Research in Human Development

ISSN: 1542-7609 (Print) 1542-7617 (Online) Journal homepage: http://www.tandfonline.com/loi/hrhd20

ON BECOMING CULTURAL BEINGS: A FOCUS ON RACE, GENDER, AND LANGUAGE

Cynthia Garcia Coll, Arlene Garcia Miranda, Ibelis Buzzetta Torres & Jaleishly Nogueras Bermúdez

To cite this article: Cynthia Garcia Coll, Arlene Garcia Miranda, Ibelis Buzzetta Torres & Jaleishly Nogueras Bermúdez (2018): ON BECOMING CULTURAL BEINGS: A FOCUS ON RACE, GENDER, AND LANGUAGE, Research in Human Development, DOI: 10.1080/15427609.2018.1491217

To link to this article: https://doi.org/10.1080/15427609.2018.1491217

Published online: 24 Jul 2018.

Research in Human Development, 00: 1–13, 2018

ISSN: 1542-7609 print / 1542-7617 online
DOI: https://doi.org/10.1080/15427609.2018.1491217

ON BECOMING CULTURAL BEINGS: A FOCUS ON RACE, GENDER, AND LANGUAGE

Cynthia Garcia Coll, Arlene Garcia Miranda, Ibelis Buzzetta Torres, and Jaleishly Nogueras Bermúdez
Carlos Albizu University

In this article, the authors present theoretical perspectives and empirical evidence on the perceptual narrowing and meaning attributed by each culture through social interactions to the categories of race, gender, and language. The authors use that evidence to support the idea that by age 5 years, and rapidly within the first years of life, as children become cultural beings, these social categories get defined and adopted by the child. The authors suggest that these processes might provide the bases for the formation of prejudices and biases very early on and conclude that to work toward a more pluralistic world society.

HOW DO WE BECOME CULTURAL BEINGS?

The concept of enculturation was first introduced by Herskovits (1951) as the process of acquiring one's native culture through a process of socialization and perpetuation of cultural norms and values. It influences group identity, healthy attachments, judgment of what is right or wrong, what is valuable, and a person's ideal self. Enculturation is believed to exist in four dimensions: behavior, values, knowledge, and cultural identity (Kim & Abreu, 2001). We aim to show evidence that emphasizes how early the processes of enculturation are observed in infants and children, as well as the effects these have on their perceptions of themselves and others.

We argue that the process of enculturation happens first through perceptual narrowing, which is a normative developmental phenomenon that manifests itself in the perceptions of faces, speech, and musical rhythms (Scott, Pascalis, & Nelson, 2007). As individuals categorize the world to process information more efficiently, they learn to discriminate between familiar and unfamiliar stimuli (Scott & Monesson, 2009). We propose that in the categories of race, gender, and language this happens so early in life because it has survival value and enables to form a schema of one's own group in contrast to the outsider group.

A second process attaches meaning to the category. Vygotsky (1987) saw meaning as a process shaped by a systemic relationship with other psychical functions, processes, structures, and systems. The ability to interact with other individuals depends on the use of a system of symbols that are understood by the members of a social group who share language, beliefs, values, and rules of behavior (Whiting, 1980). Through social interactions children learn very

Address correspondence to Cynthia García Coll, Carlos Albizu University. E-mail: cygarcia@albizu.edu

early on what is familiar or not and to value the groups norms and preferences. Each groups' meaning attached to these categories is enhanced by the development of the ability to generalize through "the creation and the use of signs." Through the development of this system, children acquire the ability to generalize and use symbolic representation. Social interaction becomes impossible without signs; it is also impossible without meaning and presupposes generalization and the development of verbal meaning (Mahn, 2012).

The construction of the self and others is a product of this meaning-making process. It emerges in the crucible of social relations that are embedded in cultural contexts and mediated by language and other semiotic systems (Miller & Mangelsdorf, 2005). Evolutionary speaking, infants come into the world prepared to engage in social relations—to gaze at human faces, attend to human voices, respond to touch—and as a result of ongoing interaction develop internal representations or "working models" of attachment figures, themselves and those around them (Bowlby, as cited by Mahn, 2012). The fact that race, gender, and language are so refined so early on in life suggests that this categories are especially salient as the child becomes enculturated.

Children are exposed to racial and gender schemas and particular languages through their immersion in and observation of the large social world. Because racism, sexism, and general bias toward the "other" exists at all levels of society and is interwoven in all aspects of social life, it is virtually impossible for alert young children either to miss or ignore it. Far from being oblivious to this reality, children are inundated with it from the moment they enter society (Feagin & Van Ausdale, 2001).

Race Enculturation

The concept of race lacks a consensual theoretical meaning. It is considered a social construction that maintains the status quo within a society (Helms, Jernigan, & Mascher, 2005). Nevertheless, there is no biological basis to support the categorization of people by races (Wade, 1997). It becomes part of the dynamic system of development that influences the way people identify and conceive the concept of race. During the first year of life, infants develop perceptual biases that help identify and recognize other races. According to research conducted by Scott and Monesson (2009) exposure to different types of faces within the first year of life establishes the way in which perceptual differences are recognized later on in life. Afterward, it becomes increasingly difficult to perceptually differentiate other faces that they have not been exposed to early on. This finding emphasizes the importance of exposure to other races during the first year of life.

