules or responsibilities at home or in public contexts. The Socialization domain (134 items in three subdomains of Interpersonal Relationships, Play Skills, and Coping Skills) collects information about whether the individual interacts properly with others and meets social demands of the environment using manners in conversation or at table, following play rules, sharing and cooperating during playtime sessions, or demonstrating responsibility and sensitivity to others. The Motor Skills domain (72 items in two subdomains of Gross and Fine motor) reflects the individual's skills in physical activities involving coordination or abilities in manipulating objects. Within each subdomain, items are presented in developmental order representing sequential skills required to master the highest level of that specific activity.

Administration time for the Expanded Form of the VABS is typically between 60–90 min. Our interviewer was fluent in both Italian and German, and interviews were conducted in the mothers' preferred language. Item scores reflect whether or not the individual performs the activity described. A score of 2 indicates *yes, usually*, 1 *sometimes or partially*, and 0 *no, never*. Scores indicating that the child has no opportunity to perform the activity (N) or that the mother does not know whether the child performs the activity (DK) were applied as required and following the scoring conventions of the instrument (Sparrow et al., 1984). Standard scores ($M = 100$, $SD = 15$) are not available for Italian or German adaptations of the VABS; therefore, raw scores were used. In a demonstration of the internal reliability of the VABS, child age was significantly correlated with the VABS domains and subdomains, $r_s(67) = .39$ to $.89$, $ps < .001$, for Italians, and $r_s(67) = .48$ to $.85$, $ps < .001$, for Austrian/German Italians. Internal consistency for the VABS is good ($\alpha = .93$ and $.99$) as is test-retest reliability ($r_s = .77$ and $.99$ in $n = 80$ in intervals from 2 to 4 weeks; Balboni & Pedrabissi, 2003; see also Sparrow et al., 1984; Tombokan-Runtukahu & Nitko, 1992).

Explanatory Variables

Acculturation—The 48-item ARSMA-II (Cuéllar, Arnold, & Maldonado, 1995), a multifactorial and multidimensional scale, provides an acculturation index of how individuals undergoing acculturation rank with the respect to two cultures. The version adapted for the population of South Tyrol included an Italian Orientation Score and an Austrian/German Orientation Score to measure integration and assimilation of the two cultures. Items measure four factors: language use and preference, ethnic identity and classification, cultural heritage and ethnic behaviors, and ethnic interaction. Each participant rated the items of her own as well as the other culture on a scale ranging from 1 (*not at all*) to 5 (*extremely often or almost always*). Because all of the participants resided in Italy and the Italian and Austrian/German scores were highly negatively correlated, $r(116) = -.83$, $p \leq .001$, we used only the Italian Orientation Score. Cronbach's α s were .66 (a result of restricted range) for the Italian sample and .86 for the Austrian/German Italian sample.

Parenting knowledge—The Knowledge of Infant Development Inventory (KIDI; MacPhee, 1981; see also Miller, 1988) assesses knowledge of parenting practices, developmental processes, health and safety, and norms and milestones. The inventory contains 75 items, but as a result of the cross-cultural validation process, 4 items were omitted from analyses. Response options varied by item (e.g., *agree-disagree*, multiple choice), but all responses are rescored as *incorrect* (0) or *correct* (1). The proportion of correct responses across the 71 cross-culturally valid items was calculated for each mother as a global measure of parenting knowledge. The original KIDI was standardized on four groups: college students, mothers, doctoral level psychologists, and pediatricians. The proportion of items that was correct, the measure used in this study, was positively and monotonically related to the degree of practical and professional experience with children (M proportions correct = .62, .72, .86, and .87, for college students, mothers, developmental scientists, and pediatricians, respectively). Cronbach's α for mothers was .82, the Guttman split-half reliability coefficient was .85, and the 2-week test-retest reliability was .92 (MacPhee, 1981). Among our sample of mothers, Kuder-Richardson 20 coefficients were .67 for the Italian sample and .71 for the Austrian/German Italian sample.

Social network—The Social Network Form (SNF; Weinraub & Wolf, 1983) assesses maternal social supports. We derived 4 scales: (1) social contacts – the sum of 3 questions about monthly contacts on the telephone and in person; (2) parenting support – the sum of 6 questions about the value the mother places on the parenting advice she receives from her contacts and the amount of parenting support received from parenting/organized groups; (3) emotional support – the sum of 10 questions about the degree to which the mother confides in her social contacts, emotional support received from social contacts, and emotional support received from parenting/organized groups; and (4) coping – the sum of 5 questions about coping with housework, childcare, finances, emotions, and overall. With the exception of the number of contacts in the past month, all items were rated on 10-point scales (e.g., *Never-Always*, *Not at all-Totally*). Internal consistency is not reported for these items because they are conceptually related but not necessarily statistically related (see Bradley, 2004; Streiner, 2003).

Analytic Plan

Our main goal was to determine whether children's adaptive behaviors were similar or different in Italian and Austrian/German Italian ethnic groups. To rule out some possible sociodemographic causes of any differences, we considered child age, maternal age, and maternal education as potential covariates, and controlled for them in analyses if there was a significant ethnic group difference or if they were significantly associated with the VABS. Finally, we considered maternal acculturation, parenting knowledge, social contacts,

parenting support, emotional support, and coping as possible culturally variant explanatory variables. That is, these variables were explored to determine whether they could help explain any differences we found in the VABS between ethnic groups.

