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Observing maternal sensitivity in a South African township: an exploratory study into behavioral features using different measures

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ABSTRACT

There is evidence that sensitive responsiveness is manifested differently in varying cultural contexts. This exploratory study examines a sample of 50 South African mothers in the context of a socioeconomically deprived Township, and investigates differences between the Ainsworth sensitivity scale (that does not specify particular manifestations of sensitivity) and the Maternal Behavior Q-sort (MBQ) mini, that assesses a more specified array of behaviors. Results showed a significant but modest association between the two measures, and maternal education was related to the MBQ-mini but not the Ainsworth scores. This pattern of results appears to be due to the higher salience of social games and verbal teaching in the MBQ-mini than in the Ainsworth scale. Such behaviors are less common in South African parenting, where more physical forms of responsiveness seem more typical. A local “South African” sort was developed to capture culture-specific manifestations of sensitivity.

KEYWORDS

Maternal sensitivity; South Africa; culture-sensitive assessment; video observation

As in the rest of the world, the delivery of early parenting support in the South African context relies heavily on assessments of sensitive maternal caregiving (Cooper et al., 2009; Juffer et al., 2016; Nugent et al., 2017). Central to the definition and assessment of maternal sensitivity is responsiveness to infant’s signals (Ainsworth et al., 1974). However, various studies have shown that the modality of responding to infant signals differs from context to context (Kärtner et al., 2010; Lancy & Grove, 2011; Richman et al., 1992), with overt expressions of positive affect and verbal responses being less common in non-Western than Western settings (Dixon et al., 1984; Lancy, 2012; Mesman et al., 2018). Recently, questions have been raised about the universal applicability of some sensitivity measures, given that certain tools specify maternal behaviors more commonly found in Western settings (Dawson, 2018; Mesman et al., 2018). When attempting to assess maternal sensitivity in mothers from a non-Western setting, researchers as well as care professionals need to consider a measure’s “goodness-of-fit” with the cultural context. Failure to do so can result in invalid research conclusions, the development of culturally biased parenting interventions, and even the stigmatizing of non-Western

parenting as problematic. This exploratory study examines maternal sensitivity in the South African Alexandra Township using two different observation instruments, and addresses the applicability of specified behaviours and their rankings in the MBQS-mini to this cultural context.

Several studies have shown that behavioral patterns that characterize high maternal sensitive responsiveness and child secure base behavior are seen as ideal characteristics of the mother–child relationship in various countries (Mesman et al., 2016; Posada et al., 1995, 2016). More specifically, Posada et al. (1995) asked mothers from seven countries to sort the items of the Attachment Q-Sort (AQS) criterion sort to reflect their notion of the “ideal child”, which was found to overlap significantly with the expert notion of the securely attached child. Similarly, Mesman et al. (2016) asked mothers from 26 cultural groups from 15 countries around the globe to sort the items of the Maternal Behavior Q-Sort (MBQS) criterion sort to reflect their notion of the “ideal mother”, which was found to overlap significantly with the expert notion of the sensitively responsive mother in most countries and cultural contexts. In addition, Posada et al. (2016) showed significant associations between maternal behavior (as measured with the MBQS) and child secure-base behavior (measured with the AQS) in four different countries. Nevertheless, the findings of significant overlap between the culturally ideal mother and sensitive parenting in the study by Mesman et al. (2016) did not approximate perfect agreement (correlations ranging from .46 to .76), suggesting that differences in what ideal maternal behavior looks like do exist and could be important to uncover to enhance our understanding of potential culture-specific aspects of the parenting within the attachment framework. In this paper we focus specifically on the cultural context of a South-African Township.

In South Africa, urban townships are under-developed, semi-informal settlements, generally on the outskirts of big cities. The townships are densely populated and house an estimated 22 million people (38% of the urban population) (Mahajan, 2014; Statistics South Africa, 2011b). These townships consist of a hybrid of formal dwellings and informal shacks, with a notable lack of infrastructure and access to quality health care and education (Davie, 2003; Mahajan, 2014; Statistics South Africa, 2011b; Wilson, n.d.). Townships house a disproportionate number (around 60%) of South Africa’s unemployed adults (Mahajan, 2014), and are often found at the top of the list of the country’s most crime ridden areas (Crime Statistics South Africa, 2016). As a country with one of the highest gini co-efficient in the world (63.0 in 2014), South Africa’s townships are starkly juxtaposed against numerous wealthy neighboring suburbs (Davie, 2003; Morris, 2000; Wilson, n.d.; World Bank, 2019).

