Abstract

The aim of this research was to determine whether the well-documented link between heterosexual parents’ secure base support (i.e., sensitivity) and child secure base behavior (i.e., security) was present among Mexican same-sex families with 1-to 6-year-old children. The sample included 22 child-caregiver dyads from four lesbian and four gay families. Four trained independent observers used the q-sort methodology (Maternal Behavior Q-set/Mother Behavior with Preschoolers Q-set and Attachment Q-set) to describe parents’ and children’s behavior, respectively. A robust regression model by Siegel method for predicting security with sensitivity as regressor was statistically significant for the whole sample with a statistical power of .89, consistent with the existing evidence in studies with different and same-sex families. Both sensitivity and attachment security are fundamentally relational constructs, not caregiver/child’s traits; they are relationship specific, as the results of the regression analysis showed. Despite the sample size, our findings prove attachment theory as a useful theoretical framework to study caregiver-child interactions no matter parents’ sexual orientation neither the family structure.

Keywords

attachment, sensitivity, gay fathers, lesbian mothers, LGBTQ parents
Mexico is considered a country with high levels of gender-role traditionalism, familism and religiosity (Costa & Salinas-Quiroz, 2019), with over 83% of the population identifying with Catholicism (INEGI, 2010). Notwithstanding this, in 2015 Mexico City was declared a Gay Friendly City, which according to official statements, is an expression of the city’s interest in developing as a sexually diverse metropolis where Lesbian, Gay, Bisexual, Trans and Queer (LGBTQ) rights are won and respected (COPRED, 2015). Among such rights are same-sex marriage and child adoption by same-sex couples, which were both legally recognized in 2009 (Salinas-Quiroz et al., 2018); that same year, 689 same-sex marriages were registered in Mexico City, and in 2017 the number rose over to 1,400 (INEGI, 2018). Although no census of LGBTQ parents has been taken in Mexico, an estimate was made in 2014 which suggested the existence of 250,000 same-sex “nuclear families”, within which 68.8% were raising children (Giraldo, 2015). Yet, by the end of July of 2015, only 11 same-sex couples were able to legally adopt a child (Medina, 2015). The exact number of same-sex parents in Mexico also remains uncertain due to the existence of many possible family configurations for these couples such as those with children from previous heterosexual relationships, and partners that achieved parenthood through donor insemination, surrogacy, step and co-parenting, or fostering (Carneiro et al., 2017).

To date, research with same-sex families has focused on children older than six years of age (e.g., Carone et al., 2020a; Carone et al., 2020b; Carone et al., 2018; Gartrell et al., 2018; Farr, 2017; Golombok et al., 2014; McConnachie et al., 2020). Comparative studies between same-sex and different-sex families demonstrated that parents’ sexual orientation does not negatively affect children’s socioemotional development (Farr, 2017), and that lesbian and gay (LG) parents can be as sensitive to their children’s needs as their heterosexual counterparts (Golombok & Tasker, 2015). However, positioning different-sex families as the norm may reinforce heteronormativity and undermine the particularities of LGBTQ families (Carneiro et al., 2017; Clarke, 2002; Salinas-Quiroz et al., 2018).

Theoretical Framework

Infant-caregiver emotional ties arise from interaction: all children, if exposed to ordinary parental care, become attached to one or more caregivers – i.e., the universality hypothesis (van Ijzendoorn & Sagi-Schwartz, 2008). The development of attachment rests on the quality of two kinds of behaviors by highly personalized caregivers: (1) behaviors which serve the function as a haven of safety, and (2) behaviors which serve the function as a secure base (Grossmann & Grossmann, 2020). Crying, calling, clinging, following, and separation protest help young children to be close to his/her source of protection and comfort; the haven of safety.