STUDY 1: Results

Preliminary Analyses

In both studies, univariate distributions of all variables were examined for normalcy, homogeneity of variance, outliers, and influential cases, and transformations were applied to resolve problems of non-normalcy (Tabachnick & Fidell, 1996). Analyses were conducted on the transformed data; for clarity, however, descriptive statistics are presented in the variables' original metrics. With the exception of the Socialization domain and fine Motor Skills subdomain, all VABS required transformations to approximate normalcy and reduce the number and influence of outliers, as did parenting knowledge. All other variables were normally distributed in their original metrics. Preliminary ANCOVAs by ethnicity and child gender determined there were no interaction effects. Main effects of child gender showed girls rated higher than boys for the VABS Daily Living domain, $F(1, 125) = 14.76, p \leq .001$, and personal daily living skills, $F(1, 125) = 15.66, p \leq .001$, domestic daily living skills, $F(1, 125) = 8.26, p \leq .01$, and fine motor skills, $F(1, 125) = 5.74, p \leq .05$, subdomains. Because child gender did not interact with ethnicity, and to preserve the power of the statistical tests, gender was omitted from the main analyses below.

A post-hoc power analysis was computed to determine whether the sample size of 138 was sufficient to detect a medium-sized effect in a one-way ANOVA design. With an effect size of $f = .25$, $\alpha = .05$, and $N = 138$, the power estimate was .83, indicating adequate power to detect a medium or large effect (Faul, Erdfelder, Lang, & Buchner, 2007).

Descriptive Statistics and Covariates

Descriptive statistics of the VABS domains and subdomains and explanatory variables appear in Table 2. We evaluated whether child age, maternal age, and maternal education were significantly related to the VABS and explanatory variables. As reported above, child age was correlated with all of the raw VABS. Maternal age was more moderately correlated with VABS, $r_s(131) = .20$ to $.31, ps < .05 - .001$, as well as parenting and emotional support, $r(115) = -.19, p < .05$, and $r(113) = -.21, p < .05$, respectively. Maternal education was unrelated to the VABS, $r_s(135) = -.00$ to $.11, ns$, but was correlated with parenting knowledge, $r(130) = .33, p < .001$, emotional support, $r(115) = .24, p < .05$, and coping, $r(127) = -.27, p < .01$. These relations matched our expectations, and therefore significant covariates were controlled in all analyses.

Italian and Austrian/German Italian Group Differences

Table 2 displays the results of ANCOVAs of the VABS domains and subdomains and explanatory variables by ethnicity, controlling for the covariates listed above. Controlling for child and mother age, there was no difference between reports of children's Communication domain or receptive or written subdomains. However, Austrian/German Italian children were reported to be more verbally expressive than Italian children. Austrian/German Italian children were also reported to have better Daily Living Skills, including personal care, domestic tasks, and community responsibilities. Italian and Austrian/German Italian children were reported to be similar in motor skills. Finally, Austrian/German Italian mothers rated their children higher in the Socialization domain, including interpersonal relationships, play skills, and coping skills.

Explanatory Exploration

To help explain ethnic differences that emerged in child adaptive behaviors, we explored the possible roles of acculturation level, parenting knowledge, and social supports. With the (obvious) exception of Italian orientation, none of the explanatory variables (parenting knowledge, social contacts, parenting support, emotional support, or maternal coping) differed between Italian and Austrian/German Italians after controlling for covariates (see Table 2).

As expected, Italian acculturation orientation was significantly different in the two ethnic groups. Italian acculturation was also significantly correlated with the VABS daily living skills and socialization domains, and the expressive, domestic, interpersonal relationships, and coping skills subdomains (controlling maternal and child ages), $r_s(110) = -.22$ to $-.44$, $p_s < .05$. To further explain ethnic differences we found in child adaptive behavior, we performed another set of ANCOVAs on those VABS that exhibited an ethnic group difference. Child and mother age and Italian acculturation were used as covariates. If the ethnic group difference attenuated, we could conclude that level of acculturation to Italian culture explained the difference between mothers' reports of Italian and Austrian/German Italian children's adaptive behaviors. If acculturation did not explain the ethnic group difference, then the reported ethnic difference in children's adaptive behaviors could be ascribable to other personal or family factors in the two groups but not parenting knowledge, social networks, or social supports. As shown in Table 2, controlling for Italian acculturation reduced the effect sizes of all tests. However, ethnic group differences remained significant for the Daily Living Skills domain as well as personal care and domestic tasks subdomains and for the coping skills Socialization subdomain.

STUDY 2: Method

With the exception of family acculturation orientation, the explanatory variables in Study 1 did not account for cultural differences in children's VABS. Therefore, we conducted a second study designed to identify salient cultural differences in Italian and Austrian/German Italian mothers' everyday interactions that could account for differences in children's adaptive behaviors. Substantively, we focused on mothers' socialization goals, but we also studied social desirability. To do so, we interviewed mothers about the activity settings of everyday life with their children. All families seek to accommodate meaningfully to their ecological niches through sustainable routines of daily living (Cooper & Denner, 1998; Gallimore, Goldenberg, & Weisner, 1993), and we wanted to capture the differential socialization of Italian and Austrian/German Italian families.

