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Parenting Infants: Socialization Goals and Behaviors of Italian Mothers and Immigrant Mothers From West Africa

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Abstract

This study was aimed at contributing to the understanding of cultural parenting strategies in a context of immigration. Socialization goals (SGs) and parenting behaviors during interaction with 3-month-old infants of first-generation West African immigrant mothers in Italy and autochthonous Italian mothers were compared. The relation between SGs and maternal behaviors within the two groups was also examined. As expected, results showed that West African immigrant mothers placed more emphasis on SGs related to hierarchical relatedness and a proximal parenting style than Italian mothers, who emphasized SGs related to psychological autonomy and a distal parenting style. Although there were no significant differences in the amount of overall vocal/verbal behaviors between the two samples, West African immigrant mothers showed longer durations of rhythmic vocalizing and singing than Italian mothers, who showed more affectionate talking. Compared with the literature on West African parenting strategies, this result suggests a possible increased amount of talking of immigrant mothers in the new language-driven environment, but maintenance of a protosong structure typical of their culture of origin. Furthermore, a significant association between socialization goals and parenting behaviors was found in the Italian group of mothers but not in the sample of immigrant mothers, suggesting that the weaker links between goals and behaviors in the immigrant sample may express a reorganization in the composition of parenting beliefs and practices.

Keywords

immigration, culture, socialization goals, parenting behaviors, infancy

Parenting is a cultural process, embodying shared beliefs and behaviors that are adapted to particular environmental demands. Accordingly, different parenting strategies in different cultural environments have been widely documented (e.g., Keller, Borke, Lamm, Lohaus, & Yovsi, 2011;

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LeVine et al., 1994; Liu et al., 2005; Schulze, Harwood, Schölmerich, & Leyendecker, 2002; Simmons & Johnston, 2007). Parenting strategies can be conceptualized as expressing different cultural priorities related to two universal human needs: the need for relatedness and the need for autonomy that sensitizes infants and children to specific ways of being in their social and nonsocial environment (Keller, 2012; Keller & Otto, 2011). According to the ecocultural model of development (Keller & Kärtner, 2013), parenting strategies are organized through cultural models into hierarchically interrelated levels of representations and behaviors—from socialization goals (SGs; the most abstract level) to ethnotheories to parenting behaviors. Indeed, cultural models define SGs in terms of objectives, connected to relatedness and autonomy, that children should achieve during a particular developmental period.

At the same time, parenting must be regarded as a biological project because parenting systems can be considered as evolved due to environmental challenges, which our ancestors had to meet. Keller (2007) proposed the component model of parenting that presupposes a universal repertoire of six behavioral systems displayed universally by caregivers, namely, primary care, body contact, body stimulation, face-to-face contact, object stimulation, and narrative envelope. Among the many potential manifestations and combinations of these parenting systems, two prototypical styles have been identified that support different cultural emphases during the first months of life, the proximal and the distal style. The proximal style, characterized by body contact and body stimulation, is associated with synchronic, co-occurring vocal/verbal exchanges (Keller, Otto, Lamm, Yovsi, & Kärtner, 2008) and protosongs (Demuth, 2008); the baby is socialized into a unit with her caregiver (Keller et al., 2009). This parenting strategy has been described as adaptive for traditional rural societies, based on subsistence economy of families with low levels of formal education. The related prototypical cultural model emphasizes hierarchical relatedness (Keller & Kärtner, 2013), which structures the cooperation between members of the families and their roles, and promotes SGs as obedience, respect for hierarchy, and responsibility for others (Keller et al., 2006; Keller, Kärtner, Borke, Yovsi, & Kleis, 2005).

The distal style, characterized by face-to-face contact and object stimulation, is associated with diachronic or sequential vocal exchanges (Keller et al., 2008), protoconversations (Trevarthen, 1998), characterized by a considerable amount of speech directed to the infant, who is considered as an interlocutor (Lavelli, 2007) and socialized as a separate and quasiequal person (Kärtner, Keller, & Yovsi, 2010). This parenting strategy has been portrayed as adaptive for Western urban middle-class families, based on economic affluence and high levels of formal education. The related prototypical cultural model emphasizes individual psychological autonomy (Keller & Kärtner, 2013), which promotes the development of uniqueness and separation from others, and encourages SGs as individuality, autonomy, competition (Keller et al., 2005; Keller et al., 2006), and self-reliance (LeVine & Norman, 2001).

However, besides these two prototypical parenting styles, there is substantial evidence for combinations related to cultural models that emphasize psychological autonomy and relational responsibilities based on compliance with family values and respect for elderly people (Kağitçibaşı, 2007). These models have been described as adaptive for urban middle-class families from non-Western contexts, characterized by high levels of formal education that prompt mother–infant interaction toward a more distal style, with an increase of face-to-face exchanges and play with objects while the relational organization in the family system is maintained (Keller, 2007; Miller, Bersoff, & Harwood, 1990; Miller & Luthar, 1989).

Parenting strategies during infancy have been documented in several autochthonous contexts, but less in contexts of immigration (Berry, Poortinga, Segall, & Dasen, 1992; Kağitçibaşı, 2007; Rogoff, 2003). Migration is a situation where different cultural models may come into contact, so that parenting values and behaviors can be studied with respect to multidimensional processes of change and continuity.

