



Universiteit
Leiden
The Netherlands

Video observations of maternal sensitivity in urban and rural Iran

Asanjarani, F.; Davoud Abadi, F.; Ghomi, M.; Mesman, J.

Citation

Asanjarani, F., Davoud Abadi, F., Ghomi, M., & Mesman, J. (2021). Video observations of maternal sensitivity in urban and rural Iran. *Attachment & Human Development*, 23(2), 164-175.
doi:10.1080/14616734.2020.1828532

Version: Publisher's Version

License: [Creative Commons CC BY-NC-ND 4.0 license](https://creativecommons.org/licenses/by-nc-nd/4.0/)

Downloaded from: <https://hdl.handle.net/1887/138861>

Note: To cite this publication please use the final published version (if applicable).



Video observations of maternal sensitivity in urban and Rural Iran: an exploratory study

Faramarz Asanjarani, Faezeh Davoud Abadi, Milad Ghomi, Mi-Lan Woudstra & Judi Mesman

To cite this article: Faramarz Asanjarani, Faezeh Davoud Abadi, Milad Ghomi, Mi-Lan Woudstra & Judi Mesman (2021) Video observations of maternal sensitivity in urban and Rural Iran: an exploratory study, *Attachment & Human Development*, 23:2, 164-175, DOI: [10.1080/14616734.2020.1828532](https://doi.org/10.1080/14616734.2020.1828532)

To link to this article: <https://doi.org/10.1080/14616734.2020.1828532>



© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 05 Oct 2020.



Submit your article to this journal [↗](#)



Article views: 645



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 4 View citing articles [↗](#)



Video observations of maternal sensitivity in urban and Rural Iran: an exploratory study

Faramarz Asanjarani^a, Faezeh Davoud Abadi^b, Milad Ghomi^c, Mi-Lan Woudstra^d and Judi Mesman^d

^aDepartment of Counseling, Faculty of Education and Psychology, University of Isfahan, Isfahan, Iran;

^bUniversity of Azad, Tehran, Iran; ^cFreelance Researcher, Arak University, Arak, Iran; ^dCentre for Child and Family Studies, Leiden University, Leiden, The Netherlands

ABSTRACT

Aiming to contribute to the cross-cultural understanding of the nature and meaning of the sensitivity construct, this exploratory study observed 26 mothers and their 18–60-month-old children in rural (15) and urban Iran (11) for 30 minutes of free interaction in the home context. This first study to use video observations of parenting in Iran showed that mothers were generally comfortable with being filmed, intercoder reliability could be established for the Ainsworth sensitivity scale, and the full range of sensitivity scores was observed. Qualitative descriptions of representative interactions are provided to illustrate stylistic differences between rural and urban mothers. Urban mothers tended to engage in verbal interactions centered around toys, whereas rural mothers and children often engaged in chores related to the family's livelihoods such as tending animals, and generally talked less. Both sensitivity and insensitivity were observed in playful and chore-based activities.

KEYWORDS

maternal sensitivity; Iran;
rural versus urban;
observation

Introduction

One of attachment theory's central hypotheses concerns the universality of several caregiver-child bonding mechanisms. Building on ethological, ethnographic, and systematic observational work, Furman & Buhrmester (2009), John Bowlby (1969, 1982), Mary Ainsworth (1968) and colleagues (Ainsworth et al., 1974) state that the propensity to become attached to one or more caregivers is a universal aspect of early childhood development, and that the quality of this attachment depends on the quality of caregiving. More specifically, the sensitivity hypothesis contends that parental sensitive responsiveness should be beneficial to the development of secure attachment and its positive developmental outcomes in children (Mesman et al., 2016). Recent work suggests that sensitivity defined as the ability of a parent to respond to child signals in a child-centered manner, can indeed be observed in very different cultural contexts, albeit with cultural variations in its behavioral manifestations (Mesman et al., 2018). Nevertheless, there is still a glaring lack of studies systematically observing and coding parent-child interactions in

CONTACT Judi Mesman  mesmanj@fsw.leidenuniv.nl  Centre for Child and Family Studies, Leiden University, PO Box 9555, 2300 RB, Leiden, The Netherlands

© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

populations outside of urban North America or Western Europe aimed at assessing parental sensitivity and the potential culture-specific forms that it may take.