Parenting practices in South-African townships partly reflect the economically deprived and harsh living circumstances of urban slums in sub-Saharan Africa, with generally lower levels of sensitivity (Tomlinson et al., 2005), more harsh and/or neglecting parenting styles (e.g., Okoth & Mburu, 2016; Swahn et al., 2017). In addition, parenting in townships are of course also influenced by the broader South-African cultural context. The majority of black South African ethnic groups were traditionally patriarchal, delineating parenting as the work and sole responsibility of women (Barbarin & Richter, 2013; Walker, 1995). The belief that “parenting is women’s work” still largely persists, despite the fact that large numbers of mothers now work, and children are consequently either placed in day care centers or sent to live with relatives at around 3 months of age (Barbarin & Richter, 2013; Coovadia et al., 2009). Nevertheless, the traditional close proximity between

mothers and infants persists, and most mothers continue to carry their infants on their backs and to co-sleep with their infants well into their childhood. Parenting practices are largely authoritarian (Barbarin & Richter, 2013; Dawes et al., 2004). Traditional cultural practices such as *imbeleko* (presenting an infant to the ancestors), *inkhaba* (burying of the umbilical cord), and *ibhala* (the cutting of the back of the infant's neck to release evil spirits and protect the baby from death) (Barbarin & Richter, 2013) are all common practice across South Africa, including the townships.

The current study focuses on Alexandra Township in Johannesburg, which is largely representative of the urban slum context in South Africa in the broader sense. As is typical of South African townships more generally, a quarter of the homes in the township are informal shacks, and infrastructure is poor with only 40% of dwellings having piped water (Statistics South Africa, 2011b). Like many South African townships, unemployment rates and levels of violent crime are high (Crime Statistics South Africa, 2016; Statistics South Africa, 2011b).

In sum, both social-economic and cultural characteristics specific to the South-African township context might translate to specific parenting patterns that do not quite follow Western representations of ideal parenting. And given evidence of culture-specific manifestations of sensitive parenting specifically (Mesman et al., 2018), the ranking of items in the MBQS may not adequately capture what sensitivity looks like in a South African township. Therefore, the aims of this paper are to: (1) Explore the nature and meaning of sensitivity scores obtained by the MBQS-mini (Pederson et al., 2011) and the Ainsworth sensitivity scale in the South African context of Alexandra Township; (2) Based on these results, explore a potential culturally appropriate adaptation of the MBQS-mini criterion for the South African township context. Although the original MBQS has been evaluated as showing high content overlap with the original Ainsworth scale (Mesman & Emmen, 2013), we expect some disparities in score distributions, given that the MBQS-mini specifies more specific behavioral manifestations of sensitivity that include verbal responsiveness, positive affect, and teaching activities, which have previously been found to be less common in African settings than in Western settings (Mesman et al., 2018).

Method

Sample

A sample of 50 mother-infant dyads from Alexandra Township participated in this study. The video-footage used was generated as part of a separate study into the efficacy of a home-visiting project (see Bain et al., 2016). Pregnant mothers were recruited by local home visitors during prenatal visits to the township's birthing clinic and invited to volunteer for the study. Mothers not adhering to prenatal care procedures were absent from the sample, and as such the sample is subject to bias. However, national antenatal care attendance rates in South Africa are high; reportedly at 90% in 2012 and 93% in 2014 (Gumede et al., 2017; Statistics South Africa, 2011a, 2015; Wabiri et al., 2016). At the time of observation, mothers, all of whom were Black, ranged in age from 17 years to 38 years ($M = 25.5$ years), while infants ranged from 2.76 months (84 days) to 8 months (246 days) ($M = 4.3$ months). Twenty-six of the infants were boys and the remaining 24 were girls. Parity ranged from 1 to 3 ($M = 1.68$). 52% of the mothers in the sample had not completed

high school, while 18% of the mothers had some tertiary level education. Of the 42 mothers not currently completing school or further studies, 64% were unemployed.