Different proposals to capture processes of cultural change and continuity in immigrant families have been made, with the most prominent being Berry's (1980, 1997) model of acculturation. This bidimensional model is based on the recognition that acquiring beliefs and practices of the host culture does not necessarily imply discarding beliefs and practices of the original culture. This pattern is conceptualized as integration, and should function as the best for immigrants' adaptation in terms of their psychological health and well-being (Coatsworth, Maldonado-Molina, Pantin, & Szapocznik, 2005; David, Okazaki, & Saw, 2009). However, during the last decades, research has demonstrated that this model could be profitably expanded to address the complexity of the acculturation processes (Chirkov, 2009; Rudmin, 2003; Schwartz, Zamboanga, Rodriguez, & Wang, 2007). For example, as a modest interrelation between cultural practices, values, and identifications (i.e., ethnic identity) was documented in contexts of immigration (Berry, Phinney, Sam, & Vedder, 2006; Raffaelli, Zamboanga, & Carlo, 2005; Schwartz, Zamboanga, & Jarvis, 2007), Schwartz, Unger, Zamboanga, and Szapocznik (2010) proposed a multidimensional model of acculturation, or "multidimensional biculturalism." This model assumes that the acculturation process includes six distinct dimensions, that is, practices, values, and identifications of the heritage culture as well as of the receiving culture, which may change at different rates; moreover, for some migrant families, some of these dimensions may not change at all. In other words, this model states that changes in one dimension of acculturation may not imply that other dimensions are changing at the same rate or will change at all. On the basis of recent research, the multidimensional model indicates that in the complex process of acculturation, aspects of the heritage culture and the receiving culture may be kept separate or combined and/or synthesized into a new and unique blend (Benet-Martínez & Haritatos, 2005; Chen, Benet-Martínez, & Bond, 2008). The latter outcome is highlighted also by the concept of "cultural translation" (Papastergiadis, 2000), proposed to point out that in migration settings, the process of confrontation and translation between different cultural practices produces new solutions that are qualitatively different from those rooted in the original and the host contexts (de Haan, 2011). For example, it has been documented that Moroccan mothers migrated to the Netherlands developed new monitoring and investment in child support by bridging the relationally oriented traditional parenting practices and the mainstream Dutch parenting practices focused on children's individual needs (de Haan, 2011).

Empirical evidence of coexistence of cultural stability and change, as well as of blended solutions, in parenting strategies addressed to infants in migrant families has been shown by some studies. Most of them have focused on parenting ethnotheories and SGs in immigrant mothers from non-Western to Western countries, documenting that particularly second-generation immigrant mothers emphasize goals connected with hierarchical relatedness as much as goals connected with psychological autonomy. For instance, Puerto Rican immigrant mothers in the United States emphasized long-term SGs related to proper demeanor as well as individual qualities associated with economic success (Leyendecker, Lamb, Harwood, & Schölmerich, 2002); second-generation Turkish immigrant mothers in Germany preferred goals as self-confidence and psychological independence as well as respect for hierarchy and elderly people (Citlak, Leyendecker, Schölmerich, Driessen, & Harwood, 2008).

Fewer studies have examined parenting behaviors of immigrant mothers documenting not only differences but also some similarities with autochthonous mothers. For instance, Central American immigrant mothers in the United States spent most of the infants' waking time engaged in social interaction, showing mutual attention and vocalizations similar to Euro-American dyads (Fracasso, Lamb, Schölmerich, & Leyendecker, 1997). South American and Japanese immigrant mothers living in the United States used exploratory play similar to North American mothers, although Japanese immigrant and North American mothers focused more on objects, while South American immigrants focused more on persons (Cote & Bornstein, 2005). In addition, first-generation Romanian immigrant mothers in Italy resembled Italian mothers in their emphasis on

cognitive stimulation and in the use of distal behaviors such as face-to-face contact and play with objects, but showed significantly less verbal solicitations and more affectionate behaviors addressed to their infants (Moscardino, Bertelli, & Altoè, 2011).

On the whole, these studies highlight that in contexts of immigration, SGs, parenting ethnotheories, and parenting behaviors are stable and susceptible to change, indicative of the multidimensionality of the acculturation processes.

The present study focuses on SGs—that is, beliefs about skills that children should develop in their first years of life—and parenting behaviors of first-generation West African immigrant mothers in Italy, compared with SGs and parenting behaviors shown by Italian middle-class mothers.

Maternal behaviors were observed during mother–infant interaction at 3 months, because after the 2-month transition (Kärtner, Keller, & Yovsi, 2010; Lavelli, 2007), infants are more alert and potentially more active in social interaction (Lavelli & Fogel, 2002, 2005); also maternal SGs and mothers' conceptions of good care become more pronounced at the 3-month age span (Keller, Borke, Chaudhary, Lamm, & Kleis, 2010). The comparison of these two cultural groups is particularly promising as West African parenting has been described as substantially different from Western middle-class parenting (Keller, 2007; Nsamenang & Lamb, 1994). Western middle-class families show a prevalent distal style of parenting oriented toward SGs informed primarily by psychological autonomy; rural West African families have been described as showing a typical proximal parenting style oriented toward SGs informed primarily by hierarchical relatedness (Keller et al., 2009; Keller et al., 2011). To our knowledge, only one study (Rabain-Jamin & Wornham, 1990) has examined parenting representations and behaviors of West African immigrant mothers in Western societies. By focusing on ethnotheories and parenting behaviors of West African immigrant mothers in France, this work has shown that the infant's body stimulation by massages and motor exercises, that is, behaviors that are highly evaluated in the culture of origin, are more resistant to change than the feeding practices.

It is a central assumption of the present study that, in the immigrant group, the links between SGs and parenting behaviors might be weaker than in the group of Italian mothers, for mainly two reasons. First, because migration is a phase of change, maternal parenting beliefs and behavior might be in a transition state which may not be synchronous on a time scale, as proposed by the multidimensional model of acculturation (Schwartz et al., 2010). Second, there is evidence for a cultural lag: From the Ogburn (1922) original idea, according to which changes in the “adaptive nonmaterial culture” tend to lag behind changes in the “material conditions,” some authors argued that not all facets of the “adaptive nonmaterial culture” are equally sensitive to change (Kärtner et al., 2007), that is, some features of culture might even be resilient and resistant to change.