Furthermore, the process of discriminating and preferring own-race face starts earlier than expected. Kelly et al. (2007) examined 3-month-old, healthy Chinese infants who were exposed to 32 color images of male and female adult faces of four ethnic groups (Chinese, White, Middle Eastern, and African). The researchers found that infants attended to their own-race faces more than the other-race faces. The authors suggest that the emergence of other-race effect may develop due to the repeated exposure to faces from your own ethnicity, which lead to the development of superior face recognition abilities within your in-group than those of other ethnicities who are not frequently in your environment. According to research conducted by Scott and Monesson (2009), exposure to different types of faces within the first year of life establish the way in which perceptual differences are recognized later on in life. Afterwards, it becomes increasingly difficult to perceptually differentiate other faces that they have not been

exposed to early on. This finding emphasizes the importance of exposure to people of other races during the first years of life.

Gender Enculturation

The World Health Organization (2017, October 03) defines *gender* as "the socially constructed characteristics of women and men – such as norms, roles and relationships of and between groups of men and women" (p. Because people are assigned a sex from the moment of birth, gender socialization tends to start immediately (Fausto-Sterling, Coll, & Lamarre, 2012). Consequently, humans begin to learn and eventually perform gender roles since day one, which leads to the development of implicit and explicit biases about gender from an early age. Anne Fausto-Sterling (2012) proposed that gender in itself develops within a dynamic embodied systems framework based on neural plasticity. She also postulates that gender-identity differentiation takes shape during the first year of life, whereas gender identity itself develops during the second year of life. Her argument proposes that even before birth, dydactic interactions influence the nervous system and behaviors develop. At birth individual variabilities arise and get categorized within the existing male–female parameters. After birth, parent–infant communications influence further the development of gender identity.

Research findings have shown gender-role enculturation from a young age. Todd, Barry, and Thommessen (2017) found infants as young as age 9 months can show preference for toys that are stereotypical for their gender role. In a sample of 101 infants, researchers found that boys and girls were more likely to engage in independent play with gender-typed toys that corresponded to their assigned gender. In fact, infants showed a stronger preference for stereotypical toys with increase of age—the oldest group being age 24 to 32 months. Zosuls, Ruble, and Tamis-LeMonda (2014) found that children that had higher levels of gender-category knowledge was related to increase play with gender-typed toys. In specific, perception of gender as a dichotomous variable, as well as the categories for each gender, were crucial to the display of stereotyped play. Moreover, this ability to perceive gender as a dichotomous variable has been shown to develop in children as early as age 2.5 years (Fagot, Leinbach, & Hagan, 1986). This dichotomy emerges as a reaction to the cultural meaning we give our sex organs and the implications these have on how we define gender schemas (Fausto-Sterling, 2000).

Associations between gender roles and colors can have an effect on aptitude. Boys can become averse of colors, objects, or concepts associated with female gender roles. Mulvey, Miller, and Rizzardi (2017) studied younger (M = 5.06 years) and older (M = 9.39 years) children's engineering aptitude and attitudes. They found that using pastel-colored materials predicted lower engineering aptitude in younger boys, who had significant lower aptitude than other young boys exposed to primary-colored materials. Nevertheless, this did not affect older boys nor girls' performance. This suggests that the association between pastel colors and feminine objects dissuaded the boys from potential higher engineering aptitude as a result of associating pastel colors with female gender roles, which are perceived as undesirable. Additionally, family context must be taken into consideration when examining the acquisition of gender roles in infants. A study by Endendijk et al. (2013) found that parental gender stereotypes predicted children's gender stereotypes in a sample of 355 three-year-old children, their one-year-old siblings, and their parents. Specifically, they found that mothers who scored higher in implicit gender stereotypes had daughters that held similar implicit beliefs. Fathers

showed stronger explicit beliefs than the mothers, especially when they had same-gender children as opposed to mixed-gender children.

These studies suggests that children become enculturated about gender roles at a young age. It could be argued that this preferences are inborn; but as with race perception, there is evidence to suggest that these are acquired by their surroundings.

Language Enculturation

Language exposition in utero emphasizes how culture is present and ubiquitous even before we are born (Mampe, Friederici, Christophe, & Wermke, 2009; Mehler et al., 1988; Molnar, Gervain, & Carreiras, 2013; Mürner-Lavanchy et al., 2014). Melody contours of French and German newborns' crying show that they not only incorporate the main intonation patterns of their respective surrounding language but are also able to reproduce these patterns in their own production (Mampe et al., 2009).