Measures

The video observations conducted for this study comprise mothers interacting with their babies in a “laboratory setting”. Although a natural setting was preferable (ie. in the infant’s home), there was insufficient space and lighting to record inside or even outside the majority of the homes. In addition, there was concern regarding the safety of the researchers utilizing costly technology (i.e. hand-held video recorders or smartphones) in the township. Mothers were transported from their homes to the research venue in the organization’s car, accompanied by a female research assistant. A 20 to 25 minute observation procedure was set up in line with the guidelines in the MBQS manual. This consisted of (a) 5 min free play interaction, “just be with your baby, as you would at home”, (b) 5 min playing with toys, (c) 3 min reading a picture book, (d) 3 min play with a “challenging toy” (i.e., a shape sorter), (e) 5 min divided attention with mother being interviewed (f) 5 min feeding if applicable to the situation (see manual by Pederson et al., 2011). Mothers were given a picture of themselves and their baby together, taken after the filming. The research assistants were educated, professional females, the majority of whom were White.

Maternal sensitivity

The first measure of maternal sensitivity used was the original Ainsworth Sensitivity scale (Ainsworth et al., 1974) which is scored on a 1–9 scale ranging from highly insensitive to highly sensitive. The scale provides general behavioral descriptions for the scale points that emphasize the fit between the caregiver’s responses and the child’s signals (sensitive responsiveness), but does not specify the precise behaviors that would constitute a good fit. Thus, as long as the caregiver responds promptly and appropriately to the child’s signals in a way that leads to a well-rounded and mutually satisfying interaction, the scale does not favor one mode of responsiveness over another. All 50 videos were coded by a single, reliable South African Ainsworth coder. Reliability was obtained by coding 10 videos from this study and comparing the scores with scores assigned by an experienced and reliable Ainsworth coder. The intraclass correlation (absolute agreement, single coder) was .83 for sensitivity.

The second measure was the MBQS-mini, a 25-item Q-sort type measure of maternal sensitivity (Pederson et al., 2011). Reliable, certified coders sort the 25-items based on the same 20 to 25-minute video recording of mother-infant interactions as used for the Ainsworth coding. The videos were coded according to the MBQS-mini-computerised card sort, by 5 reliable South African MBQS-mini coders. Following training, the MBQS-mini coders obtained reliability using 10 Canadian videos against scores from the measure developers, where a score of 0.8 and above was required to qualify as a reliable coder. Next the five coders all coded a further 14 local videos from the current study. Each coder’s inter-rater reliability was checked against each of the other 4 coders, using the Canadian criterion sort. Once coders had achieved an IRR of 0.801 and above (range 0.801 to 0.93) with all other coders on the local sample of 14, did they begin coding the research videos. Videos were double-coded and in cases where there was disagreement between coders, the coding was discussed until a final score was agreed upon.

Note that the scores used for analyses are the result of a correlation between the sort describing the behavioral profile of an individual mother and the criterion sort reflecting the “ideal sensitive mother” (Pederson et al., 2011). This means that the scores theoretically range from -1.00 to 1.00 , with positive correlations to the “ideal mother” reflecting more maternal sensitivity, and negative correlations reflecting less maternal sensitivity.

Camera-related behavior

The videos were also screened for camera-related behavior (see Introduction to this special issue), although in the form of overall impressions instead of the specific scales because they were not part of the original research protocol. Mothers generally appeared comfortable with being video-recorded. They largely appeared quite confident, with only a small number of mothers looking frequently at the camera, commenting on being filmed or expressing anxiety about being filmed. However, there appeared to be some degree of initial performance anxiety from many mothers related to being part of a research study more generally. Teenage mothers appeared to be more prone to looking at the camera frequently.