In the present study, we were guided by the following specific aims:

1. We compared SGs of Italian middle-class mothers and first-generation West African immigrant mothers. On the basis of the literature discussed above, we expected the Italian mothers to emphasize SGs associated with psychological autonomy more than with hierarchical relatedness, and more strongly than the West African immigrant mothers. On the contrary, considering that the immigrant mothers engaged in the study are first-generation immigrants who have not been living in Italy for a long time, we expected these mothers to emphasize SGs associated with hierarchical relatedness more than with psychological autonomy, and more strongly than the Italian mothers.
2. We compared behaviors shown by Italian and West African immigrant mothers during spontaneous interaction with their 3-month-old infants. On the basis of the literature discussed above, we expected the Italian middle-class mothers to use distal behaviors (face-to-face contact and object stimulation) more often than the West African immigrant

mothers, whereas we expected the African mothers to use proximal behaviors (body contact and body stimulation) more often than the Italian mothers. Furthermore, with respect to the vocal behaviors of mothers, on the basis of the literature showing main differences in the structure depending on the ecocultural context—that is, protoconversations (Keller et al., 2008; Lavelli, 2007; Trevarthen, 1998) in Western contexts versus rhythmic proto-songs (Demuth, 2008) in non-Western contexts—we expected the Italian mothers to use affectionate talking—that is, verbalizations characterized by an affectionate tone and possible turn-taking with the infant vocalizations (Lavelli & Barachetti, 2010)—more than rhythmic vocalizing and singing, and more strongly than immigrant mothers. Vice versa, we expected the immigrant mothers to use rhythmic vocalizing and singing more than affectionate talking, and more strongly than Italian mothers. Finally, because the migrant condition is characterized by the contact between different cultural models which might foster possible changes in parenting practices, we expected immigrant mothers to show some possible similarities with Italian mothers in behaviors that are not strongly bound up with their traditional beliefs, such as talking with the infant and mirroring his or her vocalizations.

3. We examined and compared the relationship between SGs and parenting behaviors within the two groups of mothers. On the basis of the literature described above, we expected that SGs related to psychological autonomy were positively associated with a parenting distal style (face-to-face contact, object stimulation) and/or negatively associated with a proximal style (body contact, body stimulation) in the Italian group of mothers. On the contrary, we hypothesized that in the migrant sample, the links between parental SGs and parenting behaviors might be weaker.

Method

Participants

In all, 20 Italian mothers from the northeastern provinces of Mantua and Verona, 20 West African immigrant mothers living in the northeast of Italy, and their 3-month-old infants born in Italy participated in this study. West African mothers came from rural (30%) and urban (70%) areas of Nigeria (55%), Ghana (30%), and the English-speaking part of Cameroon (15%). Gender was balanced across samples (Italian, 50% girls; immigrant, 50% girls). Immigrant mothers were significantly younger ($M = 28.75$ years, $SD = 6.44$) than Italian mothers ($M = 33.20$ years, $SD = 4.20$), $t(38) = 2.59$, $p < .05$, despite the fact that only 35% of immigrant mothers versus 65% of Italian mothers were primiparous. Furthermore, immigrant mothers received less formal education ($M = 11.85$, $SD = 4.03$) than Italian mothers ($M = 15.55$, $SD = 2.31$), $t(38) = 3.56$, $p < .01$. According to the authors' sociocultural approach, these differences are constitutive of different sociocultural environments (Keller, 2007; Yovsi, Kärtner, Keller, & Lohaus, 2009). Finally, immigrant mothers were in Italy from a minimum of 8 months to an average time of almost 7 years ($M = 82.35$ months, $SD = 53.10$) before they gave birth to the infants included in this study. The mothers were contacted by an Italian research assistant after the delivery in the citizen hospitals of Mantua and Verona, and were informed about the nature of the study. From the pool of mothers interested in participating in the study, mother–infant dyads were selected on the basis of the following requirements: spontaneous full-term delivery (≥ 38 – ≤ 42 weeks), physiological birth weight (above 2,500 g), Apgar scores ≥ 8 at 1st and 5th min after birth, initial disposition of the mother to breastfeed, absence of indications of physical or psychological problems on the part of the mother, couple relationship between the infant's mother and father, the mother and the father being of age and Italian or Cameroon/Nigerian/Ghanaian, and living in Italy for at least 6 months (i.e., at least a short time to get in contact with the Italian culture).

Procedure

Data presented in this article are part of a larger longitudinal research project conducted through biweekly videotaped observations of spontaneous mother–infant interaction in a naturally occurring context at their home, from 4 to 12 weeks.

In the familiarization phase, the research assistant met the mothers for the first visit at their home between the 2nd and 3rd weeks after the delivery. She explained to them the study procedure, and they talked together about how mothers take care of their infants for familiarizing with the research. Conversations were in Italian with Italian mothers, and in Italian or English with immigrant mothers, according to the language they preferred. Mothers were instructed about the videotaping of spontaneous interaction with their infants. In particular, they were instructed to behave with their infants as they usually do, to choose a habitual setting, and to talk in the language they typically use. During this meeting, mothers were also invited to fill in the Informed Consent to data treatment according to law and a questionnaire concerning sociodemographic information.