Human infants become native-language listeners through a process of perceptual narrowing (Byers-Heinlein & Fennell, 2013). Narrowing is a categorization process that serves social needs. In the language domain, infants build a broad category including the non-native contrasts that are lost and retain tightly tuned categories for native contrasts (Pascalis et al., 2014). Infants are born with a remarkable array of perceptual sensitivities that allow them to detect the basic properties that are common to the world's languages. Infants are initially sensitive to a wide range of language-relevant contrasts. However, as they mature and gain native language experience, their sensitivity to nonnative contrasts declines (Byers-Heinlein & Fennell, 2013). During the first year of life, these sensitivities undergo modification reflecting a tuning to just that phonological information that is needed to map sound to meaning in the native language (Werker & Tees, 1999).

The process of narrowing leaves older infants with a perceptual system that is more finely tuned to the language of their environment but, as a consequence, one that is no longer sensitive to non-native language categories. Pons, Lewkowicz, Soto-Faraco, and Sebastian-Galles (2009) investigated Spanish-learning and English-learning infants' and adults' response to a phonetic intersensory correspondence that is not phonemically relevant in Spanish but that is relevant in English. Spanish-learning infants exhibited evidence of narrowing by age 11 months. Moreover, they showed that this narrowing was maintained into adulthood in that Spanish adults, like the age 11 month Spanish-learning infants, failed to match the audible and visible non-native phonemes.

Characteristics of the social environment maps onto the timing of native language discrimination. Elsabbagh and colleagues (2013) suggested that specific characteristics of social context, measured in their study through differences in the quality of dyadic interactions, exert an influence on the timing of this developmental process. At age 6 months, infants from dyads with high contingency scores appeared to have already narrowed their perceptual abilities to their mother tongue, yielding evidence for early specialization in that they discriminated native but not non-native speech contrasts, whereas infants from dyads with moderate contingency scores continue to discriminate native and non-native contrasts. By age 10 months, the two groups of infants were indistinguishable, both displaying the expected pattern of discrimination for their native but not for the non-native phonetic categories.

Perceptual narrowing has also been observed in perceiving sign language (Krentz & Corina, 2008; Palmer, Fais, Golinkoff, & Werker, 2012; Pascalis et al., 2014). Krentz and Corina (2008) explored whether the bias for linguistic signals in hearing infants is specific to speech or reflects a general bias for all human language, spoken and signed. Their results indicated that 6-month-olds prefer an unfamiliar, visual-gestural language (American Sign Language [ASL]) over nonlinguistic pantomime, but 10-month-olds do not. Hearing infants can discriminate ASL signs at 4 months but not at 14 months. Meanwhile, infants learning ASL are still able to discriminate signs at the later age (Palmer et al., 2012).

THE DEVELOPMENT OF STEREOTYPES AND NEGATIVE BIASES

The developmental intergroup theory of social stereotypes and prejudice (Bigler & Lieben, 2006) describes the normative processes of how children develop stereotypes and prejudice. It proposes how characteristics of in-group and out-group are developed in a child's mind. According to this theory, the characteristics of individuals, in this case race, gender, and language, leads them to select intergroup environments, which further shape their attitudes. The drive and skill to classify individuals by their salient dimension leads to the development of stereotypes and prejudices concerning salient social groups, which is maintained by the process of categorization. The development of stereotypes and prejudices is explained as follows: when encountered with an unfamiliar individual, the child associates stereotype attributes to the person present. If the person reinforces said stereotypes this furthers strengthens the development of prejudice and stereotypes. If not, the individual either applies stereotype filters to the person present and further strengthen the development of stereotypes and prejudice; or the individual could process the individual as a subtype, which leads to the differentiation and elaboration of the stereotype.

This theory and our research suggests that children could be developing stereotypes and prejudices early on in life. The following studies give us insights into how early we see these processes leading to in-group preference and/or negative biases against outgroups.

The Development of Racial Attitudes

The recognition of one's own race might lead to implicit and explicit racial biases that develop naturally as a consequence of infant's perceptual narrowing. Implicit and explicit racial biases have been found in preschool children. Quian, Heyman, Quinn, Messi, Fu, and Lee (2015) used a new measure based on the Implicit Association Test (IAT) called Implicit Racial Bias Test (IRBT). They found that children age 3 to 5 years had implicit and explicit racial bias in favor of their own race in Chinese and Cameroonian samples. Biases against other-race faces can also be seen in the way infants associate certain musical emotional valence to their own-race versus other-race face. It has been shown that infants as young as 9 months tend to associate happy music with their own-race faces and sad music to other-race faces (Xiao et al., 2017). However, it is important to note that infants age 3 to 6 months did not associate music with emotional valence to their own- and other-race faces, which suggests infants are not born with racial bias, rather it is developed in the first few months of life.

