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Attachment Behavior With Mothers And Strangers In A Task-Oriented Situation: An Aqs Study With 14- To 20-Month-Old Bosnian Children

Abstract: *This study provides initial insights on the use of the Attachment Q-sort (AQS) for assessing young children's attachment quality in Bosnia & Herzegovina. We used the AQS technique to evaluate the quality of attachment in 31 mother-child dyads. The dyads were observed during home visits at the times children were aged 14, 16, 18, and 20 months.*
Additionally, at each visit, an object categorization task was used as a short gamelike activity between the child and the observer. The observer then instructed the mother to perform the same task with the child during the following week. Through this activity we observed the children's willingness to interact and cooperate with either a stranger or the mother in a task-oriented situation. Five out of 31 children had negative security scores and their behavior is described case-by-case. The object categorization task revealed differences in behavior towards both the mother and the observer between securely and insecurely attached children. As opposed to the secure children, insecure children tended to refuse cooperation with both the observer and the mother. Their mothers, on the other hand, either doubted their children's willingness to cooperate, or refused to participate in the experiment. These findings provide a basis for further research of attachment in young children in the region, and offer new insights into the complex relationship between cognitive and emotional development in infancy. Limitations of the study are discussed in light of cross-cultural differences in the use of the AQS technique.
Key words: *attachment, infants, AQS, cross-cultural*

INTRODUCTION

Numerous cross-cultural studies of attachment over the past decades have provided ample evidence of attachment patterns and behaviors in infants and young children from a variety of non-Western countries (see, for example, Van Ijzendoorn & Sagi-Schwartz, 2008). However, there is little or no data published on attachment in young children from the ex-Yugoslavian

countries. In her Handbook of attachment (2011), Stefanović-Stanojević offers a review of studies of attachment in the region, which are quite numerous, but none of them involves infants or young children. Similarly, the bibliographic search of attachment studies in this region yields several results on adult and adolescent attachment, but virtually no studies on attachment in infants or young children.

Our study was an exploratory one, aiming to provide the initial data on the quality of attachment in young children from Bosnia & Herzegovina, using the Attachment Q-Sort (AQS) procedure (Waters, 1987). Based on the results of the meta-analytic study of the validity of AQS, this procedure belongs to a "small set of gold standards" in the attachment field, and can be particularly useful in new populations (Van IJzendoorn et al., 2004). A detailed explanation of this technique for use in local languages is available in Stefanović-Stanojević (2005, 2011). However, as formulated by one of the AQS authors in an unpublished manuscript (E. Waters, personal communication, May 21, 2013) „the Q-sort method is not generally covered in research methods courses and often strikes first time users as overwhelmingly complex". For this reason, we will provide a brief overview of the method and some of its main advantages.

The AQS item set is a virtual ethogram of infant attachment behaviors (E. Waters, personal communication, May 21, 2013). It consists of 90 items designed to tap a range of dimensions reflecting either the secure base phenomenon or behaviors associated with it in children ages 1–5. The items are sorted into one of nine piles, depending on how characteristic or uncharacteristic they are of a child's behavior. Sorts can be completed by trained observers or, if necessary, by parents (Solomon & George, 2008, p. 404). The observing is done during home visits, ideally two home visits of two hours each (Waters, 1987).

An important advantage of the sorting procedure is that it demands closer attention to each item than might occur if the same items were simply rated on a 1-to-9 scale (Waters, 1987). This procedure also constrains to some extent social desirability responding because:

"(a) the attention required by the sorting procedure distracts from the desirability set;

(b) the sorter does not necessarily know which constructs will be scored or how they will be scored from the data; (c) only a few items can be "most characteristic" of a subject." (Waters, 1987, para. 4).

The data obtained by Q-sort can be treated in three ways: item level, cluster level, and criterion sort scoring (see Waters, 1987, for a detailed explanation of the three approaches). For

our study, we used the criterion sort approach. The criterion sort is a measure constructed by having experts sort the q-set items to describe the „hypothetical most secure“, and the „hypothetical most dependent“ subject. The Pearson correlation coefficient between this „ideal“ criterion sort and an individual subject's score is then used as the particular subject's attachment score (Waters, 1987). Although the fact that AQS scores measure security on a continuum is an advantage of this method, it is also possible to convert continuous AQS scores to a secure/insecure dichotomy, which is the approach we chose in our study.