Mary Ainsworth’s research detailed the key role played by mother–child interactions during the child’s first year of life, both in the formation of the attachment bond an infant develops with his/her mother, and the specific organization of a child’s attachment
behavior (Posada & Waters, 2018). A core aspect of attachment theory is concerned with the role of the main caregiver as a secure base from which infants can organize their behavior, derive security, explore, and learn about the environment (Ainsworth, 1969; Ainsworth et al., 1978; Bowlby, 1969/1982, 1988). The hallmark of secure base behavior is the seemingly purposeful balance between excursions away from the caregiver and the proximity seeking at different times and across contexts (Posada et al., 2013). Sensitive parenting refers to the caregiver’s ability to perceive child signals, to interpret them correctly, and to respond to them contingently and appropriately in the circumstances in which the caregiver-child dyad finds itself (Ainsworth et al., 1974). According to Grossmann and Grossmann (2020), Ainsworth’s concept of sensitivity implies both secure base and safe haven functions. Bowlby (1969/1982) argued that the dyadic process initiated in infancy, i.e., from little discrimination of a caregiver to the organization of a goal-corrected partnership, expands in early childhood, when children’s cognitive and language advances allow caregivers to support the elaboration of preschoolers’ attachment behavior (Posada & Waters, 2018).

Neither sensitivity nor security are trait-like characteristics; they are both dyadic constructs that are formed, organized, and elaborated in the context of a specific attachment relationship (Posada et al., 2004). Numerous meta-analyses to date have confirmed Ainsworth’s findings among heterosexual mother-child dyads, providing empirical support for the sensitivity-security link in infancy, i.e., the sensitivity hypothesis$^1$. Regarding heterosexual fathers, findings revealed a significant but weaker correlation between sensitivity and security when compared to mothers (Bakermans-Kranenburg et al., 2019; Lucassen et al., 2011). The few studies about maternal secure base support and child secure base behavior during preschool years indicate that they are also significantly associated (e.g., Posada et al., 2018).

Gender and Attachment

Attachment literature has not given much attention to the relationship between gender and attachment behaviors in infancy, and very few studies have examined how parent-child attachment may differ as a function of parents’ gender, child’s gender and the interaction between child’s and parents’ gender. Pierrehumbert and colleagues (2009) explored cultural dissimilarities in the extent of gender differences to contribute to the understanding of the universality/specificity conceptions about attachment across five countries. To achieve this, they used the Attachment Story Completion Task (ASCT; Bretherton et al., 1990), which aims at exploring the characteristics of 3-to 7-year-old children’s representations while evoking attachment themes, using a doll-play procedure. This research team found that girls expressed more secure representations concerning

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1) With $rs$ ranging between .24 and .39, e.g., Cadman et al. (2018); De Wolff and van IJzendoorn (1997); Verhage et al., (2016); Zeegers et al. (2017).
child-parent interactions than boys did (Pierrehumbert et al., 2009). With respect to older children, Granot and Mayseless (2001) assessed 10-year-old boys and girls with a self-report measure, the Security Scale Questionnaire (Kerns et al., 1996), as well as with the ASCT (Bretherton et al., 1990: girls were also more secure than boys).

Other studies have reported that fathers show less sensitivity and more intrusiveness than mothers do (e.g., Barnett et al., 2008; Hallers-Haalboom et al., 2014; Schoppe-Sullivan et al., 2006). However, in all of them, sensitivity was assessed with the Emotional Availability Scales (EAS; Biringen et al., 1998). The EAS is an instrument inspired by Ainsworth’s sensitivity conceptualization but that also assesses affective attunement/parental affect (Mesman & Emmen, 2013). Further, the EAS takes 10-20 minutes and such a brief interaction may not be sufficient to reveal individual differences in relational capacities (Biringen et al., 2014). Finally, Schoppe-Sullivan et al. (2006) found that fathers and mothers of one-year-olds were equally sensitive to sons, but that fathers were less sensitive to daughters than were mothers. In addition, mothers were significantly more sensitive to daughters than to sons. It is worth noting that parental sensitivity was measured with Ainsworth’s Sensitivity Scale (Ainsworth et al., 1971).

The lack of consensus about the extent to which parents treat their sons and daughters differently can be partially explained by the wide range of child ages included in the studies, the variety of measures and observational strategies and settings (Cerezo et al., 2017, p. 10).