Interestingly, biracial infants differed in their acquisition of own-race bias from their mono racial peers. Gaither, Pauker, and Johnson (2012) examined own-race face perception in biracial and mono racial infants. They recruited age 3 month Asian, White, and biracial (White-Asian) infants that had been exposed to Asians, Whites, and Latinos. The researchers tracked the infant's eye movement when they were exposed to photographs of 10 women (five White and five Asian) and recorded the looking times and scanning patterns. Additionally, they explored the amount of time biracial infants were exposed to their Asian parent over their White parent and found that the majority of infants in their sample tended to be more exposed to their Asian parent. These findings suggest that mono racial White and Asian infants with exposure to diversity did not seem to develop other-race effect by age 3 months. This finding suggests that other-race effect develops earlier for infants from more racially homogeneous environments. The authors speculate that biracial infants have a better ability of processing faces than mono racial infants because of their exposure to two different races at home thus learning about faces in a different way than monoracial infants.

Xiao et al. (2014) found that implicit bias could be reversed in children between age 4 and 6 years. The children in this study were all given racially ambiguous Chinese and African faces to label as angry or happy. They showed implicit racial bias by the end of this first phase. Furthermore, children were more likely to categorize happy faces with their own race (Chinese), and angry faces with the other race (African). In the second phase, one group of children were taught to individuate African (other-race) faces and the second group were given a training on differentiating Chinese (own-race) faces. Researchers then readministered the test, and the group that were taught to individuate African faces showed less implicit racial bias than the second group who did not show a reduction in implicit racial bias.

These biases seen in children have translated into measurable behavior. For example, racism has been observed in 3- to 5-year-olds. Feagin and Van Ausdale (2001) developed a research protocol aimed at the discovery of how children themselves perpetuated racial and ethnic patterns, away from the prying eyes and controlling activities of adults. Findings showed that these children often held a solid and applied understanding of the dynamics of race. She observed behavior that clearly used race as a tool to isolate and hurt other children. At preschool age, children know how to use racial materials such as hurtful epithets learned from other sources.

In sum, these studies suggest that exposure to a diversity of races from an early age could reduce the perceptual narrowing that we argue is related to the formation of stereotypes and prejudices from the perspective of the developmental intergroup theory. This is essential given the fact that racist behaviors can be seen in children's first years of life as suggested by Van Ausdale (2001).

The Development of Gender Role Attitudes

The child's ability to recognize and discriminate gender roles can affect the perceptions of the strengths and weaknesses of their own and others' gender. Eccles, Jacobs, and Harold (1990) propose that gender-role stereotypes also influence a parent's perception of his or her child's ability to perform in various activities and skills. Furthermore, they suggest influence caretakers have on their children could affect the children's confidence in their abilities, interests, self- and task perceptions, and the effort the child devotes to developing certain skills due to their gender role.

Furthermore, Coyne, Linder, Rasmussen, Nelson, and Birkbeck (2016) in a sample of 198 three- to six-year-old children and their parents found that girls who had a high level of engagement to Disney princesses would display increased female gender-stereotypical behaviors even when controlling for the gender-stereotypical behavior pre-Disney princess exposure. Suggesting that gender-role stereotypes as a function of cultural transmission are established are established early on in life.

The studies presented suggest that children are not only differentiating among gender roles but are also acquiring stereotypes that may influence their attitudes toward genders.

The Development of Language Attitudes

Spoken language is an identifying feature of members of a national or cultural group, and any listener's attitude toward members particular groups should generalize to the language they use. Evaluational reactions to a spoken language should be similar to those prompted by interaction with individuals who are perceived as members of the group that uses it; hearing the language is likely to arouse generalized or stereotyped in-group and out-group biases based on language use (Lambert, Hodgson, Gardner, & Fillenbaum, 1960).

A separate experiment conducted by Mehler and colleagues (1988) found that native language holds a special status for infants. Children as young as age 6 months- show a preference for their own language, proven by the change in their behaviors and reactions toward native versus non-native language stimuli. Their study included forty 4-day-old full-term infants from French monolingual families. The infants were exposed to a tape recording of a woman recounting the same events in French and Russian. A sterilized blind nipple mounted on an adjustable mechanical arm and connected to a pressure transducer was used to record the infants' sucking responses. Researchers found that sucking rates were significantly higher for infants listening to French than to Russian. During the second phase the RF group, increased sucking when exposed to French, their preferred language (Mehler et al., 1988).

Language bias or preference does not limit itself to a preference for native language. A preference to pay more attention to stimulus provided in a native accent was also suggested by Kitamura, Panneton, and Best (2013) when their study revealed that infants are capable of distinguishing accents and prefer their native accent. Three-month-old Australian infants exposed to Australian and American English listened significantly longer to Australian English. When exposed to Australian versus South African English, 6-month-old infants listened longer to utterances in Australian English than they did to utterances in South African English.

Although a preference for own language does not guarantee stereotypic or prejudicial attitudes toward other languages, it does give us insight into the possible biases that could develop from birth. Nevertheless, according to the developmental intergroup theory, these biases could lead to stereotypical and prejudicial attitudes toward people who speak languages other than your own.