In addition to observing the dyads' spontaneous behavior we also wanted to take a closer look at how children of different attachment qualities interact with an unfamiliar adult. In fact, the AQS set contains seven items covering the topic of “Behavior toward home visitors”. Hence, the AQS procedure allows the observer to introduce short games or activities with the child if they can be helpful in scoring these items (Waters, 1987). In order to assess the child's behavior towards visitors, but also to analyze in more detail the child's willingness to interact and cooperate with a stranger in a task-oriented situation, we used a short game-like activity (an object categorization task). Our predictions were rooted in the existing research findings on the relationship between cognitive measures, language development and attachment in young children (van IJzendoorn, Dijkstra, & Bus, 1995) which suggest that children with insecure attachment might have difficulties to accomplish a task which requires them to communicate with a stranger. Insecurely attached infants, particularly those classified as Group-C / anxious-resistant infants (Main, 1973,1977b, as cited in Ainsworth, Blehar, Waters, & Wall, 1978, p. 315) easily get „frustrated, over-reliant on their mothers, and generally incompetent in problem-solving situations“. On the other hand, securely attached infants are found to be more positively outgoing and cooperative with unfamiliar adults and more likely to show a „game-like spirit“ in the test situation (Ainsworth et al., 1978, p. 313). Consequently, we expected that the insecurely attached children will have difficulties in doing the object categorization task which requires cooperation with an unknown person, whereas secure children will be able to concentrate on the task and cooperate with a stranger without difficulties.

Finally, the mothers were instructed to repeat the object categorization task with their children once the observer is gone, and to record it with a camera. In this way we wanted to assess how children of different attachment qualities interact and cooperate with the mother in a task-oriented situation. We assumed that the securely attached children would behave in a similar

way as they would with an unknown person, that is, they would cooperate with the mother and focus on the task. However, with the insecure children, our expectations were twofold. As the task with the mother was supposed to be done at home, in a familiar setting, at a convenient time, with no visitors around, we considered this to be a completely unstressful situation in which the insecurely attached child could also focus on the task and cooperate with the mother. If this were the case, we should expect the children to cooperate with the mother and concentrate on the task. Yet, the mothers of insecure children themselves could consider this as a test situation (because it still needs to be recorded with a camera); hence their own feeling of insecurity could have a negative effect on the interaction with the child. In this case, we could expect poor cooperation between the mother and the child, and difficulties in doing the object categorization task.

METHOD

Participants

Thirty-one fourteen-month-old infants (range 13;25 to 14;15) from monolingual Serb families in Bosnia & Herzegovina (regions of Banja Luka and Derventa) were recruited for this study. 13 boys and 18 girls were included in the final sample. The same infants were observed at 16 (15;25 to 16;15), 18 (17;25 to 18;15), and 20 (19;25 to 20;25) months.

Infants were recruited through the listing of the Banja Luka Center for preschool education and through participating mothers' networks of acquaintances. All infants came from Bosnian middle-class backgrounds, from complete families with one or both parents employed full-time.

Measures

Attachment

The quality of children's attachment to their caregivers was assessed using the Attachment Q-sort technique (Waters, 1987). We used the AQS version 3.0, translated and adapted for use in Serbian. The original version is available on the website http://www.psychology.sunysb.edu/attachment/measures/content/aqs_items.pdf. and our translated version is available upon request from the author.

Object categorization task

The materials used for the object categorization task were similar to those used in previous studies of word-based categorization of unknown objects (e.g. Bijeljac-Babić et al., 2009; Nazzi & Gopnik, 2001; Nazzi & Pilardeau, 2007), and identical to those described in Tutnjević & Lakić (2014).