Results

Preliminary analyses

The average MBQS-mini score was low with $M = 0.17$ ($SD = 0.43$, range = -0.73 to 0.86), suggesting very little overlap between the mothers' behavioral profiles and the profile of the highly sensitive mother as represented by the criterion sort. The average Ainsworth sensitivity score was in the more-sensitive-than-insensitive range at $M = 5.52$ ($SD = 2.46$, range = 1 to 9) (See Table 1). A significant, albeit modest, correlation was found between sensitivity observed on the MBQS-mini and the Ainsworth scale ($r(50) = .30$, $p < .05$). (See Table 2). When comparing mothers rated as insensitive on the Ainsworth scale (scores 1 to 4) to those rated as (somewhat) sensitive (scores 5 to 9), we see a significant difference in their MBQS-mini scores ($t(48) = -3.04$, $p < .01$) (See Table 3). The MBQS-mini scores for mothers with low Ainsworth ratings are close to zero ($M = -.05$; $SD = .38$), indicating that the MBQS-mini profiles of these mothers showed no congruence with the profile of a sensitive caregiver. Mothers with higher Ainsworth ratings that can be considered to be (very) sensitive also have higher MBQS-mini scores ($M = .30$; $SD = .41$), but these are still much lower than the mean of volunteer-based samples internationally (see Pederson et al., 1990, $M = .73$, 1998). No comparative scores could be found for levels of sensitivity in South Africa.

The associations of the two sensitivity measures with pertinent background variables were also considered (See Table 2). Maternal educational level was significantly related to MBQS-mini sensitivity $r(48) = .34$, $p < .05$, but not Ainsworth sensitivity, $r(47) = .16$, $p = .28$.

Table 1. Descriptive statistics of sensitivity measures.

	N	Minimum	Maximum	Mean	Std. Deviation
MBQS-mini Canadian Sort	50	-0.73	0.86	0.17	0.43
MBQS-mini South African Sort	50	-0.72	0.78	0.22	0.38
Ainsworth MS	50	1.00	9.00	5.52	2.46

Table 2. Correlations.

	r	ψ	MBQS-mini Canadian Sort	MBQS-mini South African Sort	Ainsworth Sensitivity Scale	Maternal level of Education	Maternal Employment Status	Maternal Age	Infant Age	Infant Gender
MBQS-mini Canadian Sort			1	.972**	.302*	.338*	.181	.227	.05	–0.048
	Sig.	□		0	.033	.017	.251	.113	.732	.74
MBQS-mini South African sort			50	50	50	49	42	50	50	50
	r	ψ	.972**	1	.333*	.281	.256	.201	.006	–0.042
	Sig.	□	0		.018	.051	.102	.163	.966	.771
Ainsworth Sensitivity Scale			50	50	50	49	42	50	50	50
	r	ψ	.302*	.333*	1	.159	.043	–0.066	–0.057	.091
	Sig.	□	.033	.018		.276	.786	.651	.696	.531
Maternal Level of Education			50	50	50	49	42	50	50	50
	r	ψ	.338*	.281	.159	1	.228	.033	.003	.101
	Sig.	□	.017	.051	.276		.151	.824	.983	.491
Maternal Employment Status			49	49	49	49	41	49	49	49
	r	ψ	.181	.256	.043	.228	1	.257	–0.068	–0.143
	Sig.	□	.251	.102	.786	.151		.1	.667	.365
Maternal Age			42	42	42	41	42	42	42	42
	r	ψ	.227	.201	–0.066	.033	.257	1	–0.174	–0.235
	Sig.	□	.113	.163	.651	.824	.1		.228	.1
Infant Age			50	50	50	49	42	50	50	50
	r	ψ	.05	.006	–0.057	.003	–0.068	–0.174	1	–0.264
	Sig.	□	.732	.966	.696	.983	.667	.228		.064
Infant Gender			50	50	50	49	42	50	50	50
	r	ψ	–0.048	–0.042	.091	.101	–0.143	–0.235	–0.264	1
	Sig.	□	.74	.771	.531	.491	.365	.1	.064	
	N		50	50	50	49	42	50	50	50

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

ψ Pearson Correlation

□ Significance (2-tailed)

There were no significant relations with maternal employment status, maternal age, infant age, or infant gender on either sensitivity measure.