THE NEED FOR MORE INCLUSIVE EARLY ENVIRONMENTS

Humans are predisposed to become cultural beings through enculturation within a familiar cultural context. The literature reviewed suggests that children become enculturated as early as prenatally, which is influenced by their parents, caregivers, and significant others. Preferences for what is familiar is expressed early on by differentiating between us and "the other." This type

of socialization is increasingly becoming problematic. The fact that we live in a world where migration of large number of groups becomes normative as wars, economic inequality, natural disasters, religious, and political persecutions force people to migrate. As of 2013, the leading country with the highest number of immigrants was the United States (World Atlas, 2017). These massive migrations creates the emergence of inevitable multicultural contexts throughout the United States.

BECOMING A TOLERANT MULTICULTURAL SOCIETY

The intergroup contact hypothesis proposed by Gordon Allport (1954) holds that positive effects of intergroup contact occur only in situations marked by four key conditions: equal group status within the situation, common goals, intergroup cooperation, and the support of authorities, law, or custom, meanwhile research adds that the contact situation must have a "friendship potential" (Pettigrew, 1998). Nevertheless, though this theory sets a foundation for prejudice reduction, Pettigrew (1998) points out four problems that led to the proposition of four processes of change that attends the how and why the change occurs through intergroup contact, which include learning about the outgroup, changing behavior, generating affective ties, and in-group reappraisal. Ultimately it is suggested that individual differences and societal norms shape intergroup contact effects, including racial segregation. Exposing human beings to other races other than theirs, roles that are not necessarily assigned to their gender, and non-native languages early on in life under certain key conditions might lead to the reduction of prejudice and discrimination and the development of a tolerant multicultural society.

Race Prejudice Reduction

Reduce Racial Segregation

Residential segregation is observed within metropolitan areas in the United States separately for the four major racial ethnic minority groups (American Indians and Alaska Natives, Asians and Pacific Islanders, Blacks/African Americans, and Hispanics/Latinos) (Logan & Stults, 2011). Gaias, Gal, Abry, Taylor, and Granger (2018) investigated the associations among exposure to diversity (people and materials) in preschool classrooms and later cross-race friendships and racial bias in a sample of 670 children, whose preschool classrooms were observed when the children were age 54 months. Among their findings, they underline "the role that preschool classrooms can play in improving intergroup attitudes in young children and has important implications for how early care providers can promote positive inclusion outcomes" (p.). They suggest that "exposure to diversity in the preschool classroom had longitudinal implications for racial bias and cross-race friendship across childhood" (p.). Moreover, their results "provided evidence consistent with previous longitudinal research demonstrating that cross-race friendship predicts decreased racial bias" (p.). Nevertheless, they clarify that, "diversity in the preschool classroom itself may not be sufficient to reduce bias, but diverse classrooms can provide ideal opportunities to establish meaningful intergroup contact through friendships which, in turn, have a long-term impact on reduction of bias" (p.). Therefore, if we advocate for multiracial microsettings particularly

schools and residential communities, parents and children would come in contact with different racial groups on a daily basis, at the time in which many children enroll in day care and/or begin their formal education.

Exposure to Other Cultures

Bellini, Pereda, Cordero, and Suarez-Morales (2016) conducted a pilot classroom intervention, which exposed preschool children to different cultures and considered the intervention's influence on racial attitudes. Three- to 5-year-olds were randomly assigned to the experimental condition, multicultural-themed lessons, or the control condition, animal-themed lessons. As expected, the results indicated significant changes in outgroup attitudes from pre- to postintervention in the multicultural group when compared to attitudes in the control group. Their findings suggest that children in the multicultural group demonstrated improved outgroup bias as a result of the intervention when compared to children in the control group. Ultimately, they emphasize that, "attitudes and biases towards others may be influenced through early education and increased awareness" (p. 182). Although racial desegregation itself is not the sole solution, supporting multiracial settings under specific key conditions proposed by the intergroup contact theory may be an important first step to expose children because their birth to other people of different races and cultures and encourage them to cultivate multiracial friendships.

Gender Prejudice Reduction

Multiple Classification Skills

Bigler and Liben (1992) conducted a study that mainly aimed to evaluate the hypothesized importance of multiple classification skill for gender stereotyping by providing 75 White children with training in multiple classification in an experimental paradigm. The participants were assigned to (1) multiple classification training using nonsocial stimuli, (2) multiple classification training using social stimuli, (3) a rule training intervention, or (4) a control intervention. Their findings emphasize that, "multiple classification skills play an important role in children's gender attitudes and the processing of counterstereotypic information" (p. 1362). Additionally:

> children who had acquired multiple classification skills via training with social stimuli and those children trained on rules for occupational sorting showed significantly more egalitarian responding on a subsequent measure of gender stereotyping and superior memory for counterstereotypic information embedded in stories. (p. 1360)

Moreover, "children who had acquired multiple classification skill via training with nonsocial stimuli showed superior memory for counterstereotypic information, despite demonstrating no greater flexibility on the gender stereotyping measure" (p. 1361). Therefore, this results suggest the need for parents and teachers to take into consideration children's cognitive abilities at an early stage in their life when they are beginning to classify gender roles.