Procedure

Attachment observation procedure

All children were observed at four occasions by a trained observer. The length of individual home visits varied from 30 to 90 minutes. During all home visits the observer remained as discreet as possible in this cultural setting (difficulties with the AQS observation process brought by cultural differences will be thoroughly described in Discussion). Yet, as advised by the authors (Waters, 1987) the observer tried to adopt an informal and responsive manner with the child in order to make both the mother and the child more comfortable in this situation. The items were scored at each visit. In cases of discrepancies between individual scores, the final scores were calculated as the average of the scores from four individual observations. In some cases, when the observer did not have the occasion to observe certain behaviors that might be relevant for the child in question, mothers were asked to score that behavior (e.g. It is impossible for the observer to score the item "Child often cries or resists when mother takes him to bed for naps or at night" if the mother did not put the child to bed during the visits). This is a commonly accepted practice for AQS sorting (Teti & Mcgourty, 1996; Waters & Deane, 1985).

Sorting procedure

The sorting was completed according to the author's recommendations (Waters, 1987). In the first round, all items are classified into three broad categories: highly characteristic of the child; neither characteristic nor uncharacteristic of the child or not applicable; highly uncharacteristic of the child. Then, the items that are further distributed into nine piles so that each pile contains exactly ten items (rectangular/uniform distribution). In order to do this, an observer has to think very carefully about each item, which is one of the advantages of the Q-sort

technique, although this very procedure might seem as a limitation of the Q-sort in the beginning (Waters, 1987).

Object categorization task procedure

The task is embedded in the observing routine and takes place at a moment deemed convenient by the observer, ideally in the end of the observing session. Infants are either seated on the floor, or in a feeding chair. Mothers are instructed to stay close to the child and silently watch the session. They are told to put the child in the lap if needed, but not to help or interfere in any way with the child's response. The task takes about 10 to 15 minutes if the child is willing to go through the whole session. If the child refuses to do the task or loses interest in it, the session is interrupted. Whenever parents' consent is obtained, the task is recorded with a camera. In addition, the observer takes notes on each child's task-related behavior instantly after the observing sessions. Since the AQS observation sessions take place at four different occasions the observer initiates the task at each session, so that the final number of completed tasks depends on the child's willingness to cooperate.

A detailed explanation of the procedure can be read in Tutnjević & Lakić (2014). As the details of the task itself are not relevant for this study, we will only describe its main features. In short, the child needs to both watch and listen to the observer carefully in order to understand which two (out of three) objects go together. The decision has to be based on the either objects' similarity or the objects' common name. For the purpose of this study, the success on the task was not crucial. The subject of our observation was the child's willingness to interact and cooperate with a stranger in a task-oriented situation.

At the end of each visit, the mothers were instructed to repeat the same task with the child during the following week, and to record it with a camera. They were left with the materials, short written instructions and an online video tutorial. They were not informed about the subject of our interest. They were told that the purpose of the task with the mothers was to observe the child's behavior during this "game" in a natural setting, without the observer taking away the child's attention.

Data analysis

Each child's sort was correlated with the secure criterion and the dependent criterion sorts. We used Pearson's correlation to calculate similarities between individual children and criterion sorts. We treated these correlation coefficients as security "scores", as is usually the case in AQS-related research (Waters, 1987). In order to create the secure/insecure dichotomy out of the AQS data the authors (1987) suggests researchers to assume that the proportion of secure and insecure infants should be the same as if the Strange Situation had been used, which is 70 secure:30 insecure in middle-class home reared infants. Nonetheless, as the attachment theory does not assume equal proportions of secure and insecure attachment in every community or culture, we used a different approach. In order to categorize subjects into secure and insecure, we grouped all the children whose security scores were zero or negative into the "insecure group". The rest of the children, that is all children with positive security scores constituted the "secure group". It should be noted once again that this division to secure and insecure children is arbitrary, albeit based on a cogent assumption about the meaning of correlation values.

In the second part of the results we qualitatively describe the task-related behavior of the secure children group, and provide case-by-case analysis of the insecure children's behavior. The following indicators were formulated in advance to serve as guidelines for behavior analysis:

- Positive affect (The child shows positive affect during the task. He/she is willing to sit down and play with the observer without obvious fussing, crying or protesting. The child is smiling occasionally during the task.)
- Acceptance of the task with the stranger / the mother. (The child listens to the observer, pays attention to the objects the observer is showing, and reacts to the observer's comments and instructions. The child is not obviously ignoring the observer or looking away.)
- Willingness to cooperate (The child is willing to cooperate with the observer. He/she is following the observer's instructions, handing out the objects when requested, picking an object from the table when requested, obviously trying to accomplish the task in cooperation with the observer. The child is not ignoring the instructions, e.g. playing with the objects in his own way, or throwing the objects away.)