The last videotaped observation took place when infants were 12 weeks old. Mother–infant spontaneous interactions were videotaped for 10 min using a hand-held camera with a built-in microphone at a distance of approximately 2 to 3 m to adapt to infants' and mothers' movements. The research assistant made sure that the infants were awake, fed, and not crying before the recording began. After the videotaped observation, a questionnaire about *SGs* (Kärtner, Keller, & Chaudhary, 2010) was administered to all mothers.

At the end of the collaboration, a DVD with videos of mother–infant interaction was given to all mothers. Italian mothers got also a popular book on the infant's 1st year of life and a toy for the baby, while immigrant mothers received a small repayment each meeting.

Out of the 40 planned videotaped sessions (20 dyads \times 2 cultural groups), there were no missing sessions, and all mothers answered all the items of the questionnaire.

Questionnaire. The *Socialization Goals Questionnaire* (Kärtner, Keller, & Chaudhary, 2010) consists of a list of 22 statements concerning qualities that children should learn or develop during the first 3 years of life. The mothers were asked to evaluate their agreement with these statements using a 6-point Likert-type scale ranging from 0 (*not at all*) to 5 (*completely*). The questionnaire consists of two internally consistent scales that can be labeled “Psychological Autonomy” (10 items referring to the children's independence, self-confidence, and assertiveness) and “Hierarchical Relatedness” (12 items referring to the children's prosocial behavior, obedience, and proper demeanor). Measures were generated by averaging the scores of items loaded on each of the two scales. Thus, analyses were performed on mean scores. These scales were developed on the basis of the study of ethnotheories in different cultural environments: urban middle-class families from Western and non-Western countries (Germany, United States, Greece, India, China, Costa Rica) and rural ethnic communities from West Africa (Cameroonian Nso) and India (Gujarati Rajput). These studies were based on the ecocultural model of development (Keller & Kärtner, 2013, for a recent version). For the present study, the scales were translated into Italian language. Internal consistencies were quite high for both scales within both samples: Cronbach's alphas for the “Psychological Autonomy” scale were .81 in the Italian sample and .79 in the immigrant sample; for the “Hierarchical Relatedness” scale were .83 in the Italian sample and .71 in the immigrant sample.

Coding. Mothers' behaviors—videotaped during spontaneous interaction with their infants—were coded into mutually exclusive micro-categories included in each of six classes of events representing the parenting systems described by the component model of parenting (Keller, 2007): Facial Behaviors (Face-to-Face Contact), Vocal Behaviors (Narrative Envelope), Body

Contact, Body Stimulation, Object Stimulation, and Primary Care. Detailed descriptions of categories are given in the appendix. The coding was performed using INTERACT9, a software for coding and analyzing behavioral data, and a continuous event coding strategy. The minimum duration required for coding was 1 s.

Intercoder Reliability. To assess interrater reliabilities, 15% of videotapes were coded by a second coder. Each time the two independent coders entered the same code with less than 1.5 s of difference, it was considered agreement, otherwise as a disagreement. A lapse of 1.5 s was determined considering that 1 s was the minimum duration for coding, consistently with other studies (e.g., Lavelli & Fogel, 2005). The average Cohen's Kappa, calculated for each class of events, was .82 for Facial Behaviors, .79 for Vocal Behaviors, .85 for Body Contact, .86 for Body Stimulation, .88 for Object Stimulation, and .95 for Primary Care.

Results

Data analysis and results are grouped according to the three specific aims addressed in this study.

Comparing SGs (Aim 1)

First, we generated two overall measures of SGs by calculating the mean scores for both scales, namely, Psychological Autonomy and Hierarchical Relatedness.

Then, to test the hypotheses on the intracultural distribution and intercultural differences concerning the SGs, we calculated a 2×2 mixed-design ANOVA with SGs (psychological autonomy vs. hierarchical relatedness) as the within-subjects factor and Cultural Group (Italian vs. West African immigrant) as the between-subjects factor. This analysis shows a significant main effect for SGs, $F(1, 38) = 12.12, p < .01, \eta_p^2 = .24$, and a significant SGs \times Cultural Group interaction, $F(1, 38) = 126.02, p < .001, \eta_p^2 = .77$. Although there was a significant SGs effect, considering data across cultural group, there were no significant differences between relational SGs ($M = 3.88, SD = .94$) and autonomous SGs ($M = 3.43, SD = 1.00$), as demonstrated by t test, $t(39) = 14.70, p < .098, d = .27$. The interaction effect and following comparisons of the means confirm our hypotheses that the West African immigrant mothers emphasized SGs associated with hierarchical relatedness ($M = 4.60, SD = .37$) more than SGs associated with psychological autonomy ($M = 2.72, SD = .85$), $t(19) = 9.18, p < .001, d = 1.47$, and more than the Italian mothers ($M = 3.15, SD = .75$), $t(38) = -7.78, p < .001, d = 1.30$ (see Figure 1). On the contrary, Italian mothers emphasized SGs related to psychological autonomy ($M = 4.14, SD = .51$) more than those associated with hierarchical relatedness, $t(19) = -6.47, p = .001, d = 1.03$, and more than the immigrant mothers, $t(38) = 6.40, p < .001, d = 1.04$.

Comparing Parenting Behaviors (Aim 2)

First, we generated six overall measures of parenting systems as total durations of the micro-categories of maternal behavior included in each system.