Creating Gender Inclusive Environments

According to gender schema theory, the society influences children's gender conceptions, consequently making schools a source of gender stereotyping where they learn which attributes are to be linked with their own sex. Hilliard and Liben (2010) tested predictions derived from developmental intergroup theory concerning the impact of environmental qualities on the development of stereotypes and prejudices. Therefore, to address these questions, 57 children ranging in age from 3 years 1 month to 5 years 6 months were studied over a 2-week period under one of two gender salience conditions. In the low-salience condition, children continued to experience a preschool environment in which the teacher avoided making gender explicit . In the high-salience condition, children experienced a preschool environment in which the teacher highlighted gender by using gender-specific language and by using gender-based organization in the classroom. Their findings suggest that, "children in the high- (but not low-) salience condition showed significantly increased gender stereotypes, less positive ratings of other-sex peers, and decreased play with other-sex peers" (p. 1787). Nevertheless, "children's own activity and occupational preferences, however, remained unaffected." Therefore, providing a gender low-salient environment at an early age and at school is important, especially when developing cognitive abilities such as language and the ability to classify.

Parental gender stereotypes also predicted children's gender (Endendijk et al., 2013), and gender-role stereotypes influence a parent's perception of his or her child's ability to perform in various activities and skills (Eccles et al., 1990). Caregivers are the primary agents of children's gender socialization and may provide their children at an early age a safe and nurturing environment to explore gender and gender expression (National Center on Parent Family and Community Engagement, n.d). Parents' involvement in promoting gender-inclusive environments and gender-neutral roles in early stages in their children's lives as a step for gender prejudice reduction.

In sum, these gender-inclusive environments may be a stepping stone to teaching our children at an early age the flexibility of gender roles in an increasingly multicultural society and the importance of tolerance, especially if parents are unaware of their gender stereotypes. Additionally we underline the importance of allowing children to discuss and become exposed since their infancy to different gender roles of the different cultures, regardless of their gender, as a path to become tolerant, which should be the main goal of a multicultural world.

Language Prejudice Reduction

Learning Various Languages as Early as Possible

We propose, that residential, school, and language integration might lead to communities that are more tolerant and accepting of diversity. Moreover, findings presented in this article point to that infants become native-language listeners through a process of perceptual narrowing and retain tightly tuned categories for native contrasts. Therefore, the process of narrowing leaves older infants with a perceptual system that is more finely tuned to the language of their environment but, as a consequence, one that is no longer sensitive to non-native language categories. We advocate for the Two-Way Immersion (TWI) programs that provide a crucial example and successful model for all students to learn at least two languages. Research on TWI

programs has consistently shown the positive social and academic achievement outcomes for all TWI students (De Jong & Howard, 2009). Moreover, Genesee and Gándara (1999) examine alternative forms of bilingual education drawn from two different national settings—Canada and the United States—that have significant implications for intergroup relationships and the reduction of prejudice. Their findings suggest that, "Canadian and U.S. bilingual education reveals positive changes in domains related to intergroup attitudes, identity/self-esteem, language use, and in some cases affiliation and contact" (p. 680). Outcomes that may be favorable in a multicultural context.

CONCLUSION

Enculturation underlies the development of perceptual familiarity and preference, the development of in-group and out-group biases, for example, regarding race, gender, and language from an early age. Multicultural countries and increasing globalization raise the chances of being exposed to cultures different from the ones we have been taught. This encounter between what is learned early on and what we are increasingly being exposed to may give rise to a climate of prejudice and stereotyping, which can possibly lead to prejudice, intolerance, and ultimately discrimination. Wars have been waged based on ethnic cleansing, religious persecution, and the role of women in society, among other cultural values. Perhaps we might look into the first years of life as the place to start forging a new generation not only more tolerant of cultural differences but perhaps thriving in such differences.

REFERENCES

Allport, G. W. (1954). The nature of prejudice. Cambridge/Reading,MA: AddisonWesley.

Bellini, S., Pereda, V., Cordero, N., & Suarez-Morales, L. (2016). Developing multicultural awareness in preschool children: A pilot intervention. *Open Journal of Social Sciences*, *4*(07), 182–189.

Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological review*, *88*(4), 354.

Bigler, R. S., & Liben, L. S. (1992). Cognitive mechanisms in children's gender stereotyping: Theoretical and educational implications of a cognitive-based intervention. *Child Development*, *63*(6), 1351–1363.

Bigler, R. S., & Liben, L. S. (2006). A developmental intergroup theory of social stereotypes and prejudice. In R. V. Kail (Ed.), *Advances in child development and behavior* (Vol. 34, pp. 39–89). San Diego: Elsevier.

Byers-Heinlein, K., & Fennell, C. T. (2013). Perceptual narrowing in the context of increased variation: Insights from bilingual infants. *Developmental Psychobiology*, *56*(2), 274–291. doi:10.1002/dev.21167

Bigler, R. S., & Liben, L. S. (2006). A developmental intergroup theory of social stereotypes and prejudice. In Advances in child development and behavior, (34), 39–89).