There is progress regarding attachment research coverage of (urban) Latin America (Posada et al., 2016) and East Asia (e.g., Jin et al., 2012), and there are some relevant studies in Africa (e.g., Tomlinson et al., 2005), but a region that has to date been mostly neglected is the Middle East. This is an important gap in the literature, given the distinct social-cultural context of this region characterized by the Islamic faith. A notable exception to the lack of studies in the Islamic Middle East are those conducted among the Arab minority in Israel, (e.g., Zreik et al., 2017). However, Iran is not an Arab country (but Persian) where Shia rather than Sunni Islam is practiced, and is generally more isolationist than other countries in the Middle Eastern region. Thus, the results from Middle-Eastern Arab countries cannot be automatically generalized to Iranian culture. The current study aims to explore the nature of sensitivity in rural and urban Iran through quantitative and qualitative observations of mother-child interactions.

The Islamic Republic of Iran is the second-largest country in the Middle East, and one of few non-Arab countries in the region. In terms of population, Iran has one of the highest urban growth rates in the world, but about 25% of its population is still living in rural areas. As shown in several studies, there are significant differences in parenting beliefs and practices between urban and rural areas mostly pointing towards more authoritarian, less sensitive, and less emotionally available parenting styles in rural areas (e.g., Bornstein et al., 2008, 2012; Dwairy & Menshar, 2006; Mesman et al., 2016). This emphasizes the need to consider rural-urban variations in sensitivity as well, especially in a country where the divide in resources between the two regions is traditionally large. Families living in rural Iran often do not have access to (globalized) services and resources with regard to education, healthcare, the job market, and communication that are increasingly common in urban Iran. Through their access to more globalized information streams, families in urban Iran are more exposed to Western norms of parenting than rural families. In addition, the urban lifestyle itself that is related to quite different sociodemographic family circumstances such as fertility rates and livelihoods, than those in rural areas is likely to contribute to differences in parenting styles.

A traditional difference between urban and rural areas in Iran is in fertility rates that used to be much higher in rural than urban regions. However, in recent years, Iranian society has experienced a significant decrease in fertility rate, now at about 1.8 per woman (National population and housing census, 2016). This is partly due to government family planning policies aimed at rural families, where fertility rates have dropped from eight to replacement level, virtually eliminating the traditional rural-urban gap in fertility (Salehi-Isfahani et al., 2010). Similarly, rural-urban disparities in family health have decreased (but have not been eliminated), with improvements in rural infant and maternal mortality rates, and births attended by unskilled personnel (Aghajanian, 1995, 2001). Thus, although some rural-urban differences have decrease in recent years, some significant differences in resource access remain. In addition, there are general lifestyle differences between the two areas in Iran that relate to the different physical and socio-economic contexts. These include the extent to which children participate in livelihood activities such as taking care of livestock (more in rural than urban families), time spent outside (more in rural than urban families), and parental engagement in teaching activities such as reading and counting (more in urban than rural families).

There are only very few studies on parenting in Iran, and most of those are on parenting adolescents and none specifically about sensitive parenting. We discuss two of those studies that may at least serve to characterize common parenting practices in Iran. One such study among urban mothers of middle adolescents suggests that the authoritarian parenting style is normative, especially among poorer and less educated mothers (Assadi et al., 2011). Similarly, corporal punishment is still widely used and endorsed by Iranian parents, with 80% of the urban mothers reporting the use of corporal punishment, seeing such punishment as necessary to raise children, and little awareness of the potential negative effects of this parenting practice (Oveisi et al., 2010).

These findings suggest parenting patterns in Iran that do not appear to be consistent with sensitive parenting that is, in essence, child-centered and (implicit) acknowledgment of children's autonomy (Ainsworth et al., 1974). However, this information is based on very few studies, none of which have used observational measures and are thus subject to potential social desirability effects (i.e., parents answering questions about parenting in ways that fit perceived cultural expectations). Further, because sensitive caregiving is a versatile construct that may be manifested in different ways depending on cultural context (Mesman et al., 2018), and constellations of parenting dimensions appear to differ across cultures (Deater-Deckard et al., 2011), there could be room for sensitivity in the context of predominantly authoritarian parenting practices.

The current study, to the best of our knowledge, represents the first video observation study on sensitivity in Iran. The study explores expressions of sensitivity responsiveness of mothers of young children in urban and rural Iran, and the feasibility of using video methods in a society where the use of video – especially with women – is uncommon.