Participants

Participants were 77 families living in the same South Tyrol area, 34 Italian and 43 Austrian/German Italian. Demographic characteristics of the sample appear in Table 1. There was no difference in the average ages of mothers or fathers in the two groups, $F(1, 74) = .05$, ns , and $F(1, 71) = .02$, ns , respectively. They also achieved relatively high levels of education, and the two groups were equally educated, $F(1, 74) = 2.52$, ns , and $F(1, 73) = .36$, ns , respectively. Only firstborn, healthy children 3 to 5 years of age were recruited in the sample. Child age was similar across ethnic groups, $F(1, 74) = .07$, ns , and approximately equal numbers of girls and boys participated in the two groups, $\chi^2(1, N = 77) = .21$, ns , with 44.2% female and 55.8% male overall.

Procedures

The Vineland Adaptive Behavior Scales were collected (see Study 1 method) along with an ecocultural interview and a measure of mothers' social desirability of responding.

Ecocultural Family Interview—To amplify and explicate possible sources of children's differential adaptive behaviors, we adopted Weisner's (1984, 1997; Weisner, Coots, & Bernheimer, 1997) Ecocultural Family Interview (EFI). The EFI is a parent interview devised to study culture-sensitive socialization processes in families in a variety of situations. The focus of the interview is on daily activities, the salient concerns regarding how everyday routines are organized with respect to the child's care. The EFI lasts about 1 hr during which mothers narrate their daily life with their children. Mothers describe typical situations with the child giving emphases and voice to personal meanings, value systems, and educational strategies. The interview format mixes conversation, probing questions by the interviewer, and preplanned questions that lead participants to describe and narrate their customary behaviors and habits. We adopted the EFI to explore dimensions that characterize South Tyrolean family life and might influence parenting strategies and children's adaptive behaviors. The special focus of the EFI is on family socialization routines in the morning, at mealtimes, and before bed, on the child's activities at kindergarten, and on maternal sources of support in her parental role. We were interested in learning about typical organization of Italian and Austrian/German Italian families with their children and to examine whether socialization goals were a possible source of cultural differences in children's adaptive behavior. The EFI has been used in different cultural communities, including Italians (Frare, Axia, & Battistella, 2002; Tremolada, Axia, Pillon, Scrimin, & Capello, 2005).

For our study, verbatim transcripts of the interviews were rated on 35 items grouped into 5 statistically and theoretically significant domains that are the major variables of the second study: Mother Social Support, Father Involvement with the Family, Child Autonomy, Family Connectedness, and Family Involvement in Mealtimes. The *Mother Social Support* domain (7 items, $\alpha = .85$) measures the presence of a network of social support, the quantity of help that the family receives from others (relatives, formal and public assistance services, professionals, groups for parents) and the mother's perceived emotional support. The domain of *Father Involvement with the Family* (5 items, $\alpha = .76$) reflects the husband's participation in the household, quantity of time dedicated to the family, and father's involvement in childcare activities. *Child Autonomy* is a domain (10 items, $\alpha = .70$) that assesses the autonomy of the child during play sessions or other activities, independence from the parent in preparing for and going to bed, and the degree to which the child requires adult presence for sleeping. This domain also includes items that evaluate the child's interaction and socialization at kindergarten, respectfulness of norms and rules at school, autonomous participation in didactic activities and involvement in preparing and serving food to peers. The *Family Connectedness* domain (8 items, $\alpha = .88$) collects information about family cohesion, the sense of being a single unit, and the harmony and stability of couple habits within the family. Parental agreement about child education and health care, mother's and father's perceived intimacy, and the child's contribution to strengthening family unity are part of this domain. The last domain, *Family Involvement in Mealtimes* (5 items, $\alpha = .60$) measures participation of family members in dinner and the child's involvement in preparing the meal.

Each item assesses the salience and importance of a given issue in the daily routines of parents and children. Item scores range from 0 to 8. A score of 0 indicates that the variable is not present in the mother's narrative, 1 only minimally present, up to 8 which indicates a very strong presence of the item in the family's daily organization. Scores reflecting the presence of a variable that cannot be gathered are noted with "N" ("not applicable"). "M" indicates that the variable is missing.

Two independent judges coded 25 (32.46%) of the 77 interviews. Their agreement was measured in two ways. First, agreement with respect to attribution of categorical values ("N" and "M") was assessed by calculating Cohen's *kappa* (which always exceeded .92) and

percent agreement for each item (which always exceeded 95%). Second, to evaluate the degree of judges' agreement with respect to intensity, item reliability was calculated with Spearman's Rho between values attributed from the first and the second judge (ρ s = .73 to .97).

Social desirability—The Social Desirability Scale (SDS; Crowne & Marlowe, 1960) uses 33 items to assess adults' tendency to respond to questions in a socially desirable fashion. Questions like, "I have never intensely disliked anyone." are rated as *True* or *False*. Crowne and Marlowe (1960) reported that test-retest reliability for the SDS was .89. The SDS was used as a control on the VABS.

Analytic Plan

Our main goal in Study 2 was to assess relations between domains in the EFI and VABS in the child. First, we explored ethnic differences in the EFI using ANCOVAs, and, then, we computed partial correlations between the EFI and the VABS. As in Study 1, to rule out sociodemographic variation in the two groups, we considered child age, maternal age, maternal education, and social desirability as potential covariates, and controlled for them in analyses if there was a significant ethnic group difference or if they were significantly associated with the dependent variable.

STUDY 2: Results

Preliminary Analyses

Family connectedness, the VABS communication domain, and the written, coping, gross motor, and fine motor skills subdomains required transformations to approximate normalcy and reduce the number and influence of outliers; all other variables were normally distributed in their original metrics. With one exception, child age was significantly associated with the VABS domains and subscales, $r_s(74) = .18 - .76$, p s = *ns* - .001, and child age was associated with child autonomy, $r(74) = .30$, $p \leq .01$. Maternal age, education, and social desirability were not significantly related to the VABS or EFI.