- Consistency (The child shows consistency in the task-related behavior. He/she reacts to the task and the observers' instructions each time in a similar manner. The child is not behaving differently at each visit.)

RESULTS

Five out of 31 subjects in our study had zero or negative security scores. For the purpose of our study these children were labeled as insecure. Three among them also had negative dependency scores, whereas the remaining two had positive dependency scores (see Table 1). Further in the text we will describe the children's task-related behavior in more detail.

Table 1. AQS scores for subjects with negative security scores

	S1	**S2**	**S3**	**S4**	**S5**
Secure criterion	-.065	-.002	-.086	-.181	-.228
Dependent criterion	-.442	-.326	-.448	.187	.339

Notes. S stands for Subject. Scores calculated as Pearson's correlations of individual subjects and experts' criterion sorts.

Secure children's task-related behavior

Upon analysis of each secure child's task-related behavior we concluded that there was little variation in their attitude towards both the observer and the task. In general, these children showed positive affect during the task and were willing to "play a new game" with an unfamiliar adult. They readily sat down opposite to the observer and carefully examined new objects she showed to them. They listened to the observer's instructions and tried to follow them in order to accomplish the task. Their behavior was consistent across visits.

When the object categorization task was administered by their mothers, the results were quite similar across all four indicators: positive affect, acceptance of the task with the mother, willingness to follow the instructions and behavior consistency. The main difference between the behavior towards the stranger and the behavior towards the mother was not directly observed, but reported by some mothers. Thus, some mothers thought that their children were more disciplined and more willing to follow the task instructions with the stranger, than with themselves.

Certainly, there were also noticeable individual differences among these children due to their different temperamental traits. Some children sat still during the task and enjoyed slowly and carefully examining each new object, whereas others went through the task rather quickly, showing signs of restlessness and higher motor activity in general. Moreover, there were obvious differences in attention length and tenacity, with some children being able to go through the whole session without pause, and others losing interest more quickly. Yet, their willingness to interact and cooperate with an unfamiliar adult as well as with their mothers was similar in all cases.

Insecure children – case analyses

In further text we will describe in detail the behavior of five children with zero or negative security scores. The five cases in question can be roughly divided into two subgroups, based on their dependency scores:

1. Children with negative security scores and negative dependency scores (Subjects 1, 2 and 3);
2. Children with negative security scores and positive dependency scores (Subjects 4 and 5).

All subjects are female. We used false names in the narratives to protect the children's identity.

Subject 1 - Sara

Sara's security score is slightly negative (r = -.065), while her dependency score is high and also negative (r = -.442). The first object categorization task session with Sara is a complete failure. This fourteen-month-old girl approaches the observer without hesitating, but also without smiling or any other indication of positive affect. She does not hide behind her mother and shows no signs of shyness. However, she does not react in any way to the observer's calling, questions, or remarks. She approaches him only at her own volition, and she leaves him in that way too. She is truly indifferent to him. Numerous attempts to draw her attention with new toys or tricks has no effect on her. She soon completely loses interest in the observer. When the mother tries to lift her on the lap and draw her attention to the objects she shows clear signs of refusal and wiggles out. If the mother insists she starts fussing. The mother, on the other hand, is smiling,

and very accepting of Sara's behavior. She explains how Sara is simply like that: independent and self-willed. She does not like cuddling and hates being held in the lap. When put to bed she falls asleep alone and she always sleep alone in her bed. The mother uses the term „honoured“ to describe how she feels when Sara allows her a little physical contact.

During the next three sessions (at 16, 18, and 20 months), the observer has some more success in communicating with Sara, but it is never enough to actually start doing the task with her. She gives it a short try but gets bored with it very soon and walks away. Neither the observer nor the mother can get her to cooperate. As for the mother, she accepts to do the task with Sara, but strongly doubts that she will do anything that she asks her. According to the mother's report, it turns out that she was right, so the data on Sara's task-related behavior with the mother is missing.