Method

Sample and procedure

A total of 26 mother–child dyads (11 urban, 15 rural) participated in this study, which took place in the cities of Tehran, Isfahan, and Arak, Sari and Shahrood (urban areas), and in Kalateh, Natanz, Davudabad, Ahangaran, Khondab and Bastam (rural villages from the same regions). Eligible participants were mothers with a child aged between 18 and 60 months, both without notable physical or mental disabilities. For both rural and urban families, we asked local female students and researchers to help us find eligible participants through personal networks, followed by snowball sampling. This means that the first participating mothers suggested or approached other mothers in their networks for the study. The target sample was therefore rather selective, and only four mothers who were approached declined to participate. Mothers received a general explanation about the study and the reason for being videotaped over the phone, and in more detail in person when they agreed to take part in the study. They were assured of confidentiality and the fact that these data will not be shown or uploaded in any public media. Mothers were asked to sign an informed consent form, which included reasons for the study and giving permission to the researcher to use videos for future academic purposes. The researcher also provided contact information in case they would change their mind and did not want their videos to be used for the study. No withdrawal of consent after

participation occurred. Once mothers were on board, they all signed the forms and did not reconsider their decision.

Mothers' age ranged from 21 to 35 years ($M = 28.16$, $SD = 3.88$), children's age ranged from 18 to 60 months ($M = 34.38$, $SD = 11.59$), and families included 1 to 3 children ($M = 1.68$; $SD = 0.63$). About half (56%) of the children were firstborn children, and little under half were female (42%). Only one of the mothers was employed. All children lived with both parents, none with other adult caregivers, and all families considered themselves religious. Comparing the rural and urban families on these demographic variables at a glance (sample sizes too small for statistical testing) did not reveal obvious differences.

Video observation procedure

Videotaping took place at the homes of the participants, either inside ($N = 17$) or outside in the family's yard ($N = 7$, all rural) or a nearby park ($N = 2$, both urban). Filming outside was done because some mothers were reluctant about being filmed inside their homes, due to the fact that family privacy is highly valued in the Iranian culture. The fact that the yard was the place of choice for half of the rural families is probably also due to the fact that children spend most of their time outside in these areas which makes that an easy alternative to filming in the home. Mothers and children were videotaped during 30 minutes of free interaction, after being asked to do something together that they would normally also do together as part of their daily routine. All videos were translated into English by the first author (who is Iranian and has a BA degree in English translation) and were provided in a time-labeled document. The document also included explanations of certain behaviors or statements if the translator felt that this additional information was necessary for understanding the situation or interaction.

Video coding

Maternal sensitivity was coded using the Ainsworth sensitivity scale (1–9), and scores were given for warmth (0–4), physical contact (0–2), verbal expression (0–2), and camera awareness (looking at camera, talking about being filmed, expressing insecurity about being filmed, each 0–2). See the Introduction to this special issue for details on these scales. Further, based on the first viewings of the videos, it was decided to add one more observation scale that assesses to what extent mothers chose chores as the main activity during the free interaction. Chores included household tasks such as washing, cleaning, tidying, sweeping, folding, etc. This scale was added as a number of mothers decided to ask their children to do chores as the main activity for their interaction with their children. This measurement was coded on 3-point scale: 0 = no chores (or only minor brief ones), 1 = some chores (but not as main activity), 2 = many chores (more than half of the video). Coding was done by the last author, who is an expert coder of sensitivity and other aspects of parent–child interactions across cultures. Fifteen videos were double coded (by the fourth and last author) to establish intercoder reliability, which yielded adequate intraclass correlations for all scales: Sensitivity (.76), non-intrusiveness (.76), verbal engagement (.75), physical engagement (.75), and warmth (.70). Overall, coding did not present any problems, and if any doubts about the (cultural) meaning of certain behaviors arose, these were discussed with the first author who is a clinical psychologist from Iran for clarification.

Results

Overall, mothers did seem a little self-conscious at the beginning of videotaping, but the Iranian research team, as well as the Western coder, noted that this decreased quickly and that the use of 30 minutes observation time (rather than shorter) contributed to a more naturalistic end result, especially as the videotaping progressed. This was also evidenced by the observation of camera-related behavior during those 30 minutes. None of the mothers made any comments about being filmed (to the child, bystanders, or the researchers), none expressed insecurities about what to do, and only four mothers looked at the camera more than once or twice. Overall, the impression is that mothers were quickly comfortable with being filmed and behaved quite naturalistically.