**Same-Sex Families and Attachment**

On this matter, McConnachie et al. (2020) interviewed English children aged between 10 and 14 years to explore father-child attachment in adoptive gay father families. Carone and colleagues (Carone et al., 2020a, 2020b) conducted avant-garde research concerning attachment security in Italian gay father surrogacy families. In one of their studies, they not only assessed 6–12-year-olds’ perception of security, but they also used observational instruments to evaluate parent-child’ interactions, through structured activities — such as drawing and building blocks — over a 5-minute period of time (Carone et al., 2020a).

Regarding observational measures based on attachment theory and the assessment of infants (i.e., 12–36-month-olds) and preschoolers (i.e., 3–6-year-olds), Feugé et al. (2020) described Canadian adoptive gay fathers’ sensitivity and child’s attachment security using two “gold standard” measures (Cadman et al., 2018): The Mother Behavior Q-Set (MBQS; Pederson & Moran, 1995a) and the Attachment Q-Set (AQS; Waters, 1995) respectively. Results showed that higher levels of sensitivity were related to higher levels of security, but they did not test for child gender differences.

Further south of the continent, we published a paper that also used the q-sort methodology to describe Mexican infant-same-sex parent interactions (i.e., MBQS and AQS), with a focus on providing and in-depth examination of which elements configured the quality of care through a semi-structured qualitative interview (Salinas-Quiroz et al.,...
Both research teams inaugurated a new field of study where same-sex parents’ caregiving behavior and children’s organization of secure base behavior are described using gold standard measures through extensive and unstructured naturalistic observations (i.e., 90–120 minutes home visits).

Additionally, our findings are important for critical theoretical issues, namely, the universality and the sensitivity hypotheses which have been scantily studied among same-sex couples and their children. In other words, Salinas-Quiroz et al. (2018) as well as Feugé and colleagues (2020) granted pioneering empirical evidence for the “ordinary expectable caregiving environments” (Bowlby, 1969/1982) that North American same-sex couples provide to their children, i.e., the universality and the sensitivity hypotheses.

According to Posada and Waters (2018), consolidating the use of parents as a secure base during early childhood, i.e., beyond infancy, entails concurrent age-appropriate secure base support. Nevertheless, to date; no study has explored how same-sex parents assist their preschoolers in the construction and organization of secure base behavior over long periods of time through observational assessment tools.

To guide this study, we posed specific research questions: Are there differences in the security and sensitivity scores between lesbian and gay families? And if so, would the potential differences be accounted for child’s age and gender? Are Mexican lesbian mothers/gay fathers’ sensitivity scores predictors of children’s secure base behavior (i.e., security)? Do higher levels of lesbian and gay parental sensitivity impact on higher levels of child security? These research questions were developed based on our aim to examine whether the well-documented link between heterosexual parents’ secure base support and child secure base behavior could also be observed among Mexican same-sex families with 1- to 6-year-old-children.

Method

Participants

We contacted parents through a non-governmental organization (NGO). The only inclusion criterion for study entry was that same-sex couples living together had 12–72-month-old children. The NGO representative extended the invitation to the 703 Facebook group members. Afterwards, they signed an informed consent to be videotaped where confidentiality and anonymity were ensured. If they agreed to participate, the study was explained in greater detail and home/playground visits were scheduled.

2) “Familias Diversas” [Diverse Families] is a civil association of Mexican LGBTQ parents who interact and dialogue about their experiences in order to visibilize their existence.

3) The exact number of members that are actually parents as well as the age of their offspring is unknown. In order to gain a membership, an invitation from a group member is needed.
Eight same-sex families (16 parents) from an upper-middle socioeconomic status agreed to participate – virtually all parents had a college degree and one or two cars. The sample included 22 child-parent dyads from four lesbian and four gay families, within which one gay couple and one lesbian couple had boy-girl twins, and one lesbian couple had boy twins. In total, seven boys and four girls participated; six were aged between 12 and 36 months (infants) and five were 37–72 months of age (preschoolers); five children were raised by two fathers and six by two mothers. All lesbian couples chose donor insemination, while one gay couple became parents in the context of a previous heterosexual relationship, two through adoption and the last one via surrogacy (see Table 1).