Item analysis

An analysis of the items that contributed to high or low scores on the MBQS-mini revealed that 15 of the 25 items functioned as expected (ie. mothers with a high Ainsworth score largely obtained a positive score on high criterion items, and a low score on low criterion items and vice versa). The ten items which did not function in accordance with the criterion sort (ie. where MBQS-mini item scores were similar for mothers scored as sensitive and insensitive on the Ainsworth scale) are listed in [Table 4](#). Many mothers who scored high on the Ainsworth scale scored as insensitive on three highly weighted items (items 1, 5, 20) relating to co-operation and interference. Both mothers who received high and low scores on the Ainsworth scale tended not to actively engage in social games or verbally based teaching moments (items 4, 16, 22). Only 12 of the 31 mothers who scored high on the Ainsworth scale were coded as likely to respond to their infant's signals during the divided attention task. Tendency to engage in overt expressions of positive affect were mixed across items, with very little praise from mothers both with high and low Ainsworth sensitivity scores, the majority of mothers (>77%) in both groups noticing their infants' smiles and vocalisations, and slightly more animation from mothers with low Ainsworth sensitivity scores.

Follow-up analysis

Following the above analysis, a new "South African" criterion sort for the MBQS-mini was developed by the first author, in collaboration with two local psychologists and five local lay counselors. The psychologists and lay counselors all live in South Africa and work clinically with mother-infant dyads in Alexandra Township. All were South African citizens, except one psychologist, who is a citizen of a neighboring African country. While there was significant overlap between the Canadian and South African "ideal mother" sorts, there were a few significant differences, with the South African sort attributing less (positive or negative) weight to items to do with physical manipulation of the child, praise of baby, noticing when baby smiles and building on the focus of baby's attention. Mother exhibiting distress at baby's demands was an item that was attributed more weight in this sort.

A new MBQS-mini South African sort score was obtained for each mother by running a correlation with the South African criterion sort and the mother's original item scores. Next, the analyses outlined above were conducted again with the new "South African" MBQS-mini scores.

The average "South African" MBQS-mini score was still low with $M = 0.22$ ($SD = 0.38$, range = -0.72 to 0.78) (See [Table 1](#)). A significant, albeit modest, correlation was again found between sensitivity observed the "South African" MBQS-mini and the Ainsworth scale ($r(50) = .33$, $p < .05$) (See [Table 2](#)). When comparing mothers rated as insensitive on the Ainsworth scale (scores 1 to 4) to those rated as (somewhat) sensitive (scores 5 to 9), we again see a significant difference in their "South African" MBQS-mini scores ($t(48) = -3.17$, $p < .01$) (See [Table 3](#)). The "South African" MBQS-mini scores for mothers

Table 3. Independent sample test (*t*-test for equality of means) and group statistics.

	Ains*	N	Mean	Std. Dev.	Std. Error Mean	t	df	Sig. **	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
											Lower	Upper
MBQS-mini Canadian Sort	0	19	-0.05	0.38	0.09	-3.04	48	0.004	-0.35	0.12	-0.59	-0.12
MBQS-mini South African Sort	0	19	0.02	0.35	0.08	-3.17	48	0.003	-0.32	0.10	-0.52	-0.12
	1	31	0.34	0.34	0.06							

* Ainsworth Maternal Sensitivity High = 1 and Low = 0

** Significance (2-tailed)

Table 4. MBQS-mini items lacking expected variance across high and low scores on the Ainsworth scales.

Items related to co-operation and interference

1. Provides B with little opportunity to contribute to the interaction (Formerly 1)*

5. Content and pace of interaction set by M rather than according to B's responses (formerly 17)*

20. Builds on the focus of B's attention (formerly 71)

Items related to teaching and active social engagement

16. Points to and identifies interesting things in B's environment (formerly 48)

4. Repeats words carefully and slowly to B as if teaching meaning or labelling an activity or object (formerly 11)

22. Plays social games with B (formerly 78)

Items related to divided attention

8. Responds to B's distress and non-distress signals even when engaged in some other activity such as having conversation with visitor (formerly 27)

Items related to overt expressions of positive affect

21. Notices when B smiles and vocalises (formerly 72)

13. Is animated when interacting with B (formerly 43)

15. Praises B (formerly 45)

*Items are reversed

with low Ainsworth ratings remained close to zero ($M = .02$; $SD = .35$), and mothers with higher Ainsworth ratings also had higher MBQS-mini scores ($M = .34$; $SD = .34$).