Quantitatively, sensitivity scores ranged from 1 to 9 in the rural sample (Figure 1) and from 2 to 9 in the urban sample (Figure 2), showing clear variability. Because of the very small sample sizes (11 and 15) and skewed distributions, statistical tests were not conducted. Mothers in both groups tended to be mostly sensitive, with the rural mothers scoring more in the middle to high range, and the urban mothers more in the high range. Four rural mothers (27% of the rural sample) and 2 urban mother (18% of the urban sample) scored in the insensitive range (scores < 5). Regarding warmth, only 14% of rural mothers scored high (scores 3 or 4), versus 73% of urban mothers. Whereas 27% of rural mothers were scored as showing no warmth (score 0), none of the urban mothers scored 0. Verbal interaction was mostly in the medium range in the rural sample (80% scoring 1 on a 0–2 scale), whereas in the urban sample both medium and high verbal engagement occurred frequently (both at 46%). Finally, physical contact was not that high in either region, with none scoring the maximum of 2, and 47% of rural mothers and 73% of urban mothers showing medium physical contact (score 1).

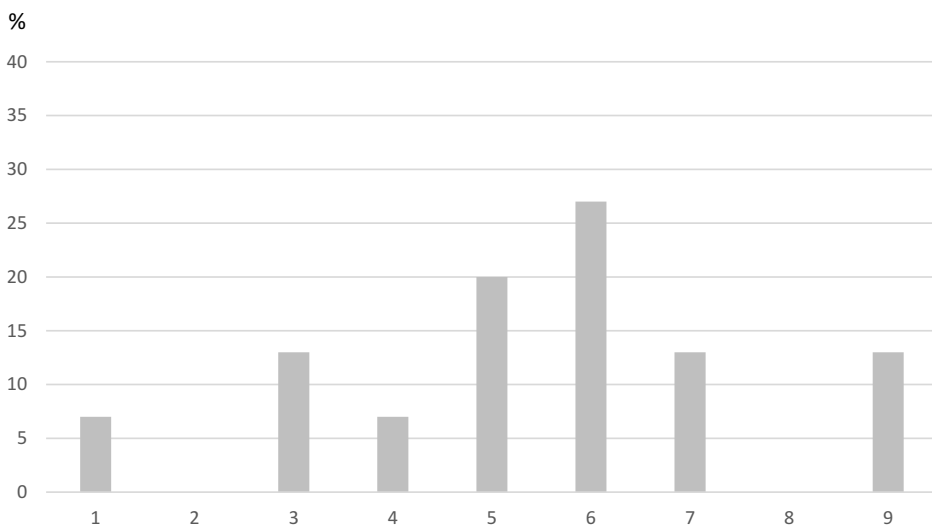


Figure 1. Distribution of Ainsworth sensitivity scores in the rural sample (N = 15).

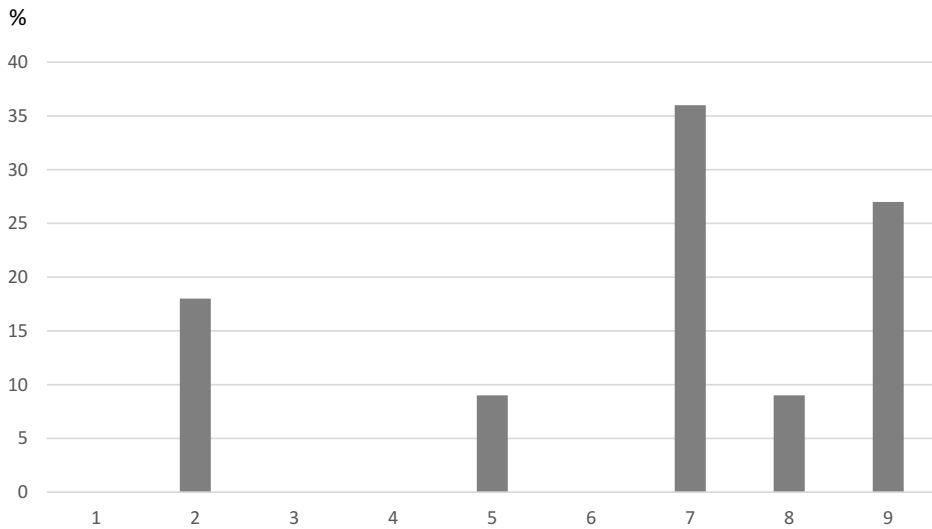


Figure 2. Distribution of Ainsworth sensitivity scores in the urban sample (N = 11).