Then, to test the hypothesized differences between the two cultural samples concerning parenting behaviors, we calculated t tests on the overall durations of each of the six parenting systems. Results indicate that, as expected, the West African immigrant mothers showed significantly longer durations of Body Contact, $t(38) = -7.29, p < .001, d = 1.29$, and Body Stimulation, $t(38) = -4.67, p < .001, d = .77$, that is, more proximal behaviors than did the Italian mothers (see Figure 2). In contrast, the Italian mothers presented significantly longer durations of Face-to-Face Contact, $t(38) = 4.09, p < .001, d = .72$, and Object Stimulation, $t(38) = 2.91, p < .01, d = .50$, that is, a higher amount of distal behaviors compared with the immigrant

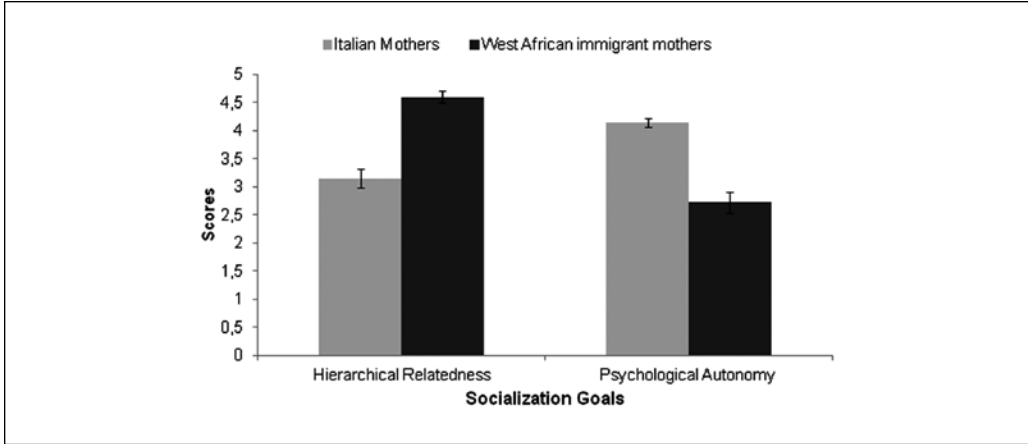


Figure 1. Mean scores of socialization goals in Italian mothers and West African immigrant mothers. Note: Bars represent standard errors.

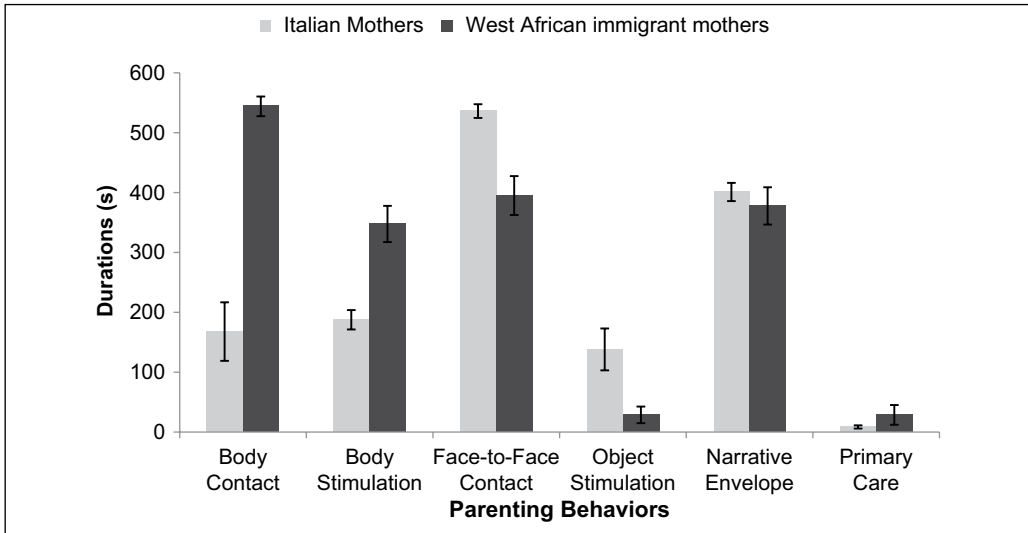


Figure 2. Mean durations of parenting behaviors in Italian mothers and West African immigrant mothers. Note: Bars represent standard errors.

mothers (see Figure 2). However, no significant differences between the two cultural groups were found for the durations of vocal behaviors (Narrative Envelope) and Primary Care.

To test the hypothesis of intercultural differences in the structure of maternal vocal behaviors, we performed a 4 (Vocal Behaviors) × 2 (Cultural Groups) mix-design ANOVA with Vocal Behavior (Affectionate Talking, Rhythmic Vocalizing, Singing, and Vocal Mirroring) as the within-subjects factor and Cultural Group as the between-subjects factor; the Bonferroni adjustment was applied because of the multiple comparisons. Within-group and between-group *t* tests were used as post hoc test. The results show a significant main effect for Vocal Behavior, $F(3, 114) = 38.84, p < .001, \eta_p^2 = .51$, and a significant Vocal Behavior × Cultural Group interaction, $F(3, 114) = 21.49, p < .001, \eta_p^2 = .36$. The Vocal Behavior effect indicates that the amount of