Coyne, S. M., Linder, J. R., Rasmussen, E. E., Nelson, D. A., & Birkbeck, V. (2016). Pretty as a princess: Longitudinal effects of engagement with Disney princesses on gender stereotypes, body esteem, and prosocial behavior in children. *Child Development*, *87*(6), 1909–1925.

De Jong, E., & Howard, E. (2009). Integration in two-way immersion education: Equalizing linguistic benefits for all students. *International Journal of Bilingual Education and Bilingualism*, *12*(1), 81–99.

Eccles, J. S., Jacobs, J. E., & Harold, R. D. (1990). Gender role stereotypes, expectancy effects, and parents' socialization of gender differences. *Journal of Social Issues*, *46*(2), 183–201.

Elsabbagh, M., Hohenberger, A., Campos, R., Herwegen, J. V., Serres, J., Schonen, S. D., & Karmiloff-Smith, A. (2013). Narrowing perceptual sensitivity to the native language in infancy: Exogenous influences on developmental timing. *Behavioral Sciences*, *3*(1), 120–132. doi:10.3390/bs3010120

Endendijk, J. J., Groeneveld, M. G., Van Berkel, S. R., Hallers-Haalboom, E. T., Mesman, J., & Bakermans-Kranenburg, M. J. (2013). Gender stereotypes in the family context: Mothers, fathers, and siblings. *Sex Roles*, *68*(9–10), 577–590.

Fagot, B. I., Leinbach, M. D., & Hagan, R. (1986). Gender labeling and the adoption of sex-typed behaviors. *Developmental Psychology*, *22*(4), 440.

Fausto-Sterling, A. (2000). *Sexing the body: Gender politics and the construction of sexuality*. Basic Books.

Fausto-Sterling, A. (2012). The dynamic development of gender variability. *Journal of Homosexuality*, *59*(3), 398–421.

Fausto-Sterling, A., Coll, C. G., & Lamarre, M. (2012). Sexing the baby: Part 2 applying dynamic systems theory to the emergences of sex-related differences in infants and toddlers. *Social Science & Medicine*, *74*(11), 1693–1702.

Feagin, J. R., & Van Ausdale, D. (2001). The first R: How children learn race and racism. Rowman & Littlefield Publishers.

Gaias, L. M., Gal, D. E., Abry, T., Taylor, M., & Granger, K. L. (2018). Diversity exposure in preschool: Longitudinal implications for cross-race friendships and racial bias. Journal of Applied Developmental Psychology. https://doi.org/10.1016/j.appdev.2018.02.005

Gaither, S. E., Pauker, K., & Johnson, S. P. (2012). Biracial and monoracial infant own-race face perception: An eye tracking study. *Developmental Science*, *15*(6), 775–782.

Gender. (n. d.). Retrieved October 18, 2017, from http://www.who.int/gender-equity-rights/understanding/gender-definition/en/

Genesee, F., & Gándara, P. (1999). Bilingual education programs: A cross-national perspective. *Journal of Social Issues*, *55*(4), 665–685.

Helms, J. E., Jernigan, M., & Mascher, J. (2005). The meaning of race in psychology and how to change it: A methodological perspective. *American Psychologist*, *60*(1), 27.

Herskovits, M. J. (1949). Man and his works; the science of cultural anthropology. Oxford, England: Alfred A. Knopf.

Hilliard, L. J., & Liben, L. S. (2010). Differing levels of gender salience in preschool classrooms: Effects on children's gender attitudes and intergroup bias. *Child Development*, *81*(6), 1787–1798.

Qian, M. K., Heyman, G. D., Quinn, P. C., Messi, F. A., Fu, G., & Lee, K. (2016). Implicit racial biases in preschool children and adults from Asia and Africa. *Child development*, *87*(1), 285–296.

Kim, B. S., & Abreu, J. M. (2001). Acculturation measurement. *Handbook of Multicultural Counseling*, *2*, 394–424.

Kitamura, C., Panneton, R., & Best, C. T. (2013). The development of language constancy: Attention to native versus nonnative accents. *Child Development*, *84*(5), 1686–1700. doi:10.1111/cdev.12068. New York City, NY.

Krentz, U. C., & Corina, D. P. (2008). Preference for language in early infancy: The human language bias is not speech specific. *Developmental Science*, *11*(1), 1–9. doi:10.1111/j.1467-7687.2007.00652.x

Lambert, W. E., Hodgson, R. C., Gardner, R. C., & Fillenbaum, S. (1960). Evaluational reactions to spoken languages. *Journal of Abnormal & Social Psychology*, *60*(1), 44–51.

Logan, J. R., & Stults, B. (2011). The persistence of segregation in the metropolis: New findings from the 2010 census. Census brief prepared for Project US2010. Retreived from https://s4.ad.brown.edu/Projects/Diversity/Data/Report/report2.pdf

Kelly, D. J., Quinn, P. C., Slater, A. M., Lee, K., Ge, L., & Pascalis, O. (2007). The other-race effect develops during infancy: Evidence of perceptual narrowing. *Psychological Science*, 18(12), 1084–1089.