Qualitatively, the nature of the activities that mothers chose to engage in with their children varied between the two regions. Urban mothers mostly chose (educational) children's games as a way to spend the 30 minutes of observation. In the rural region this was the case for only about half of the mothers, whereas the other half chose to focus on chores for the child for a significant portion of the observation. The chores chosen by the rural mothers were mostly related to livestock management, such as feeding livestock, herding sheep into an enclosure, or cutting chicken's tails. Relevant to the assessment of sensitivity is the extent to which these chores are age appropriate. Sensitive parenting means that signals from the child that these chores are too strenuous would need to be taken seriously by the mother. The eight children who did chores during the videos (7 of them rural) were 19 to 48 months old. The child aged 19 months who did chores was helping his mother feed their sheep. He held the water hose while mother opened the tap, brought hay to put in the trough, and chased animals into the stable. The second youngest child in the "chores group" was 24 months old and he – together with his older brother – helped his mother move the rugs in the living room for her to sweep under. It was clear from the videos that the chores were not too strenuous for the children, and especially the children helping with the animals seemed to really enjoy this task. Consider the following two examples:

A 41-month-old boy helps his mother feed the sheep. When the sheep are eating, the boy gets restless around the sheep. Mother tries to calm him down and tells him to let the sheep eat in peace, but he is overexcited. She then asks him if he would like to help her cut the chicken's tails, to which he responds with obvious enthusiasm. He then sets out to catch a chicken. This is not so easy, and mother instructs him along the way. Then he catches one and brings it to his mother. She holds the chicken while the child carefully cuts its tail with an ease that suggests he has done this before, and is much calmer during the task than he was before.

The mother of a 30-month-old boy asks him to put the water bowl out for the chickens. He does so, but sees that there are no chickens around to drink. Mother tells him to chase the chickens into the enclosure so they can drink. He energetically starts running after the chickens in the yard, and mother gives him a big stick to help him chase the birds. However, it becomes clear that the stick is too big for the boy to handle, and mother quickly replaces it with a much smaller stick for him to use. The boy runs and skips through the yard with his stick yelling 'move move' to the running chickens with a big smile on his face, much like a toddler might in a petting zoo, except that in this case his mother does not try to stop him, but rather encourages him, while he gleefully gets the job done.

It was clear that these (often playful) chores were relevant to the skills that these children would need when they grow up in rural Iran. Some mothers also used the chores for educational purposes, asking the child to count the animals for example. It must be noted that the farm-related chores were all done by boys. Chores performed by girls were related to cleaning up, putting away toys or eating gear. These were not as clearly enjoyable tasks as the ones for boys, but also only took a small amount of time and never dominated the 30-min observation time. Of course, not all chore-based interactions were sensitive. In one rural case, the mother only repeated many directions and instructions over and over, and did not appear to adjust her responses to her child's actions or interests, and seemingly randomly switched her commands from one chore to another which was clearly confusing to the child.

Activities chosen by urban mothers also appeared to be relevant to the development of skills in their children, involving books or puzzles, make-believe play with tea sets, play with dolls and toy cars, and outside interactions on a playground. These interactions looked much like what is commonly seen in video materials from Western countries. Two examples illustrate this:

A 3.5-year-old boy is standing next to a slide in a playground and points up towards the top. Mother follows his gaze and says: "yes, you can climb up there". The boy walks to the stairs, and puts one foot up, but is a little hesitant. Mother encourages him to continue, but when he does not, she holds him and helps him up to the next step and the next, while the boy is looking increasingly confident and smiles. When he is quite far – but not the whole way up, he stops, looks around, and starts to lower his body in an attempt to go down again, but he does not know how. Mother picks him up and then climbs the steps together with him, supporting him the whole time, and encouraging him until he does get to the top with her help, and can actually go down the slide, which he does, while mother praises him.

A mother carries her 3-year-old daughter to the cupboard with toys, opens the door and asks her daughter what she would like to play with. The child picks a toy car, and the mother subtitles her choice: "ah the car!" and then asks her if she wants anything else. The girl thinks for a while, looking at the toys, mother waits for her to make a decision, but when the girl does seem to want anything more, she starts to close the door. Just then the girl changes her mind and says: "I want the doll!" and mother re-opens the cupboard door and asks the girl if she can find the doll herself. The girl finds it and mother says "Yes that one, you are so smart!". Then they sit down on the floor and engage in a game rolling the car back and forth between them.

Not all play-based interactions were sensitive. One urban mother of a four-year-old girl engaged in drawing kept on grabbing the pencil and paper from her daughter to do her own drawing, and then instructed the child to draw exactly what she had drawn in a barrage of commands, interspersed with criticism when the child did it "wrong", leaving

no room for the child's own initiatives. In a way this interaction was more of a chore for the child (doing what mother tells her to do) than a fun game.

In both rural and urban families, eating was a common activity in the videos. Often the mother would ask if the child was hungry, and if the child said yes (which they invariably did), the mother would prepare some food. The quality of these interactions ranged from insensitive to sensitive, with some mothers simply commanding the child to eat and berating them for spilling without any other exchanges, while other mothers would patiently feed the child, pick up signals of the child being ready for the next bite, complimenting them for eating well, and checking whether the child was full and wanted to stop eating.