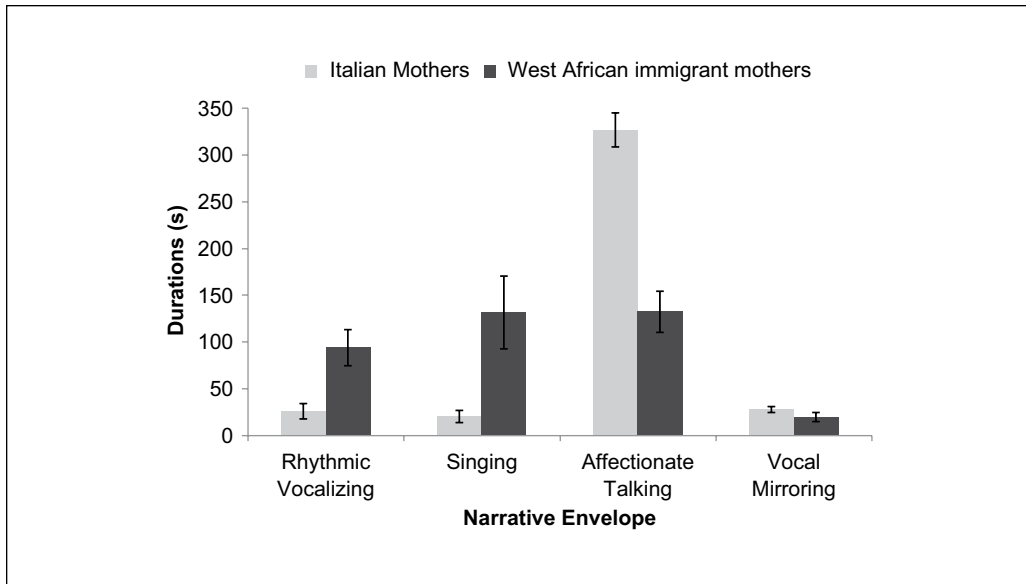


Figure 3. Mean durations of vocal behaviors in Italian mothers and West African immigrant mothers. Note: Bars represent standard errors.

Affectionate Talking was significantly higher than Rhythmic Vocalizing, $t(39) = 5.86, p < .001, d = .93$, Singing, $t(39) = 4.28, p < .001, d = .68$, and Vocal Mirroring $t(39) = 10.06, p < .001, d = 1.59$, as demonstrated collapsing data across cultural groups (see Figure 3). The interaction effect and following t tests confirm our hypothesis that the structure of vocal behaviors differed between the two cultural groups: the Italian mothers used Affectionate Talking ($M = 326.83, SD = 81.31$) significantly more than Rhythmic Vocalizing ($M = 26.19, SD = 36.80$), $t(19) = 12.70, p < .001, d = 2.84$, and Singing ($M = 20.60, SD = 29.15$), $t(19) = 14.85, p < .001, d = 3.32$, and more strongly than West African immigrant mothers (ImmM AffTalk $M = 132.47, SD = 98.30$), $t(38) = -6.81, p < .001, d = 1.08$ (see Figure 3). On the contrary, immigrant mothers used Rhythmic Vocalizing ($M = 94.13, SD = 86.28$) and Singing ($M = 131.77, SD = 173.91$) significantly more than Italian mothers, $t(38) = -3.24, p = .002, d = .55$, and $t(38) = -2.82, p = .008, d = .55$, respectively, but no more than Affectionate Talking. No significant differences were found between the two cultural groups for Vocal Mirroring.

We also investigated the influence of the length of residence in Italy on parenting behaviors of the immigrant mothers.¹

Comparing the Relationship Between SGs and Parenting Behaviors (Aim 3)

We calculated the correlations between SGs and maternal behaviors grouped by parenting systems within each of the two cultural groups (see Table 1). As expected, the results show that for the sample of Italian mothers, the goal of psychological autonomy was significantly correlated with Object Stimulation, $r = .52, p < .05$, that is, with a main component of a parenting distal style, and significantly but negatively correlated with Body Contact, $r = -.55, p < .05$, that is, with a plain proximal behavior. In contrast, for the sample of West African immigrant mothers, no significant associations between SGs and parenting behaviors were found. Unexpectedly, results also show that within the Italian group, there was a significant positive association between psychological autonomy goals and hierarchical relatedness goals, $r = .46, p < .05$.

Table 1. Correlations Between Socialization Goals and Parenting Behaviors for the Italian and West African Immigrant Mothers.

Categories	1	2	3	4	5	6	7	8
1. Autonomy Goals	—	.46*	-.43	.14	-.55*	.10	.52*	.23
2. Relatedness Goals	.03	—	-.11	.02	-.27	.26	.11	.17
3. Face-to-Face Contact	-.06	-.19	—	-.13	.00	-.03	-.23	-.12
4. Narrative Envelope	.16	-.31	.14	—	.02	-.53*	.17	-.49*
5. Body Contact	-.12	.06	.10	-.07	—	-.14	-.35	-.01
6. Body Stimulation	-.08	.13	-.12	.30	-.00	—	-.20	.61**
7. Object Stimulation	-.06	-.43	-.10	-.20	-.60**	-.23	—	-.21
8. Primary Care	.03	.05	-.33	-.29	.16	-.42	-.10	—

Note: Correlations for the Italian mothers are presented above the diagonal, and correlations for the West African immigrant mothers are presented below the diagonal.

* $p < .05$. ** $p < .01$.

Discussion

With this study, we want to contribute to the understanding of cultural parenting strategies in a context of immigration. Consequently, we compared SGs and parenting behaviors during interactional situations with infants from first-generation West African immigrant mothers and autochthonous Italian mothers. We selected these two groups because remarkable differences in socialization strategies have been reported from West European and West African mothers (Keller & Kärtner, 2013). Overall, the results confirmed the expected cultural differences of these two groups as related to different cultural emphases on psychological autonomy and hierarchical relatedness. West African immigrant mothers placed more emphasis on SGs related to hierarchical relatedness and a proximal parenting style than Italian mothers, who stressed more SGs related to psychological autonomy and a distal parenting style than the immigrant mothers.