Mahn, H. (2012). Vygotsky's analysis of children's meaning making processes. *International Journal of Educational Psychology*, *1*(2), 100–126.

Mampe, B., Friederici, A., Christophe, A., & Wermke, K. (2009). Newborns' cry melody is shaped by their native language. *Current Biology*, *19*, 1994–1997. doi:10.1016/j.cub.2009.09.064

Mehler, J., Jusczyk, P., Lambertz, G., Halsted, N., Bertoncini, J., & Amiel-Tison, C. (1988). A precursor of language acquisition in young infants. *Cognition*, *29*, 143–178. doi:10.1016/0010-0277(88)90035-2

Miller, P. J., & Mangelsdorf, S. C. (2005). Developing selves are meaning-making selves: Recouping the social in self-development. *New Directions for Child and Adolescent Development*, *2005*(109), 51–59.

Molnar, M., Gervain, J., & Carreiras, M. (2013). Within-rhythm class native language discrimination abilities of basque-spanish monolingual and bilingual infants at 3.5 months of age. *Infancy*, *19*(3), 326–337. doi:10.1111/infa.12041

Mulvey, K. L., Miller, B., & Rizzardi, V. (2017). Gender and engineering aptitude: Is the color of science, technology, engineering, and math materials related to children's performance? *Journal of Experimental Child Psychology*, *160*, 119–126.

Mürner-Lavanchy, I., Steinlin, M., Kiefer, C., Weisstanner, C., Ritter, B. C., Perrig, W., & Everts, R. (2014). Delayed development of neural language organization in very preterm born children. *Developmental Neuropsychology*, *39*(7), 529–542. doi:10.1080/87565641.2014.959173

National Center on Parent Family and Community Engagement. (n.d.). Healthy Gender Development and Young Children. Retrieved from https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/healthy-gender-development.pdf

Palmer, S. B., Fais, L., Golinkoff, R. M., & Werker, J. F. (2012). Perceptual narrowing of linguistic sign occurs in the first year of life. *Child Development*, *83*, 543–553. doi:10.1111/j.1467-8624.201101715.x

Pascalis, O., Loevenbruck, H., Quinn, P. C., Kandel, S., Tanaka, J. W., & Lee, K. (2014). On the links among face processing, language processing, and narrowing during development. *Child Development Perspectives*, *8*(2), 65–70. doi:10.1111/cdep.12064

Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, *49*(1), 65–85.

Pons, F., Lewkowicz, D. J., Soto-Faraco, S., & Sebastian-Galles, N. (2009). Narrowing of intersensory speech perception in infancy. *PNAS*, *106*(26), 10598–10602.

Scott, L. S., Pascalis, O., & Nelson, C. A. (2007). A domain-general theory of the development of perceptual discrimination. *Current directions in psychological science*, *16*(4), 197–201.

Scott, L. S., & Monesson, A. (2009). The origin of biases in face perception. *Psychological Science*, *20*(6), 676–680.

Todd, B. K., Barry, J. A., and Thommessen, S. A. O. (2017) Preferences for 'Gender-typed' Toys in Boys and Girls Aged 9 to 32 Months. Inf Child Dev, 26: e1986. doi: 10.1002/icd.1986.

Vygotsky, L. S. (1987). *The collected works of LS Vygotsky: Volume 1: Problems of general psychology, including the volume thinking and speech* (Vol. 1). Springer Science & Business Media, New York.

Wade, P. (2010). The Meaning of 'Race' and 'Ethnicity.' Race and ethnicity in Latin America. (pp. 4–23) London, UK: Pluto press.

Werker, J. F., & Tees, R. C. (1999). Influences on infant speech processing: Toward a new synthesis. *Annual Review of Psychology*, *50*(1), 509–535. doi:10.1146/annurev.psych.50.1.509

Whiting, B. B. (1980). Culture and social behavior: A model for the development of social behavior. *Ethos*, *8*(2), 95–116. doi:10.1525/eth.1980.8.2.02a00010

World Atlas. (2017). *30 Countries hosting the most immigrants*. Retrieved from http://www.worldatlas.com/articles/highest-immigrant-population-in-the-world.html

Xiao, N. G., Quinn, P. C., Liu, S., Ge, L., Pascalis, O., & Lee, K. (2017). Older but not younger infants associate own-race faces with happy music and other-race faces with sad music. *Developmental Science*.

Xiao, W. S., Fu, G., Quinn, P. C., Qin, J., Tanaka, J. W., Pascalis, O., & Lee, K. (2014). Individuation training with other-race faces reduces preschoolers' implicit racial bias: A link between perceptual and social representation of faces in children. *Developmental Science*. doi:10.1111/desc.12241

Zosuls, K. M., Ruble, D. N., & Tamis-LeMonda, C. S. (2014). Self-socialization of gender in African American, dominican immigrant, and Mexican immigrant toddlers. *Child Development*, *85*(6), 2202–2217.