Regarding the other aspects of maternal behavior that were coded, verbal engagement was quite high in urban mothers, although reciprocal conversations were rare. High verbal engagement mostly meant mother talking a lot, and children just listening or answering with just a few words (yes, no, ok). This could be partly due to the high importance placed on being respectful to your parents, but also to mothers wanting to "show off" their parenting for the camera. High verbal engagement could be sensitive (subtling what the child is doing, asking questions relevant to the child's play, complimenting the child), or insensitive (a series of commands without regard for the child's interests). Although verbal engagement tended to be more common in urban families, a similar pattern of mostly maternal verbal expression rather than back-and-forth conversations was found in rural families. Physical contact between mothers and the children was generally low, which was probably due to both the age of the children (not infants anymore), and the types of activities that tended to be either centered around toys (joint attention) or gross motor activities in a large spatial area (e.g., running around in a yard). Expressions of warmth towards the child tended to be more common in the urban sample. Urban mothers appeared to smile more than rural mothers, and were also prone to giving compliments when the child had done something well (such as making a nice drawing, or completing a puzzle). Rural mothers seemed less likely to use compliments in response to their children's "achievements", although some were observed, for example, in response to putting a feeding tray for the animals in the right place. Physical expressions of warmth such as hugs and kisses were observed in both groups but were rare.

Discussion

The current exploratory study showed that sensitivity can be observed in rural and urban Iran, in that we successfully obtained 30-minute video materials of naturalistic interactions in which mothers and children appeared quite comfortable with being filmed, we achieved intercoder reliability on the Ainsworth sensitivity scale, and found the full range of scores (1–9) in a sample of 26 mothers. Most mothers in both regions were at least (somewhat) sensitive, but there was a pattern of urban mothers having higher scores than the rural mothers, although this could not be tested statistically due to the small sample sizes. The interaction contexts in terms of chosen activities, and the extent of verbal expression and warmth were also quite varied within the samples.

Regarding the qualitative comparison between urban and rural families, some differences in interaction patterns came to light that appears to reflect a more Western

approach to parenting in urban Iran, characterized by high affection, verbal exchange, and playful interaction, as opposed to the more quiet and introverted modes of interaction focused on practical activities found in rural Iran. Globalized urbanization is known to bring certain patterns of originally Western behaviors and lifestyles to non-Western regions (Pizarro et al., 2003). Based on the statistics released on 2013, in urban Iran, 53.29 percents of the population have access to the Internet, which is about 44 million, whereas such exposure is far more limited in rural Iran. In addition, smaller family sizes, and changes in livelihoods that allow for more time to focus on the child in daily life in urban regions may also contribute to changing parenting styles. Interestingly, however, sensitivity as well as insensitivity was observed in both the urban play-based interactions and the rural chore-based interactions. This is consistent with observations by Mary Ainsworth in Uganda, where she noted that even when mothers were not engaged in a child-centered task, such as working in the field with the child in a sling, they still more often than not attended sensitively to the children's signals (Ainsworth, 1967). As has been argued before, sensitivity can be expressed through a range of different modalities and superficial styles of interaction, depending on the cultural context (Mesman et al., 2018). Sensitivity can be shown just as well during a reading game, as during sheep herding, and it can be shown by smiling and talking, or by physical following and facilitating.

The study has some limitations that need to be considered. First, the sample sizes of the two subgroups (urban and rural) were small which limits the generalizability and robustness of the results. The mothers who consented to be videotaped were likely to represent a selective group who were culturally open to new experiences. Future studies could provide more groundwork to overcome such selection effects, for example, by conducting focus group discussions with mothers from a variety of backgrounds to figure out what factors might facilitate recruitment for this type of study. Second, we did not collect information on mothers' education or income levels, which precludes the investigation of socioeconomic factors that could be relevant in comparing rural and urban families. This is an important issue, given that poverty is more common in rural areas in Iran (Khosravinedjad, 2012) and parenting practices in general and sensitivity, in particular, have been shown to vary as a function of affluence (Mesman et al., 2012).

A third limitation is that the videos were only coded by a Western coder who used translations (and for the reliability phase a second Western coder). Although the main coder is an expert observer of caregiver-child interactions with extensive experience with videos from many different cultures, it is always preferable to (also) involve local coders to make sure that certain behaviors are not misinterpreted due to a lack of specific cultural knowledge. However, this limitation was to some extent minimized through intensive communication between the coder and the local researcher when certain behaviors or interactions seemed ambiguous or unclear.