Table 1

Demographic Characteristics

<table>
<thead>
<tr>
<th>Mother / Father (Pseudonym)</th>
<th>Age</th>
<th>Education</th>
<th>Occupation</th>
<th>Pathway to parenthood</th>
<th>Pseudonym</th>
<th>Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lilia</td>
<td>47</td>
<td>Bachelor</td>
<td>Yoga Teacher &amp; Radio newscaster</td>
<td>Donor insemination</td>
<td>Julia</td>
<td>36 months</td>
</tr>
<tr>
<td>Flor</td>
<td>41</td>
<td>Postgraduate</td>
<td>Documentary film editor &amp; Yoga Teacher</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gabriela</td>
<td>37</td>
<td>Postgraduate</td>
<td>Self-employed Sales</td>
<td>Donor insemination</td>
<td>Gabriel &amp; Paulo (twins)</td>
<td>19 months</td>
</tr>
<tr>
<td>Eugenia</td>
<td>30</td>
<td>Bachelor</td>
<td></td>
<td>Donor insemination</td>
<td>Isabel &amp; Fabián (twins)</td>
<td>58 months</td>
</tr>
<tr>
<td>Isabel</td>
<td>40</td>
<td>Postgraduate</td>
<td>Stay-at-home mom Lawyer</td>
<td>Donor insemination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fabiola</td>
<td>46</td>
<td>Postgraduate</td>
<td></td>
<td>Donor insemination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mary</td>
<td>35</td>
<td>High school degree (currently studying a bachelor)</td>
<td>Self-employed</td>
<td>Donor insemination</td>
<td>Óscar</td>
<td>58 months</td>
</tr>
<tr>
<td>Aidé</td>
<td>27</td>
<td>Technical career</td>
<td>Sales</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4) The Mexican Association of Market and Public Opinion Research Agencies (Spanish acronym AMAI) developed a classification index based on an assignment tree considering 13 variables. According to the AMAI, Mexico population is divided into six segments: AB (people with high purchasing power and income), C+ (people with higher-than average incomes, whose families are headed by someone with a college degree and have at least two cars), C (people with middle incomes, whose families are headed by someone with a high school degree and have a car), D+ (people with incomes slightly below average, some secondary education and no family vehicle), D and E (people with low income levels and a fairly austere way of existence, who have a primary school education and who lack access to traditional banking services). Middle class would find itself at least in the D+ to C range.
Parents

<table>
<thead>
<tr>
<th>Parent</th>
<th>Age</th>
<th>Education</th>
<th>Occupation</th>
<th>Pathway to Parenthood</th>
<th>Pseudonym</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jerónimo</td>
<td>35</td>
<td>Bachelor</td>
<td>Lawyer</td>
<td>Previous heterosexual relationship</td>
<td>Carlos 50 months</td>
</tr>
<tr>
<td>Ernesto</td>
<td>41</td>
<td>Bachelor</td>
<td>Teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fernando</td>
<td>42</td>
<td>Bachelor</td>
<td>IT Accountant</td>
<td>Surrogacy</td>
<td>Fernando &amp; Lorenzo (twins) 23 months</td>
</tr>
<tr>
<td>Lorenzo</td>
<td>46</td>
<td>Bachelor</td>
<td>Politician</td>
<td></td>
<td>Mario 59 months</td>
</tr>
<tr>
<td>Lázaro</td>
<td>48</td>
<td>Postgraduate</td>
<td>Bank employee</td>
<td>Adoption</td>
<td></td>
</tr>
<tr>
<td>Juan</td>
<td>41</td>
<td>High school degree (currently studying a bachelor)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noe</td>
<td>30</td>
<td>Bachelor</td>
<td>Medical Representative</td>
<td>Adoption</td>
<td>Karina 27 months</td>
</tr>
<tr>
<td>Gerardo</td>
<td>35</td>
<td>Postgraduate</td>
<td>Physician</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*These individuals participated in Salinas-Quiroz et al. (2018) study. The present manuscript adds to what has been already published, since the aforementioned research project focused on which elements configured the quality of care through a semi-structured qualitative interview.