Subject 2 - Lena

Lena's security score is virtually zero (r = -.002) and her dependency score is clearly negative (r= -.326). At first sight, she is a very shy girl. The observer takes a long time, much longer than with any other child in the sample, to approach her. She is extremely quiet, and the mother assures the observer that she does not speak yet, not even a single word. She describes Lena as very unusual, especially when compared to her older brother. As Subject 1, Lena likes to fall asleep alone and does not like to be cuddled. The mother, much like Subject's 1, assures the observer that this is her character trait. Very polite and smiling, she insists that the observer had better give it up right away, because „there is no way that Lena will ever accept to cooperate, headstrong and self-willed that she is“. The observer manages to get Lena's attention with a book, and proceeds with the task. Unlike our Subject 1, she finds the objects very interesting, turns them around and watches carefully as if she were analysing them, but does not follow any of the observer's instructions. She completely ignores both the observer and his instructions rather than refuses. She is just concentrated on the objects, slowly examining each one of them. The mother keeps smiling and says: „I told you she would not do it.“ After 15 minutes of trying in vain to get her do the task the observer gives up, but, as opposed to Subject 1, all this time Lena is quietely sitting still. Eventually, the mother puts her to bed in her room just before the end of the observing session. Indeed, Lena accepts being put to bed without protesting.

During the next sessions her behavior is the same. Neither the observer, nor the mother manage to get her to do the task. The mother first refuses to try to do the task with Lena, but on the observer's insisting she accepts to give it a try, although convinced that she will not cooperate. Her attempts are reported to be in vain. Therefore, as with Subject 1, our data on Lena's task-related behavior is missing.

Subject 3 - Maja

Maja's security score is r = -.086, and her dependency score is conspicously negative (r= -.448). During the first visit she appears to be very friendly and quite ready to play with an unfamiliar adult. She accepts to do the task without hesitation and interacts with the observer, unlike our Subjects 1 and 2. However, it is soon obvious that she is the one who creates the rules in this interaction.

She absolutely ignores the instructions and plays with every object in her own way, mostly banging them against the table and throwing them around the room.

The mother appears very hospitable and talkative, although during the initial phone conversation she insisted on not having more than 15 minutes for this visit. While preparing the juice, the cake and the coffee (regardless of the observer's polite refusal) she manages to show him an impressive collection of children's books, each containing all the exemplars of the series. She then insists on Maja caseshowing everything that she knows: imitating animal sounds, showing animals in the books etc. All observer's attempts to limit the conversation and actually observe the family's everyday behavior are thwarted. The mother continues to assure him that she uses every technical and educational means to promote Maja's development. Interestingly, she categorically refuses the idea of doing the task with Maja herself. The time is not the problem, nor are numerous obligations. The problem is that „Maja would never do anything that I asked her. She is like that. There is simply no chance that she will do it with me.“

The next three sessions look much like the first one. Maja gets more and more cooperative with the observer, and once even manages to go through the task. The mother, on the other hand, refuses to do the task herself with always the same explanation – Maja is headstrong, she does only what she wants to do and listens to no one.

Subject 4 - Anica

Anica's case is very different from the first three. What they do have in common is a negative security score (r = -.181), but Anica's dependency score is slightly positive (r = .187). Her behavior towards the observer can be best described as ambivalent and inconsistent. During the first visit, Anica is extremely friendly, interested in the task and cooperative, to the extent that she bursts out crying when the observer has to leave. Everything goes well during the second visit as well. Yet, the two remaining visits are a complete failure. Anica starts crying as soon as the observer crosses the door, although the session was arranged at a time the mother chose as convenient (the child is not ill, sleepy, or fussy). The mother and the observer try their best to soothe her, but her animosity towards the observer is such that eventually the observing session has to be ended. The mother accepts to do the task with Anica without arguing in advance that she will not cooperate. Yet, she reports that Anica does not follow the instructions and plays with the objects only the way she likes.