Unlike with the "Canadian" MBQS-mini scores, maternal educational level was not significantly related to the "South African" MBQS-mini sensitivity $r(49) = .28$, $p > .05$. There remained no significant relations with maternal employment status, maternal age, infant age, or infant gender on either sensitivity measure.

Discussion

The finding of a significant, albeit modest, correlation between sensitivity observed with the Ainsworth scale and with both the "Canadian" and "South African" MBQS-mini suggests that there is an overall relation between the constructs measured by the two scales when used with mothers from Alexandra Township. However, a stronger relationship is to be expected from two scales measuring the same construct using the same video footage. The mean score for both the "Canadian" and "South African" MBQS-mini is also relatively low. Given the stressful context in which the participants are living, it is possible that the low MBQS-mini mean scores are the result of the previously observed effects of poverty and stress on parental behaviour (see Bakermans-Kranenburg et al., 2004; Rafferty & Griffin, 2010). However, given the higher mean Ainsworth sensitivity score

and the lack of comparable means for South African mothers, other explanations must also be considered. The analysis of the distribution of the MBQS-mini item scores for mothers who scored high and low on the Ainsworth scales assists with investigating other possible explanations.

Some of the incongruence between Ainsworth and MBQS-mini scores seems to be explained by the high tendency of mothers from this sample to set the content and pace of the interaction themselves, and not to build on the interests of the baby. When using the Ainsworth scales, such behaviours are generally coded on a separate but related scale – the co-operation and interference scale (Ainsworth, 1969) – while the MBQS-mini draws from descriptions across all the scales and provides a single global score (Mesman & Emmen, 2013; Pederson et al., 2011). This finding, therefore, highlights one of the key differences in the way the two measures operationalize maternal sensitivity.

Three reasons for the high rates of interference in this sample are proposed here. Firstly, such behavioural characteristics may be explained by the more authoritarian approach to parenting of South Africans in comparison to Western families, as noted above. Secondly, high levels of interference may be the result of a unresolved trauma, as a result of high levels of violent crime in the environment. Research has previously shown a link between unresolved trauma and increased intrusive behaviour (Lyons-Ruth & Block, 1996). Lastly, the tendency of the mothers to set the content of the interaction may be the result of over-compliance with the researcher's "implied" instructions (ie. handing the mother different toys), given South Africa's apartheid history and the difference in race and educational background between the participants and the researchers. A similar dynamic (of compliance and performance anxiety) may underlie both the tendency not to respond to infant signals during the divided attention activity (ie. filing in the demographic questionnaire with the researcher) irrespective of Ainsworth sensitivity score, despite a strong tendency to respond to signals outside of the divided attention task from mothers who scored high on the Ainsworth sensitivity scale, as well as the high tendency from all mothers in the sample to notice positive signals and vocalisations. That is to say, given the power differential and the evaluative setting, all mothers may have tended to attempt to prioritize the more overt instructions from the researcher and may have been particularly pleased with positive signs from their infants.

The absence of praise (a highly weighted item in the Canadian criterion sort) in this sample is congruent with common parenting practice in South Africa (Barbarin & Richter, 2013; Dawes et al., 2004). Animation, a mid-range item in the Canadian criterion sort, was a behavioural trait more commonly found in mothers from this sample who scored low on the Ainsworth scale. This is congruent with reports by Mesman and Emmen (2013) that in some sub-groups, high levels of positive affect are accompanied by high levels of intrusiveness and low levels of awareness of infant signals. The same may be true for this sample. The absence of social games and verbally based teaching moments (items 4, 16, 22) in this sample is also congruent with cultural assessments of characteristic behaviour in non-Western settings (Dixon et al., 1984; Lancy, 2012; Mesman et al., 2016). Although these items have low criterion scores in the Canadian (and South African) sort, the almost complete absence of these behaviours in this sample means that their presence in the sort may negatively impact on sensitivity scores for this sample when using the MBQS-mini, as items with greater negative weighting are forced to the middle of the sort while these items are forced to the extremes. Such specific behavioral manifestations such as praise,

social games and verbally based teaching are not specified in the Ainsworth scale, leaving room for assigning higher scores based on other, more subtle forms of responsiveness (Mesman et al., 2018).