Considering that to our knowledge this study represents the first video observational study of parenting in Iran, it provides a good starting point for further exploration of the themes addressed here as well as new research questions. Sensitive parenting can be observed using video in both rural and urban Iran, which opens up opportunities for uncovering its (culture-specific) predictors and outcomes that were not addressed in this study. To contribute to our understanding of attachment theory's universality hypotheses (Mesman et al., 2016), several avenues of further research would be needed using larger

samples and more elaborate data collection. First, differences in sensitivity levels between urban and rural parents in Iran (or elsewhere for that matter) would be of interest to explore further, as well as potential factors that could explain such differences, including – among other things – family income, livelihoods, parental educational level, family size, social capital, and religiosity. A second valuable course for further research would be to complement observations of parenting with assessments of parental beliefs about parenting goals and practices. This will provide more context for observed parenting patterns and enhance our understanding of the individual and cultural origins of these patterns.

Third, the current study did not assess child outcomes, and the proof of the universality pudding would be to test whether variations in maternal sensitivity in Iranian families predicts positive child outcomes in a similar manner as found in Western populations. It would be particularly important to consider the selection of outcome measures that would capture child competencies and behaviors that are relevant for functioning in very different regions. Finally, future studies would ideally not be limited to mothers, but also take into account the role of fathers and potential other caregivers such as grandparents and older siblings in sensitive caregiving. Salient questions would be whether the levels and manifestations of sensitivity are different between different types of caregivers, and whether they differentially relate to child developmental outcomes.

In conclusion, although exploratory in nature, the current study seems to support the notion of multiple possible styles of sensitive caregiving that are culturally determined but do not necessarily affect the *levels* of sensitivity. The results emphasize that playing a counting game with a child is not inherently more sensitive than cleaning the yard together without much conversation. They serve quite different purposes in terms of the content of socialization efforts that are logically bound to the roles and activities that await children, as they grow older, but are largely independent of the extent to which a caregiver monitors a child's needs and adapts her behavior accordingly. Nevertheless, the qualitatively parenting differences between rural and urban regions in Iran do provoke interesting questions about the way that global cultural influences as well as urban-rural lifestyle disparities may shape within-country differences in parenting practices.

Acknowledgments

The authors would like to thank the participating parents for allowing us to film them and their children and for answering our questions about their daily lives.

Disclosure statement

No potential conflict of interest was reported by the author(s).

References

- Aghajanian, A. (1995). A new direction in population policy and family planning in the Islamic Republic of Iran. *Asia-Pacific Population Journal*, 10(1), 3–20. <https://doi.org/10.18356/371f2549-en>
- Aghajanian, A. (2001). *Family and family changes in Iran*. Department of Sociology Fayetteville Stage University faculty.uncfsu.edu/aaghajanian/papers/iraned2.pdf.