A post-hoc power analysis was computed to determine whether the sample size of 77 provided sufficient power to detect a medium-sized effect in a correlation design. With an effect size of $f^2 = .15$, $\alpha = .05$, and $N = 77$, the power estimate was .92, indicating adequate power to detect a medium or large effect.

Italian and Austrian/German Italian Group Differences in the EFI and Correlations with the VABS

Table 3 displays descriptive statistics and ethnic group differences in the EFI scales. Only child autonomy showed an ethnic group difference when child age was controlled. Austrian/German Italian families promoted more child autonomy at home and school than Italian families. Table 4 displays correlations between the VABS and the EFI. Child autonomy was significantly correlated with VABS daily living skills, socialization, and all of their subscales. Family connectedness was associated with fine motor skills, and family involvement in mealtimes was negatively associated with receptive language and positively associated with fine motor skills.

Discussion

This study aimed to evaluate and compare adaptive behaviors in young girls and boys in two contrasting ethnic groups living together in northern Italy as well as to discover prominent determinants of ethnic differences in children's adaptive behaviors. Differential adaptive

demands mold how people conceive of themselves and the world and what is important, and they shape distinctive cultural features of childcare, child development, family, and community (Weisner, 1984). Appraisal of adaptive behavior is based on reports of an individual's activities in everyday life. Combined with intelligence, adaptive behavior is a complementary determination of the individual's capacity to cope in her or his environment. Adaptive behaviors balance “what one does” with knowledge of “what to do.” Here we summarize children's adaptive behaviors in these two geographically intercalated but culturally distinctive ethnic groups by the main effects we obtained, caution as to the robustness and validity of our findings, and discuss possible sources of their differences.

We found several consistent differences in adaptive behaviors between Italian and Austrian/German Italian children. Briefly, Austrian/German Italian mothers reported that their children perform higher, and Italian mothers reported their children perform lower, in expressive Communication, Daily Living Skills, and Socialization. Although our sample sizes were modest, we had the power to detect medium sized effects, and the effect sizes of nonsignificant effects were small. We assume that the reported ethnic differences reflect true differences in functioning as VABS validity studies suggest. At minimum, they reflect mothers' evaluations of their children's typical behavior. The Vineland interview does not ask mothers to express attitudes or impressions about their children, but to report concrete and manifest behaviors. Items in the VABS tap defined and well-known developmental achievements that parents surely notice. The VABS has good interrater reliability with correlation coefficients of .85 or higher between parents and teachers. Finally, maternal perceptions constitute a significant part of the milieu in which the child-mother dyad develops, and they merit research interest apart from being considered as evaluations of a non-objective informant (Bornstein, 2009b; Miller, 1988). In interpreting group differences, we hasten to add, it is always important to keep in mind that average differences can mislead because there is almost always considerable overlap between comparison groups. Moreover, children's adaptive functioning was based on adult (maternal) report. Adult perceptions of child characteristics can favor one group vis-à-vis another on account of cultural differences in perception or methodological differences in understanding items or different standards for mastery. For this reason, we controlled for both maternal biases of various kinds (age, education, social contacts, coping, social desirability, and so forth) and parenting knowledge, and exercised care in developing our research materials.

Our results comport with early anthropological study of this unique cultural and geopolitical area; they accord as well with a modern line of research on German individualistic socialization; and they converge with other contemporary data. Between 1957 and 1967, Wolf and Cole (1974) observed social interactions in neighboring Italian (Tret) and German (Saint Felix) villages at the linguistic border of the Non valley. The two villages were no more than 3 km apart and shared similar geography, but they were separated by a “hidden frontier” and displayed marked social differences. Inhabitants of these two villages adhered to different cultural models and articulated different social norms, notably their relative respect for authority, kinship networks, and general sociability, all along the lines we found that are common to childhood adaptive differences. From a more contemporary perspective, several investigators have reported the extreme independent cultural model Germans promote in their children (e.g., Colin, 1996; Darwish & Huber, 2002; Friedlmeier & Trommsdorff, 1999; Keller & Lamm, 2005; Keller et al., 2006). German socialization strategies foster autonomous self-regulation and personal agency, promote separateness, and value independent functioning. The belief in individuality is presumed to be rooted in a cultural ethic that stresses responsibility, freedom, and introspection (Ahnert, Kraetzig, Meischner, & Schmidt, 1994). Directly germane to our findings, for Germans it is important for children to sleep independently through the night, dress themselves, make their own

experiences, take responsibility for their own things, and respect adults using correct courtesy forms. The ideal competent German is self-contained, independent, and unique.

Adaptive behavioral development is likely influenced by ways in which adults perceive and relate to children. To amplify and explicate possible sources of children's differential adaptive behaviors, we adopted Weisner's (1984, 1997) Ecocultural Family Interview. Italian and Austrian/German Italian families differed significantly with respect to expectations and actions over children's autonomy at home and at school. In accord with our main findings, Austrian/German Italian mothers were described as promoting independence, and children were described as independent protagonists, in a variety of everyday activities from dressing themselves before going to kindergarten, playing alone, going to sleep without needing an adult present, and the like. At school, Austrian/German Italian children are more involved in deciding autonomously which educational activities to participate in from a range offered by the school.