Maternal educational level was related to higher levels of sensitivity as measured by the “Canadian” MBQS-mini, but not when measured by the Ainsworth scale or the ‘South African’ MBQS-mini. It is possible that the more educated mothers in Alexandra may be more acculturated into Western models of infant development and parenting. These mothers may also have greater access to parenting guidance and information online and in books (which are largely generated in developed countries). The adoption of more “Westernized” ways of being with their babies may account for their higher scores on the MBQS-mini when using the Canadian sort. More educated mothers may also have been less impacted by the race of the researcher as a result of their higher educational status. Given that education has been historically compromised along racial lines in South Africa, it may be argued that measures which are not related to educational level may provide a better fit with the context of Alexandra, so as not to unfairly disadvantage mothers.

Overall impressions regarding the participants’ camera-related behavior suggests that the collection of video data is appropriate in the studied context. The use of several different elements in the observation procedure maximized the range of behaviors that mothers could show in the interactions with their infants. However, some of the tasks (reading, playing with toys) were not necessarily representative of what mothers would do with their children in daily life given the limitations of the township context in terms of books and toys. Unfamiliarity with these activities may have also dampened the sensitivity ratings. More naturalistic interactions that more closely resemble daily life (even if in the lab because filming in the township is hazardous) would be preferable. For example, in addition to feeding, mothers could be asked to bathe the child. As noted above, another potential limitation of the observation setting was the fact that the research assistants were all white, and thus from different racial and linguistic backgrounds than the mothers. Especially in the South African context, this may have influenced some of the mothers in terms of their level of comfort in the situation, and/or their fear of being judged and feeling like they need to perform according to other cultural standards than their own. The need for research personnel that matches the ethnic characteristics of the sample as closely as possible is an important challenge in South Africa, and needs to be considered seriously to improve future observation studies on parenting. An additional potential limitation of the study is the brief period of observation. Although MBQS-mini ratings on brief (10 minute) observations have been shown to yield reliable and valid scores of quality of maternal interactive behaviour (Tarabulsky et al., 2009), and the Ainsworth scale has been used on briefer interactions historically (Bouvette-Turcot et al., 2019; Joosen et al., 2013), the Ainsworth’s scale was originally designed for use based on lengthy naturalistic observation (Ainsworth et al., 1978). It must therefore be acknowledged that ratings based on a longer observation period may yield different results. Other limitations of the study include the small sample size, and use of coders who, despite having sensitivity around cultural and contextual difference and working in Alexandra, are not from the township themselves.

In conclusion, although there are challenges to video observation studies among South African mothers living in townships, a clear strength of this study is that it marks one of the first studies to scrutinize observational analysis of mother-infant interactions in the context of South African Townships. However, the study is exploratory in nature, and follow-up studies with more lengthy naturalistic observations with a more diverse team of coders, as well as alternative research methods such as parenting vignettes would be needed to draw more firm conclusions about the specific behavioral patterns associated with sensitive caregiving in this context. Such studies are important to avoid pathologizing non-Western cultural practices and to ensure valid interpretation of research results. Whereas the MBQS-mini has clear value for coding sensitivity in cultural contexts where verbal interaction and a focus on infant learning are culturally appropriate and normative, the use of more open-ended measures may be preferable in the absence of locally informed items or criterion sorts. Such considerations require further investigation to promote the in-depth investigation of the goodness-of-fit of all observation-based measures when conducting parenting research in contexts that are starkly different from that in which the tool was developed. Further study is needed to test whether the different scores obtained with sensitivity instruments also relate to different associations with pertinent child outcomes such as attachment security and social-emotional competence.

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