Subject 5 - Emma

Emma's case is similar to the previous one. Her security score is negative (r = -.228) while her dependency score is moderately positive (r = .339). Her reactions to the observer, as in Subject 4, vary extremely across visits, regardless of the fact that all the observing sessions are scheduled at the most convenient moment for the mother and the child. During the first visit Emma is whining and constantly clinging to her mother. She shows no interest for the task and ignores the observer. The second time she is a little more interested and ready to, at least, communicate with the observer, although this is not enough to get her through the task. The next time she is delighted with both the task and the observer, insists on doing it again and again, while the last time it is the opposite again.

The mother's attitude varies as well. At 16 months she claims that it is impossible to get Emma to follow the instructions and do the task. At 18 months, it is the opposite – she is delighted to report that Emma did everything perfectly well.

Upon comparison of all five cases, it is clear that the one thing they have in common concerns rather the mothers, than the children themselves: in at least two out of four attempts, the mothers of these children claim *in advance* that they cannot get their children to cooperate with them.

DISCUSSION

Given both the exploratory nature of this study and the fact that the attachment theory does not assume equal proportions of secure and insecure attachment in every community or culture (Waters, 1987), we did not make any specific hypothesis about the attachment patterns distribution. Our division to secure and insecure children was made for the purpose of this study only, using a convenience sample. Therefore, we cannot judge on the number of secure and insecure children in the population based on our results. Yet, it is interesting to point out that the distribution of secure versus insecure children obtained in our study does not mach the predefined 70:30 proportion (only 16,1% of children were categorized as insecure). Our results are also incongruous with the typical adult attachment pattern distribution in the region, which is around 50% secure : 50% insecure (Stefanović-Stanojević, 2007).

As pointed out earlier in this paper, the focus of our interest was specific: we wanted to find out how children of different attachment qualities (secure vs. insecure) interact and cooperate with an unfamiliar adult in a task-oriented situation. In addition, we wanted to look at how they would interact with the mother in that same situation. In accord with our expectations, and in line with attachment theory, secure children were found to be more outgoing and cooperative with unfamiliar adults than the insecure ones. They were more likely to treat the object categorization task as a game, but also to concentrate on the task and cooperate without difficulties. The results were similar when their mothers asked them to accomplish the task. Interestingly, some mothers from secure dyads thought that their children would be more disciplined and more willing to follow the task instructions with the stranger, than with themselves. However, this proved to be wrong in another study which compared the results on the object categorization task with mother vs. results on the same task with stranger: there was no statistically significant difference between the two (Tutnjević, 2014).

As for the insecure children group, their behavior towards the stranger during the task confirmed the existing research findings (van IJzendoorn, Dijkstra, & Bus, 1995) which suggest that children with insecure attachment have difficulties to accomplish a task requiring them to communicate with a stranger. Based on their dependency scores, we were able to classify our insecure children into two subgroups. Our first subgroup (Subjects 1, 2 and 3 with negative security and negative dependency score) consists of children who show clear signs of contact

resistance and avoidance towards their mothers. This avoidance may lead to deficiencies in exploratory behavior and cooperativeness typical for Group-A, or anxious-avoidant children. Avoidance is most strikingly visible in steadfast ignoring of the mother, despite her efforts to coax the baby to come to her (Ainsworth et al., 1978), a behavior clearly demonstrated by our Subjects 1, 2 and 3. These children did not get frustrated during the task, and did not rely on their mothers at any moment of the observation (except for Subject 1, who got frustrated only when the mother tried to keep her on the lap). They simply refused to participate in the task.

The second subgroup (negative security and positive dependency score) included two children whose behavior reminded of, but did not perfectly match the description of insecurely attached infants classified as Group-C (Ainsworth et al., 1978), or anxious-resistant. Our Subjects 4 and 5 got extremely frustrated and over-reliant on their mothers at certain moments of the observation, as described in the Ainsworth's Group-C behavior. Yet, they were far more characterized by ambivalence and inconsistency in their behavior toward both the mother and the observer.