A major goal of parenting is to connect children to the fabric of society for it is in forging such connections that children are most likely to thrive. In this spirit, parents assist their children in achieving and maintaining adaptive functioning. Biological, psychological, and social variables are inextricably entwined and exert mutual influences on each other in shaping all behaviors. It is not possible to assess the effects of any one of these influences without implicating the others. Overall, however, it is important to underscore that the group differences we observed reinforce a conceptualization that adaptive behavior is contextually channeled and supported.

More generally, this study contributes information about a unique and underresearched situation and pair of populations. The ethnic group differences we found reinforce the significance of exploring intracultural variation, and they serve to caution cross-culturalists against too ready generalizations between groups within a culture. Finally, the data underscore the notion that adaptive development in children can be expected to proceed along different pathways relative to home, local, as well as larger culture. Through time, specific cultures evolve specific ways of doing things, and individuals in those cultures perform in ways that are shaped by them. In traditional conceptualizations, adaptive behaviors arise from necessary and desirable demands. A necessary demand is that people feed themselves; a desirable demand is that they do so a certain way, on a certain timetable, in a certain place, and so forth. Cultural studies of adaptive behavior tell us about children's performance and adjustment in terms of culturally desirable demands. Our focus on adaptive behavior stresses children's achieving goals that are valued by particular cultures. Adaptive behavior is therefore a good fit with a conception of adjustment and development, not as an attribute of the person, but as illustrative of person-environment interactions.

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References

- Ahnert, L.; Kraetzig, S.; Meischner, T.; Schmidt, A. Sozialisationskonzepte für Kleinkinder: Wirkungen tradierter Erziehungsvorstellungen und staatssozialistischer Erziehungsdoktrinen im intraund interkulturellen Ost-West-Vergleich. In: Trommendorff, G., editor. *Psychologische Aspekte des soziopolitischen Wandels in Ostdeutschland*. Walter de Gruyter; Berlin: 1994. p. 94-110.
- Alcock, A. *Geschichte der Südtirolfrage: Südtirol seit dem Paket*. Braumüller; Wien: 1982.
- Alcock, A. *The South Tyrol autonomy. A short introduction*. University of Ulster; Londonderry: 2001.

- ASTAT; Istituto provinciale di statistica. Censimento della popolazione 2001. Astat informazioni. 2001; 17:1–16.
- ASTAT. Istituto provinciale di statistica. Barometro linguistico in Alto Adige. Uso della lingua ed identità linguistica in provincia di Bolzano. La Bodoniana; Bolzano: 2006.
- Axia V, Weisner TS. Infant stress reactivity and Home Cultural Ecology of Italian infants and families. *Infant Behavior & Development*. 2002; 25:255–268.
- Balboni, G.; Pedrabissi, L. Adattamento italiano delle Vineland Adaptive Behavior Scales. O.S. Organizzazioni Speciali; Firenze: 2003.
- Balboni, G.; Dantoni, D.; Pedrabissi, L. Vineland Adaptive Behavior Scales-Classroom Edition: Uno strumento di misura dell'adattamento scolastico. I disturbi dell'apprendimento; IX Congresso Nazionale A.I.R.I.P.A.; 2000.
- Balboni G, Pedrabissi L, Molteni M, Villa S. Discriminant validity of the Vineland scales: Score profiles of individuals with mental retardation and a specific disorder. *American Journal on Mental Retardation*. 2001; 106:162–172. [PubMed: 11321607]
- Barnard, KE.; Solchany, JE. Mothering. In: Bornstein, MH., editor. *Handbook of parenting* Vol. 3. Status and social conditions of parenting. 2nd ed.. Erlbaum; Mahwah, NJ: 2002. p. 3-25.
- Baur, S. La minoranza tedesca del Sudtirolo: tutela della lingua madre e prospettive di bilinguismo. Congress “L'educazione plurilingue in Italia”; Frascati: CEDE, Quaderni di Villa Falconieri; 1983.
- Baur, S. Memorie collettive – Lingua e convivenza. In: Baur, S.; Montali, S., editors. *Lingue tra culture*. Alpha & Beta; Bolzano: 1994. p. 129-145.
- Bornstein, MH. Cultural approaches to parenting. Erlbaum; Hillsdale, NJ: 1991.
- Bornstein, MH., editor. *The handbook of cultural developmental science*. Volume 1. Domains of human development across cultures: Volume 2. Human development in different places on earth. Taylor & Francis Group; New York: 2009a.
- Bornstein, MH. Parents' reports about their children's lives. In: Ben-Arieh, A.; Cashmore, J.; Goodman, G.; Kampmann, J.; Melton, G., editors. *Handbook of child research*. SAGE; Thousand Oaks, CA: 2009b. p. xx-xx.
- Bornstein MH, Giusti Z, Leach DB, Venuti P. Maternal reports of adaptive behaviours in young children: Urban-rural and gender comparisons in Italy and United States. *Infant and Child Development*. 2005; 14:403–424.
- Bradley RH. Chaos, culture, and covariance structures: A dynamic systems view of children's experiences at home. *Parenting: Science and Practice*. 2004; 4:243–257.
- Calvo V, Mazzeschi C, Zennaro A, Lis A. Studio di alcuni aspetti di rischio connessi alle rappresentazioni di attaccamento di padri e madri. *Età Evolutiva*. 2002; 72:68–73.
- Capozza D, Manganelli Rattazzi AM. Stereotypes and attribution processes in a multi-ethnic Italian province. *Journal of Community and Applied Social Psychology*. 1999; 9:231–236.
- Cole, M. Culture in development. In: Bornstein, MH.; Lamb, ME., editors. *Developmental science: An advanced textbook*. Erlbaum; Mahwah, NJ: 2005. p. 45-101.
- Colin, VL. Human attachment. McGraw-Hill; New York: 1996.
- Cooper CR, Denner J. Theories linking culture and psychology: Universal and community-specific processes. *Annual Review of Psychology*. 1998; 49:559–584.
- Costarelli S. The distinct roles of subordinate and superordinate group power, conflict, and categorization on intergroup prejudice in a multiethnic Italian territory. *The Journal of Social Psychology*. 2006; 146:5–13. [PubMed: 16480118]
- Crowne DP, Marlowe D. A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*. 1960; 24:963–968.
- Cuéllar I, Arnold B, Maldonado R. Acculturation Rating Scale for Mexican Americans-II: A revision of the original ARSMA scale. *Hispanic Journal of Behavioral Sciences*. 1995; 17:275–304.
- Darwish AE, Huber JL. Individualism-collectivism in different cultural societies: A cross-cultural study. *Journal of Psychology (Egypt)*. 2002; 16:152–162. in Arabic.
- De Stasio S, Gentile S, Labonia M, Masi R. Utilizzo della Vineland Adaptive Behaviour Scales nella diagnosi Psicometrica-Psicologica e nella Pratica Assistenziale in Pazienti con Deficit Uditivo. 7° Incontro di Informazione Scientifica OBG. 2002