All children raised by gay parents had been with them from the day they were born, as birth mothers agreed to give them away in the hospital; in other words, neither of the children raised by gay men had been institutionalized nor established contact with their birth mother. The sampling procedure was non-probabilistic and purposive. Caregivers’ mean age was 39.18 (SD = 6.23) years old and children’ age 38.81 (SD = 17.34) months old. They were grouped into infants (i.e., 12–36-month-olds) and preschoolers (i.e., 37–72-month-olds); 12 and 10 children, respectively.

Procedure

Parental and child behavior during parent-child interactions (i.e., without the presence of their partner) were observed and videotaped. For infants, 2-hour home visits were recorded, while for preschoolers one hour at home and 60 minutes at the playground. All home visits were unstructured such that mothers and fathers were told to go about their daily activities as they normally would. For preschoolers, we chose playgrounds with “jungle gyms” that provided swings, ladders, slides, and monkey bars. Dyads were met and videotaped at their homes for the first hour, afterwards, everyone walked or drove to the playground of parent’s choice.

Observers were allowed to interact with the mother/father and the same child at home/playground. Parents were instructed to play as usual at home/playground and observers interacted with parents and children in a natural manner (parents were not
told to pretend that the researchers were not there, and observers did not take notes). Mother/father and child’s behaviors were reported after the visit by four independent and q-sort trained observers\(^*\) who were blind to the research hypotheses (two for sensitivity and two for security).

Ethical approval for this study was obtained by the second author’s university Ethics Committee. All procedures were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

**Assessment**

All observers were trained in the use of the q sorts (Attachment Q-set [AQS] and Mother Behavior Q-set [MBQS]/Mother Behavior with Preschoolers Q-set [MBPQS] separately) by the first, third and fourth authors. Training for each q-sort consisted of first reading and discussing the meaning of the 90 items. This was followed by three to five practice observations and q-descriptions of parental (MBQS/MBPQS) and child behavior (AQS) during videotaped child-mother interactions at home/playground. Trainee observers’ descriptions were compared to those of an expert; an observer was considered trained when he or she obtained an inter-observer reliability with a specialist (i.e., correlation corrected for number of observers using the Spearman-Brown formula) of at least .80 in three practice observations. The four coders achieved the reliability criteria.

**Parental Behavior (Sensitivity)**

The Maternal Behavior Q-set (MBQS; Pederson & Moran, 1995a) comprises 90 items that are used to assess the sensitivity of mothers of infants aged 8 months up to 3 years during their interactions. Q-sort items are proposed on a set of cards that are classified by an observer according to its relevance with the parent’s actual behaviors. Following the q-sort methodology, items were sorted along a continuum from “least characteristic” to “most characteristic.” Firstly, each observer divided the 90 items into three piles: uncharacteristic, neither characteristic nor uncharacteristic, or characteristic. Subsequently, the three piles were further subdivided into nine piles of ten items each ranging from 1 (least characteristic) to 9 (most characteristic). The pile number in which an item is placed is the rating for that item. When two observers provided behavioral descriptions, disagreements on item placement (i.e., items sorted more than three piles apart) were discussed and each observer rescored the items in question. The MBQS was originally designed for home observations of mother-infant interactions, but it has also been used with heterosexual fathers (e.g., Colonnesi et al., 2013), gay fathers (Feugé et al., 2020; Salinas-Quiroz et al., 2018), and lesbian mothers (Salinas-Quiroz et al., 2018).

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5) Two Mexican and two Uruguayan undergraduate Psychology students.
Correlations were computed between the observer’s sort and a criterion sort established for a prototypically sensitive caregiver by experts in attachment theory. The final score fluctuated from -1.0 (least sensitive) to 1.0 (prototypically sensitive). For this sample, two independent observers coded the video recordings of interactions at home (120 minutes). Intraclass correlations, calculated for 100% of the sample, showed excellent inter-observer reliability, $r_{icc} = .93$ (range from .87 before discussion to .97 after discussion).