Within-group analyses revealed the expected significant differences between SGs scores in the two groups. Immigrant mothers scored significantly higher on hierarchical relatedness than psychological autonomy, while Italian mothers placed more emphasis on psychological autonomy than hierarchical relatedness. These findings are consistent with findings with other Western urban middle-class families, especially from Germany and the United States, who consistently preferred psychological autonomous goals over hierarchical relational ones (Keller et al., 2005; Keller et al., 2006). Nevertheless, results also showed that in the group of Italian mothers, psychological autonomy goals were positively correlated with hierarchical relatedness goals. This finding suggests that Italian middle-class mothers engaged in this study do not share the prototypical model of parenting observable in other Western urban middle-class families, but rather a model close to the “autonomous relatedness” model described for urban Turkish middle-class families (Kağitçibaşı, 2005), which is characterized by a combination of autonomy and relatedness. Thus, for Italian mothers there may be a particular link between the two types of SGs, that is, the prevailing autonomy goals are encouraged together with the emphasis on social relationships. This result seems to be consistent with results from other studies showing that Italian middle-class mothers emphasize the infant autonomy and cognitive skills (Moscardino et al., 2011), as well as the infant ability to participate in social interactions (Bornstein, Cote, & Venuti, 2001). Indeed, previous studies revealed that Italian mothers show a clear preference for socially active and affectively responsive infants (Axia & Weisner, 2002), and are more likely to respond to their infants’ social actions than middle-class mothers from the United States (Hsu & Lavelli, 2005). Further studies should deepen the investigation of combination of autonomy and relatedness in other Italian samples.

The findings concerning the relation between autonomous and relational SGs in immigrant mothers are different from previous studies with mothers migrating from a culture of origin stressing hierarchical relatedness into a host society stressing psychological autonomy (rural Turkish families in Germany and Puerto Rican mothers in the United States). The mothers of these groups had emphasized psychological autonomy (Citlak et al., 2008), or selected aspects of psychological autonomy (Leyendecker et al., 2002), as well as hierarchical relatedness equally. The difference with the Citlak et al. (2008) study, however, may be due to the fact that in that study, the mothers who emphasized autonomous and relational SGs in a similar way were second-generation immigrant mothers, whereas the participants in our study were first-generation migrants who lived in Italy for only about 7 years. Moreover, most of them arrived in Italy when they were already in adult age. In line with the evolutionary life span theory (Belsky, Steinberg, & Draper, 1991; Chasiotis, 2011), it can be assumed that basic reproductive strategies including parenting styles and investment decisions have been primed during the first 6 years of life. Future studies should investigate continuities and changes in socialization strategies of migrant mothers from multiple generations.

With respect to the mothers' behaviors, the differences found in parenting styles confirm our expectations. West African migrant mothers displayed primarily a proximal style consisting of body contact and body stimulation in interactional situations with their 3-month-old infants. The length of their residence in Italy was negatively associated with rhythmic motor stimulation, that is, a specific parenting behavior included in body stimulation, but not so much to affect the overall duration of body stimulation, which is particularly appreciated in West African cultures. Italian middle-class mothers displayed primarily a distal style in interactional situations, composed of face-to-face contact and object stimulation.

On the whole, these results are consistent with the only study addressing parenting styles with infants of West African immigrant mothers in a Western European country, that is, France (Rabain-Jamin & Wornham, 1990). These authors also documented that behaviors related to body stimulation were particularly resistant to change. This may be due to the fact that in sub-Saharan African communities, body/motor stimulation of infants is considered as the embodiment of good parenting and crucial for healthy development (Lohaus et al., 2011). Behaviors that are central to the concept of parenting in the culture of origin may thus be more resistant to change than behaviors that are more peripheral. Again, future studies should investigate parenting behaviors in immigrant mothers of multiple generations, investigating also the possible change of the rhythmic mode related to body stimulation.

Regarding autochthonous Italian mothers, the findings are consistent with what has been documented in other Western urban middle-class families, which is a preference for the distal behavioral style (Keller et al., 2009; Keller & Kärtner, 2013).

There were no significant differences in the overall amount of vocal/verbal behaviors and primary care between the two samples. The lack of differences in the amount of primary care is accorded to the fact that we instructed the mothers to play with their babies. Therefore, primary care only occurred sporadically in both groups. The results also reveal no differences in the amount of vocal/verbal behaviors, that is, the narrative envelope. This result suggests a possible change in the parenting behavior of the West African immigrant mothers, because in the cultures of origin, vocal/verbal behavior is much less than in Western middle-class samples (Keller, 2007). However, from previous studies with the West African ethnic group of the Nso, we know that also the structure of vocal/verbal interactions is significantly different from Western middle-class mothers, in particular, the role of rhythmic stimulation differs (Demuth, 2008). In line with these studies, the West African immigrant mothers in our study showed significantly longer durations of rhythmic vocalizing and singing than Italian mothers, who showed longer durations of affectionate talking than the immigrant mothers. These findings are in line with previous studies, which have shown the prevalence of protoconversations in Western countries (Keller

et al., 2008) and protosongs in non-Western contexts (Demuth, 2008). Thus, immigrant mothers may have changed the amount of language in interactional situation in the new language-driven environment, but they maintained the structural elements of their culture of origin. This difference in amount and structure might therefore indicate an interesting process driven by acculturative changes and lead to a new quality of the narrative envelope in mother–infant interactions. It might also hint to the direction of changes with identification of elements that are more flexible and those that are more resistant. Nevertheless, measuring acculturation addressing the complexity of this process turns out to be very difficult, because to our knowledge, no instruments assessing acculturation in a differentiated, multidimensional way—that is, consistent with the multidimensional model of acculturation (Schwartz et al., 2010) discussed above—are available.