- Deflorian, F.; Miclet, R. Indagine sociolinguistica e primi risultati della sperimentazione. International Congress "Il tedesco seconda lingua in prima elementare-La sperimentazione in atto"; Bolzano: Assessorato all'Istruzione e Cultura in Lingua Italiana Della Provincia Autonoma di Bolzano; 1992.
- diSibio M. Conjoint effects of intelligence and adaptive behavior on achievement in a nonreferred sample. *Journal of Psychoeducational Assessment*. 1993; 11:304–313.
- Dörrenhaus, F. *Wo der Norden dem Süden begegnet: Südtirol*. Athesia; Bozen: 1959.
- Doucette, J.; Freedman, R. *Progress tests for the developmentally disabled*. Alet; Cambridge, MA: 1980.
- Eichinger L. South Tyrol: German and Italian in a changing world. *Journal of Multilingual and Multicultural Development*. 2002; 23:137–149.
- Eichinger, LM. Südtirol. In: Hinderling, R.; Eichinger, LM., editors. *Handbuch der mitteleuropäischen Sprachminderheiten*. Narr; Tübingen: 1996. p. 199–262.
- Faul F, Erdfelder E, Lang A-G, Buchner A. G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavioral Research Methods*. 2007; 39:175–191.
- Frare M, Axia G, Battistella PA. Quality of life, coping strategies and family routines in children with headache. *Headache*. 2002; 42:953–962. [PubMed: 12453026]
- Friedlmeier W, Trommsdorff G. Emotion regulation in early childhood: A cross-cultural comparison between German and Japanese toddlers. *Journal of Cross-Cultural Psychology*. 1999; 30:684–711.
- Gallimore R, Goldenberg CN, Weisner TS. The social construction and subjective reality of activity settings: Implications for community psychology. *American Journal of Community Psychology*. 1993; 21:537–559.
- Greenfield PM, Keller H, Fuligni A, Maynard A. Cultural pathways through universal development. *Annual Review of Psychology*. 2003; 54:461–490.
- Harkness S, Super CM, Moscardino U, Rha J-H, Blom M, Huitron B, Johnston C, Sutherland M, Hyun O-K, Axia G, Palacios J. Cultural models and developmental agendas: Implications for arousal and self-regulation in early infancy. *Journal of Developmental Processes*. 2007; 2:5–39.
- Holman, J.; Bruininks, R. Assessment and training of adaptive behavior. In: Lakin, KC.; Bruininks, RH., editors. *Strategies for achieving community integration of developmentally disabled citizens*. Paul H. Brooks; Baltimore: 1985. p. 73–104.
- Kamphaus RW. Conceptual and psychometric issues in the assessment of adaptive behavior. *Journal of Special Education*. 1987; 21:27–35.
- Keith TZ, Fehrman PG, Harrison PL, Pottebaum SM. The relation between adaptive behavior and intelligence: Testing alternative explanations. *Journal of School Psychology*. 1987; 25:33–43.
- Keith TZ, Harrison PL, Ehly SW. Effects of adaptive behavior on achievement: Path analysis of a national sample. *Professional School Psychology*. 1987; 2:205–215.
- Keller H, Lamm B. Parenting as the expression of sociohistorical time: the case of German individualisation. *International Journal of Behavioral Development*. 2005; 29:238–246.
- Keller H, Lamm B, Abels M, Yovsi R, Borke J, Jensen H, Papaligoura Z, Holoub C, Lo W, Janet Tomiyama A, Su Y, Wang Y, Chaudhari N. Cultural models, socialization goals, and parenting ethnotheories: A multicultural analysis. *Journal of Cross-Cultural Psychology*. 2006; 37:155–172.
- Kessen W. The American child and other cultural inventions. *American Psychologist*. 1979; 34:815–820.
- Kirchler E, Zani B. Strategie di differenziazione tra gruppi etnici: Italiani e Tedeschi in Alto Adige. *Giornale italiano di Psicologia*, XVI. 1989; 1:61–79.
- MacPhee, D. *Manual: Knowledge of infant development inventory*. University of North Carolina; 1981. Unpublished manuscript
- Marín, G.; Marín, BV. *Research with Hispanic populations*. SAGE; Newbury Park, CA: 1991.
- Masten AS, Coatsworth JD. The development of competence in favorable and unfavorable environments: Lessons From research on successful children. *American Psychologist*. 1998; 53:205–220. [PubMed: 9491748]