A study by Vaughn & Waters (1990) suggested a strong association between the Strange situation security classifications (secure infants/Group B vs. anxious infants/Groups A and C combined) and security scores obtained by Q-sort reports from home observations. In their study, the association was not significant for subgroup comparison of anxious-resistant and anxious-avoidant infants, but our study suggests that AQS security and dependency score might also be useful in differentiating these two groups.

In summary, we cannot claim that our insecure children were unable to do the task, although we could say that they proved incompetent in this task-oriented situation. In fact, what we have at play in this task is a complex interaction of children's cognitive and social-emotional capacities, which leads us to an interesting assumption. It is a common thing in studies dealing with infant cognitive development that researchers report the number of subjects who participated in a study, along with the number of subjects who were excluded for different reasons (fussiness, crying etc.). Could it be that studies measuring different aspects of cognitive development actually only provide us with the data on secure children, whereas the “dropouts” are insecure children who typically refuse to cooperate with unfamiliar adults? We believe this is a question worth asking in future studies.

Another quite interesting result of our study was the insecure mothers' behavior. We expected mothers to become anxious in the “testing” situation when asked to do the object categorization task with their children and record it with a camera. We expected their reluctance, even refusal to do the task. However, what we saw was not so much their refusal, as it was their complete sense of helplessness with their children. Bowlby emphasized that the protective function of attachment requires the attachment figure to assume a position of being older, wiser, and more powerful than a child (1982, as cited in Solomon & George, 2011). The feeling of helplessness can undermine the mother's ability to maintain this position in the relationship, which is characteristic for mothers of children with disorganized attachment in infancy (Solomon & George, 2011). The common thing for all five mothers from our insecure group was exactly this feeling – helplessness. They view their child and themselves in relation to their child as out of control, or controlled by the child. As illustrated by their own words they feel that: “There is no chance she will do the task with me.”, but also “There is no way she would do anything I asked her to.”; “She only does what she wants to.” etc., which is quite striking when we know that it refers to a one-and-a-half-year-old child. Since AQS observation is mainly focused on the child's behavior, it might be important for future researchers to take a closer look at mothers' behavior in order to obtain a more complete picture of attachment dynamics.

The most important limitation of our study is the fact that the observing was done by a single person. We tried to neutralize this limitation with a higher number of observation hours, and a higher number of visits per child. However, we believe the reason for which we chose to use a single observer is very important to mention for further studies in the region. An AQS observer is supposed to be very discreet, simply sitting down in a corner of the room and observing, without influencing in any way the usual family behavior. Yet, in Bosnia & Herzegovina, but also in most surrounding countries, this is virtually impossible to achieve. In this traditionally overly hospitable region it is the moral duty of each person to treat their visitors with maximal attention. “An observer” can hardly stay in a room without being given coffee, juice, food, and even more importantly, without being entertained. It is considered impolite to leave your guest alone and mothers in our study, even though they were always politely asked to simply go on with the family routine and pay no attention to the visitor, could not help themselves being polite and “taking care” of the visitor. Even when mothers who understood the role of the observer made an effort to “ignore” the visitor, there were still grandmothers, often

present in the house, who would draw the observer's attention away with constant attempts to entertain him, usually by showcasing the child's newly acquired words and nursery rhymes. One observer can perhaps go unnoticed after several visits and a certain amount of time, which is what we tried in our study, but with two or more of them it would be quite difficult, especially in families that live in very small apartments. We believe this is a very important thing to consider for all future AQS studies in the region.

In conclusion, this study offers several important insights. First, we provide the readers with important insights into the use of AQS in a new region. Then, in line with our expectations and previous studies it was found that secure children gladly interact and cooperate with both an unfamiliar adult and the mother in a task-oriented situation, focusing on the task all while accepting it as a game. Second, as expected, insecure children tend to refuse interaction and cooperation with an unfamiliar adult, either through contact avoidance or through ambivalent behavior towards the adult. We argue that this might be an interesting finding with regard to the interpretation of "dropouts" in infant cognitive development studies. Furthermore, insecure children's mothers, when asked to do a game-like activity with their child, either plainly refuse it, or accept to try it but strongly doubt their child's willingness to participate. We believe our findings opens some new avenues for investigations of the complex interplay between cognitive and social-emotional spheres of infant development.

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