The final objective of our study was the analysis of relationships between SGs and parenting behaviors within the two cultural groups. As expected, we found significant associations in the Italian group of mothers but not in the sample of immigrant mothers. In particular, the associations found within the Italian group of mothers—that is, psychological autonomous SGs positively associated with object stimulation, expressing a distal style, but negatively correlated with body contact, expressing a proximal style—have been reported also from other samples of Western middle-class mothers (Keller, 2007). On the contrary, the fact that no associations between SGs and parenting behaviors were found in the sample of immigrant mothers may indicate that the hierarchically interrelated organization of parenting strategies in SGs, beliefs or ethnotheories, and behaviors is possibly affected by the experience of migration and thus, contact with different cultural models. In line with the concept of multidimensional biculturalism (Schwartz et al., 2010), the weaker links between goals and behaviors in the immigrant sample might express a reorganization of new and old SGs and behaviors. Here again, multidimensional measures of acculturation are needed and should be developed in future research.

Our study has other constraints that might inform further studies. (a) Studies addressing change processes induced through migration would benefit from including samples from the culture of origin. However, in the case of West African migrants, this is not easy to accomplish. West Africa is a culturally diverse region with many different ethnic communities and languages. We concentrated on West African migrants with Anglophone background, because this was the only possibility to collect data from families or individuals from West Africa who have a language in common. Paying attention to more variability within West Africa would be very important. (b) Our study focused on Anglophone migrant mothers in Italy. However, studies with migrants from the same culture of origin, but migrating to different destinations in the Western world, have indicated substantial changes in acculturation and integration patterns (Phalet & Schönplflug, 2001). None of these studies, however, addressed early socialization patterns. It would therefore be important to include different host societies and study similarities and differences in acculturation and integration. (c) This study considered only first-generation migrant mothers, while further studies should investigate continuities and changes in socialization strategies of West African migrant mothers from multiple generations.

Despite these limitations, this study contributes substantially to the understanding of parenting strategies in a context of migration in revealing interesting patterns of continuities and changes. In particular, it showed that behaviors that are central to the cultural conception of parenting, such as the motor stimulation in West African child care philosophy, are rather resistant to change, whereas patterns that are less culturally saturated, such as the amount of talking, change more easily. The study also demonstrated how new syntheses, as assumed by the migration literature discussed earlier, are looking like when the increased amount of talking of West African mothers in Italy is still structured more as a protosong as compared with the protoconversation pattern in the host society. It also demonstrated that the consistency in the organization

of parenting strategies that has been found in the Italian middle-class mothers is not prevalent in the migrant mothers, which may indicate a new composition of beliefs and practices. Thus, this study may help to understand the impact of migration on socialization.

Appendix

Parenting systems and maternal behaviors	Description
I. Facial behaviors (Face-to-Face Contact)	
1. No facial behavior	No facial behavior addressed to the infant, no gaze at the infant.
2. Observing	Gazing at the infant's body and movements, that is, following the infant's behavior with no focus on the face.
3. Gazing at the infant's face	Gazing at the infant's face.
4. Smiling at the infant	Smiling at the infant.
5. Stimulating by facial actions	Trying to get the infant's attention by facial action stimuli; for example, lip or tongue protrusion.
6. Facial mirroring	Repeating an infant's facial action by imitating it quite literally or with particular emphasis, while the infant is gazing at the mother's face.
II. Vocal Behaviors (Narrative Envelope)	
1. No vocal behavior	Absence of vocal behavior.
2. Affectionate talking	Talking to the infant in an affectionate way.
3. Rhythmic vocalizing	Repeating guttural sounds, or syllables, or one/some words in a rhythmic and fast way.
4. Singing	Singing a song.
5. Vocal mirroring	Repeating an infant's vocalization by imitating it quite literally or with particular emphasis, or by reproducing the affective quality of an infant's action.
III. Body Contact	
1. No body contact	No body contact between mother and infant.
2. Whole body	The infant is held in mother's arms, so that the infant's legs, arms, head, back or chest are in physical contact with the mother's body.
3. On the lap	The infant's trunk or lower back and legs are leant on the mother's lap.
IV. Body Stimulation	
1. No body stimulation	The infant's body is neither moved nor touched.
2. Vestibular/motor	Moving the infant's whole body by changing partially or drastically the infant's position in the space; for example, shaking the infant.
3. Rhythmic vestibular/motor	The vestibular/motor stimulation is strongly and rhythmically repeated.
4. Kinesthetic	Moving one part of the infant's body; for example, the infant's arms or legs.
5. Rhythmic kinesthetic	The kinesthetic stimulation is repeated rhythmically.
6. Tactile	Touching the infant without moving any part of his or her body; for example, caressing, kissing.
7. Rhythmic tactile	The tactile stimulation is repeated rhythmically.

(continued)

Appendix. (continued)

Parenting systems and maternal behaviors	Description
V. Object Stimulation	
1. No object stimulation	No object included in interaction.
2. Visual	Getting the infant's attention showing an object.
3. Visual and auditory	Getting the infant's attention by the sound and the visual presentation of an object; for example, shaking a rattle.
4. Tactile and visual	Touching a part of the infant's body with an object that the infant can see; for example, putting one toy in her hand.
5. Tactile, visual, and auditory	Touching a part of the infant's body with a ringing object while the infant is gazing at it; for example, shaking a rattle in her hand.
VI. Primary Care	
1. No primary care	No caring behavior
2. Primary care	Involving the infant in caring routines; for example, dressing, cleaning the mouth.

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Note

1. To explore the role of the length of residence in Italy on parenting behaviors shown by immigrant mothers, correlations between number of years in Italy and categories of parenting behaviors were performed within the group of West African immigrant mothers. Results showed that the number of years in Italy was negatively correlated with Rhythmic Motor Stimulation, $r = -.45$, $p < .05$, a specific parenting behavior (included in Body Stimulation) which is particularly appreciated in West African cultures; no other correlations were found.

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