- Milan S, Snow S, Belay S. The context of preschool children's sleep: racial/ethnic differences in sleep locations, routines, and concerns. *Journal of Family Psychology*. 2007; 21:20–28. [PubMed: 17371106]
- Miller S. Parents' beliefs about children's cognitive development. *Child Development*. 1988; 59:259–285.
- New RS. Parental goals and Italian infant care. *New Directions for Child Development*. 1988; 40:51–63. [PubMed: 3217037]
- New RS. The family context of Italian infant care. *Early Child Development and Care*. 1989; 50:99–108.
- New, RS. Child's play – una cosa naturale: An Italian perspective. In: Roopnarine, JL.; Johnson, JE.; Hooper, FH., editors. *Children's play in diverse cultures*. SUNY Press; Albany, NY: 1994. p. 123-147.
- New, RS.; Richman, AL. Maternal beliefs and infant care practices in Italy and the United States. In: Harkness, S.; Super, CM., editors. *Parents' cultural belief systems: Their origins, expressions, and consequences*. Guilford; New York: 1996. p. 385-404.
- Newmark, CS. *Major psychological assessment instruments*. Allyn & Bacon; Needham Heights, MA: 1989.
- Parke, RD. Fathers and families. In: Bornstein, MH., editor. *Handbook of parenting: Vol. 3. Status and social conditions of parenting*. 2nd ed.. Erlbaum; Mahwah, NJ: 2002. p. 27-73.
- Peterlini, O. *Autonomie und Minderheitenschutz in Trentino-Südtirol: Überblick über Geschichte, Recht und Politik*. Braumüller; Wien: 1997.
- Riehl, CM. Deutsch in Südtirol. In: Wirrer, J., editor. *Minderheiten- und Regionalsprachen in Europa*. Westdeutscher Verlag; Opladen: 2000. p. 237-248.
- Sparrow, SS.; Balla, DA.; Cicchetti, DV. *Vineland adaptive behavior scales*. American Guidance Service; Circle Pines, MN: 1984.
- Sparrow SS, Cicchetti DV. Behavior rating inventory for moderately, severely, and profoundly retarded persons. *American Journal of Mental Deficiency*. 1978; 82:365–374. [PubMed: 623156]
- Stern, D. *The motherhood constellation*. Basic Books; New York: 1995.
- Streiner DL. Being inconsistent about consistency: When coefficient alpha does and doesn't matter. *Journal of Personality Assessment*. 2003; 80:217–222. [PubMed: 12763696]
- Tabachnick, BG.; Fidell, LS. *Using multivariate statistics*. Harper Collins; New York: 1996.
- Taverna, L. Unpublished doctoral dissertation. Padua University; Padua, Italy: 2008. *I comportamenti adattivi nei bambini di età prescolare: Gruppo linguistico italiano e tedesco in Alto Adige a confronto*.
- Tremolada M, Axia G, Pillon M, Scrimin S, Capello F, Zanesco L. Parental narratives of quality of life in children with leukemia as associated with the placement of central venous catheter. *Journal of Pain and Symptom Management*. 2005; 30:544–552. [PubMed: 16376741]
- Trivers, R. *Social evolution*. Benjamin Cummings; Menlo Park, CA: 1986.
- Tombakan-Runtukahu J, Nitko AJ. Translation, cultural adjustment, and validation of a measure of adaptive behavior. *Research in Developmental Disabilities*. 1992; 13:481–501. [PubMed: 1410714]
- Valentin SR. Sleep in German infants-The “cult” of independence. *Pediatrics*. 2005; 115:269–271. [PubMed: 15866862]
- van de Vijver, FJR.; Leung, K. *Methods and data analysis for cross-cultural research*. SAGE; Thousand Oaks, CA: 1997.
- Weinraub M, Wolf BM. Effects of stress and social supports on mother-child interactions in single- and two-parent families. *Child Development*. 1983; 54:1297–1311. [PubMed: 6354635]
- Weisner, TS. Ecocultural niches of middle childhood: A cross-cultural perspective. In: Collins, WA., editor. *Development during middle childhood*. Nation Academy Press; Washington, DC: 1984. p. 335-369.
- Weisner TS. The Ecocultural Project of Human Development: Why ethnography and its findings matter. *Ethos*. 1997; 25:177–190.

- Weisner, TS.; Coots, J.; Bernheimer, L. The Ecocultural Family Interview Manual. UCLA Center for Culture and Health; Los Angeles, CA: 1997.
- Weisner TS, Gallimore R. My brother's keeper: Child and sibling caretaking. *Current Anthropology*. 1977; 18:169–190.
- Welles-Nyström B, New R, Richman A. The “good mother”: A comparative study of Swedish, Italian and American maternal behavior and goals. *Scandinavian Journal of Caring Sciences*. 1994; 8:81–86. [PubMed: 7886330]
- Wolf, ER.; Cole, JW. The hidden frontier. Academic Press; New York: 1974.