On the other hand, the Maternal Behavior with Preschoolers Q-set (MBPQS; Posada et al., 2007) allows researchers to describe age-relevant caregiving behavior connected to security outcomes in naturalistic settings, during early childhood (3-6-year-olds). Similarly to the MBQS, the MBPQS includes 90 items. We averaged characterizations of parental behavior at home and playground to obtain a composite description (i.e., the four descriptions were averaged into a composite that was used as the Q description of a parent’s behavior). The final score also fluctuated from -1.0 to 1.0. Intraclass correlations, calculated for 100% of the sample, showed excellent inter-judge reliability, $r_{icc} = .89$ (range from .85 before discussion to .94 after discussion).

**Secure Base Behavior (Security)**

We described 1–6 years-old’s behavior (i.e., infants and preschoolers) during interactions with their parents using the Attachment Q-set (AQS; Waters, 1995). It also comprises 90 items that assess the organization of children’s attachment behavior in naturalistic settings. Following the q-sort methodology, all items were classified by each observer according to its relevance with the child’s actual behaviors. Disagreements on item placement (i.e., items sorted more than three piles apart) were discussed and each observer rescored the items in question. The AQS has also been used with children raised in same-sex families (Feugé et al., 2020; Salinas-Quiroz et al., 2018).

Correlations were computed between the observer’s sort and a criterion sort established for a prototypically secure child by a committee of experts. The final score fluctuated from -1.0 (least secure) to 1.0 (prototypically secure). Two independent observers coded all video recordings of interactions; for infants, a 120 minutes video at home; and for preschoolers, we averaged the two descriptions of child behavior at home (60 minutes) and the two descriptions of child behavior at the playground (60 minutes) to obtain a composite description (i.e., the four descriptions were averaged into a composite that was used as the Q description of a child’s behavior). Intraclass correlations, calculated for 100% of the sample, showed good inter-observer reliability, $r_{icc} = .73$ (range from .41 before discussion to .94 after discussion).
Data Analysis

Due to the presence of twins and two parents in the same family, we computed a cluster analysis to analyze nested data. We also carried out a Shapiro-Wilk test for both security and sensitivity scores. We conducted Mann-Whitney U tests to examine differences in security/sensitivity scores by grouping variables, i.e., family type, child’s age and gender. Further, we calculated a non-parametric linear regression model (Siegel method) to assess the impact of sensitivity as regressor of security. We used the R software version 3.5.3 (R Core Team, 2019), and packages dplyr (Wickham et al., 2019), ggplot2 (Wickham, 2016), psych (Revelle, 2018) and mblm (Komsta, 2019) to conduct all statistical analyses.

Results

The normality test showed that the global security score followed a normal distribution ($W = .97, \ p = .73$) while the global sensitivity score did not ($W = .72, \ p < .001$). The mean score obtained for sensitivity among lesbian and gay parents was .56, which reflects that parents perceived child signals, interpreted them correctly, and responded to them contingently and appropriately. Regarding secure base behavior (i.e., security), the mean score obtained was .47, which reflects a smoothly functioning child-parent dyad, and that children used both of their mothers/fathers separately as a haven of safety, as well as a secure base from which to explore their surroundings. Security scores were not affected by children’s age group ($U = 80.5, \ p = 0.187$), therefore, it is possible to infer that there are no differences in security depending on their developmental stage. Due to the above, and given the small group sizes, we considered performing analyzes with the data of both age groups (i.e., infants and preschoolers) so that the sample size did not represent an additional limitation. Mean and distribution measures of security and sensitivity scores are presented in Table 2.