- Ainsworth, M. D., & Bell, S. M. (1968). Attachment, exploration, and separation: A discussion illustrated by the behavior of one-year-olds in a strange situation. In meeting of the Amer. Psychol. Ass., San Francisco.
- Ainsworth, M. D. S. (1967). *Infancy in Uganda: Infant care and the growth of love*. Johns Hopkins University Press.
- Ainsworth, M. D. S., Bell, S. M., & Stayton, D. J. (1974). Infant-mother attachment and social development. In M. P. Richards (Ed.), *The introduction of the child into a social world* (pp. pp. 99–135). Cambridge University Press.
- Assadi, S. M., Smetana, J., Shahmansouri, N., & Mohammadi, M. (2011). Beliefs about parental authority, parenting styles, and parent-adolescent conflict among Iranian mothers of middle adolescents. *International Journal of Behavioral Development*, 35(5), 424–431. <https://doi.org/10.1177/0165025411409121>
- Bornstein, M. H., Putnick, D. L., Heslington, M., Gini, M., Suwalsky, J. T., Venuti, P., ... Zingman de Galperin, C. (2008). Mother-child emotional availability in ecological perspective: Three countries, two regions, two genders. *Developmental Psychology*, 44(3), 666. <https://doi.org/10.1037/0012-1649.44.3.666>
- Bornstein, M. H., Putnick, D. L., Suwalsky, J. T. D., Venuto, P., De Falco, S., Zingman de Galperin, C., ... Heslington Tichovolsky, M. (2012). Emotional relationships in mothers and infants: Culture-common and culture-specific characteristics of dyads from rural and metropolitan settings in Argentina, Italy, and the United States. *Journal of Cross-Cultural Psychology*, 43(2), 171–197. <https://doi.org/doi:10.1177/0022022110388563>
- Bowlby, J. (1969). *Attachment and loss* v. 3 (Vol. 1). Random House.
- Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry*, 52(4), 664.
- Deater-Deckard, K., Lansford, J. E., Malone, P. S., Alampay, L. P., Sorbring, E., Bacchini, D., ... Di Giunta, L. (2011). The association between parental warmth and control in thirteen cultural groups. *Journal of Family Psychology*, 25(5), 790–794. <https://doi.org/10.1037/a0025120>
- Dwairy, M., & Menshar, K. E. (2006). Parenting style, individuation, and mental health of adolescents in Egypt. *Journal of Adolescence*, 29(1), 103–117. <https://doi.org/10.1016/j.adolescence.2005.03.002>
- Furman, W., & Buhrmester, D. (2009). The network of relationships inventory: Behavioral systems version. *International Journal of Behavioral Development*, 33(5), 470–478.
- Jin, M. K., Jacobvitz, D., Hazen, N., & Jung, S. H. (2012). Maternal sensitivity and infant attachment security in Korea: Cross-cultural validation of the strange situation. *Attachment and Human Development*, 14(1), 33–44. <https://doi.org/doi:10.1080/14616734.2012.636656>
- Khosravinedjad, A. (2012). Estimation of poverty indices in Iranian urban and rural Households. *Economic Modeling*, 6(2), 39–60. Retrieved from <https://www.sid.ir/en/journal/ViewPaper.aspx?id=287383>
- Mesman, J., Minter, T., Angged, A., Cissé, I. A., Salali, G. D., & Migliano, A. B. (2018). Universality without uniformity: A culturally inclusive approach to sensitive responsiveness in infant caregiving. *Child Development*, 89(3), 837–850. <https://doi.org/10.1111/cdev.12795>
- Mesman, J., Van IJzendoorn, M., Behrens, H., Carbonell, K., Carcamo, O. A., Cohen-Paraira, R., ... Zreik, G. (2016). Is the ideal mother a sensitive mother? Beliefs about early childhood parenting in mothers across the globe. *International Journal of Behavioral Development*, 40(5), 385–397. <https://doi.org/10.1177/0165025415594030>
- Mesman, J., Van IJzendoorn, M. H., & Bakermans-Kranenburg, M. J. (2012). Unequal in opportunity, equal in process: Parental sensitivity promotes positive child development in ethnic minority families. *Child Development Perspectives*, 6(3), 239–250. <https://doi.org/10.1111/j.1750-8606.2011.00223.x>
- National Population and Housing Census. (2016). Retrieved from https://www.amar.org.ir/Portals/1/census/2016/Iran_Census_2016_Selected_Results.pdf
- Oveisi, S., Ardabili, H. E., Dadds, M. R., Majdzadeh, R., Mohammadkhani, P., Rad, J. A., & Shahrivar, Z. (2010). Primary prevention of parent-child conflict and abuse in Iranian mothers: A

- randomized-controlled trial. *Child Abuse & Neglect*, 34(3), 206–213. <https://doi.org/10.1016/j.chiabu.2009.05.008>
- Pizarro, R., Wei, L., & Banerjee, T. (2003). Agencies of globalization and third world urban form: A review. *Journal of Planning Literature*, 18(2), 111–130. <https://doi.org/10.1177/0885412203257693>
- Posada, G., Trumbell, J., Noblega, M., Plata, S., Pena, P., Carbonell, O. A., & Lu, T. (2016). Maternal sensitivity and child secure base use in early childhood: Studies in different contexts. *Child Development*, 87(1), 297–311. <https://doi.org/doi:10.1111/cdev.12454>
- Salehi-Isfahani, D., Abbasi-Shavazi, M. J., & Hosseini-Chavoshi, M. (2010). Family planning and fertility decline in rural Iran: The impact of rural health clinics. *Health Economics*, 19(S1), 159–180. <https://doi.org/10.1002/hec.1613>
- Tomlinson, M., Cooper, P., & Murray, L. (2005). The mother–infant relationship and infant attachment in a South-African peri-urban settlement. *Child Development*, 76(5), 1044–1054. <https://doi.org/10.1111/j.1467-8624.2005.00896.x>
- Zreik, G., Oppenheim, D., & Sagi-Schwartz, A. (2017). Infant attachment and maternal sensitivity in the Arab minority in Israel. *Child Development*, 88(4), 1338–1349. <https://doi.org/10.1111/cdev.12692>