Figure 1A.
South Tyrol in Italy

Figure 1B.
Italians in South Tyrol
Austrian/German Italians in South Tyrol

Table 1

Demographic characteristics of participants

	Study 1 (N = 138)				Study 2 (N = 77)			
	Italian		Austrian/German Italian		Italian		Austrian/German Italian	
	M	SD	M	SD	M	SD	M	SD
Mother's age (years)	34.87	3.98	34.13	4.29	35.59	3.75	35.41	3.78
Mother's education ^a	6.50	1.56	6.75	1.42	6.74	1.42	7.29	1.56
% secondary school	10.1		5.8		5.9		2.4	
% high school	58.0		47.8		50.0		33.3	
% university	30.4		46.3		44.1		64.3	
% of mothers employed	91.3		73.9		94.1		86.0	
Father's age (years)	37.34	5.76	36.88	5.66	38.21	3.91	38.08	4.94
Father's education ^a	6.18	1.48	6.38	1.64	6.21	1.47	6.41	1.52
% secondary school	11.5		15.9		8.8		14.6	
% high school	62.3		42.0		64.7		48.8	
% university	23.2		34.5		26.5		36.6	
% of fathers employed	89.8		82.5		100.0		100.0	
Child's age (months)	48.03	13.63	48.84	13.67	52.97	10.39	53.57	9.17
Child's gender (% male)	50.7		46.4		52.9		58.1	

The mean value of 6 corresponds to having completed high school.

^aEducation was rated on an 11-point scale, ranging from 0, 'no schooling', to 10, 'completed graduate degree'.

Table 2

Study 1: Descriptive statistics and group differences between ethnic groups

	Italian		Austrian/German Italian		Controlling Covariates		Controlling Acculturation	
	M	SD	M	SD	F	η^2_p	F	η^2_p
<i>VABS</i>								
Communication	173.51	26.33	178.52	25.01	2.86	.02	--	--
Receptive	41.30	3.24	41.64	2.80	.00	.00	--	--
Expressive	128.19	21.14	133.03	20.86	8.00**	.06	.00	.00
Written	3.91	5.11	3.86	4.69	.11	.00	--	--
Daily Living	138.35	37.82	159.01	31.42	35.99***	.22	10.44**	.09
Personal	102.78	28.31	114.16	21.41	20.76***	.14	10.84**	.09
Domestic	14.16	6.61	21.09	8.64	33.32***	.21	6.41*	.06
Community	39.68	5.26	41.43	4.47	6.85**	.05	1.57	.01
Motor	123.88	17.07	127.00	14.06	1.50	.01	--	--
Gross	74.93	7.70	76.93	6.06	3.76	.03	--	--
Fine	48.94	10.15	50.07	9.03	.37	.00	--	--
Socialization	112.84	17.57	121.71	19.57	16.43***	.12	3.00	.03
Interpersonal	55.12	7.26	58.49	7.67	12.76***	.09	.46	.00
Play	45.32	10.07	48.48	10.90	5.49*	.04	1.61	.02
Coping	12.57	3.82	14.70	4.15	11.04***	.08	5.82*	.05
<i>Explanatory Variables</i>								
Acculturation	4.70	.30	2.95	.65	355.35***	--	--	--
Parenting knowledge	.73	.08	.74	.09	.06	.00	--	--
Social contacts	97.25	48.19	81.32	46.87	2.94	.03	--	--
Parenting support	31.62	11.94	36.77	13.36	3.90	.03	--	--
Emotional support	66.30	21.25	74.70	22.42	2.55	.02	--	--
Coping	7.19	2.01	6.84	1.92	.02	.00	--	--

Note. Analyses with the VABS domain and subscale scores were controlled for child and maternal ages. Analyses with parenting knowledge and coping were controlled for maternal education. Analyses with parenting support were controlled for maternal age. Analyses with emotional support were controlled for maternal age and education.

*
 $p \leq .05$
**
 $p \leq .01$

 $p \leq .001$

Table 3

Study 2: Descriptive statistics and group differences between ethnic groups

	Italian		Austrian/German Italian		F	η^2_p
	M	SD	M	SD		
Mother social support	5.26	1.71	5.13	1.81	.12	.00
Father involvement with family	4.15	1.68	3.71	1.66	.91	.01
Child autonomy	4.11	1.14	5.75	.95	47.51***	.40
Family connectedness	5.29	1.74	5.54	1.46	.10	.00
Family involvement in mealtimes	4.81	1.53	4.90	1.74	.00	.00

Note. Analyses were controlled for child age.***
 $p \leq .001$.

Table 4

Study 2: Partial correlations between VABS and EFI scales, controlling child age

	Mother Social Support	Father Involvement with Family	Child Autonomy	Family Connectedness	Family Involvement in Mealtimes
Communication	.06	.02	-.07	.03	-.10
Receptive	.02	-.08	-.09	-.02	-.24*
Expressive	.16	.06	-.04	.06	-.09
Written	-.00	-.01	.02	.12	.10
Daily Living	.01	-.10	.44***	.08	.12
Personal	.11	-.17	.40***	.13	.11
Domestic	-.05	-.09	.39***	.12	.12
Community	-.07	.01	.33**	-.06	.09
Motor	.11	.12	.19	.17	.15
Gross	.13	.04	.21	.13	.02
Fine	.04	.09	.22	.25*	.23*
Socialization	.06	.09	.38***	.06	.03
Interpersonal	.02	.03	.33**	.15	.07
Play	.13	.06	.38***	.08	.09
Coping	-.01	.12	.29*	-.02	-.04

*
 $p \leq .05$.**
 $p \leq .01$.***
 $p \leq .001$.