Table 2

Descriptive Statistics for Security and Sensitivity Scores by Grouping Variables

<table>
<thead>
<tr>
<th>Group/Score</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Median</th>
<th>Range</th>
<th>Skew</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>12–36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>12</td>
<td>0.51</td>
<td>0.16</td>
<td>0.52</td>
<td>0.60</td>
<td>-0.88</td>
<td>0.16</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>12</td>
<td>0.73</td>
<td>0.05</td>
<td>0.73</td>
<td>0.16</td>
<td>0.60</td>
<td>-0.54</td>
</tr>
<tr>
<td>37–72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>10</td>
<td>0.43</td>
<td>0.16</td>
<td>0.41</td>
<td>0.49</td>
<td>0.17</td>
<td>-1.40</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>10</td>
<td>0.36</td>
<td>0.33</td>
<td>0.51</td>
<td>0.86</td>
<td>-0.80</td>
<td>-1.23</td>
</tr>
<tr>
<td>Group/Score</td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>Median</td>
<td>Range</td>
<td>Skew</td>
<td>Kurtosis</td>
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<tr>
<td>Boy</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>8</td>
<td>0.45</td>
<td>0.18</td>
<td>0.45</td>
<td>0.52</td>
<td>0.16</td>
<td>-1.53</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>8</td>
<td>0.72</td>
<td>0.10</td>
<td>0.74</td>
<td>0.31</td>
<td>-0.80</td>
<td>-0.69</td>
</tr>
<tr>
<td>Gay</td>
<td></td>
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</tr>
<tr>
<td>Security</td>
<td>10</td>
<td>0.46</td>
<td>0.15</td>
<td>0.48</td>
<td>0.57</td>
<td>-0.59</td>
<td>0.06</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>10</td>
<td>0.52</td>
<td>0.38</td>
<td>0.70</td>
<td>1.00</td>
<td>-1.23</td>
<td>-0.41</td>
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<tr>
<td>Girl</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
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<td>0.49</td>
<td>0.15</td>
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<td>0.57</td>
<td>-0.77</td>
<td>-0.23</td>
</tr>
<tr>
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<td>0.33</td>
<td>0.62</td>
<td>0.96</td>
<td>-1.17</td>
<td>-0.27</td>
</tr>
<tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>0.18</td>
<td>0.56</td>
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<td>0.85</td>
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</table>

Given the nature of the study design and the participant families, i.e., both parents were assessed with the same child and three out of eight families had twins, the likelihood of having family nested data was latent. To analyze this effect an eight-cluster analysis was computed. Results show that clusters did not correspond with family composition with the exception of one lesbian family who had twins [Mother 7 and Mother 8] (see Figure 1).

**Figure 1**

*Cluster Analysis by Family Composition*
We computed Mann-Whitney U tests to look for differences on security and sensitivity’ scores between lesbian mothers and gay fathers (family type), as well as by children’s sociodemographic characteristics (age and gender). We found statistically significant differences only for sensitivity between children’s age group ($U = 120.0, p < .001$) and gender ($U = 18.5, p < .05$); the $r$ effect sizes were $-.546 [-.785, -.174]$ and $_.845 [.757, .854]$, respectively. Parents of infants and girls scored higher on sensitivity. Differences for all groups are presented in Figure 2.

Figure 2

*Differences on Security and Sensitivity’ Scores by Grouping Variables*

Due to the small number of cases, it was not possible to compute a nested model. Nevertheless, a robust regression model by Siegel method for predicting security scores with sensitivity scores as regressor was significant for the whole sample ($\beta = 0.294, p < 0.05$), with a statistical power of .89 (see Table 3 and Figure 3).

Table 3

*Siegel Regression Analysis Predicting Child Attachment With Parental Sensitivity*

| Variable          | Estimate | MAD  | V value | Pr(>|V|) |
|-------------------|----------|------|---------|----------|
| (Intercept)       | 0.293    | 0.240| 216     | 0.003    |
| Sensitivity Score | 0.294    | 0.399| 157     | 0.013    |
Discussion

Before moving to the analysis of our findings, we acknowledge that they should be interpreted with caution given the relatively small number of dyads, the upper-middle socioeconomic status of our participants, as well as the high variability within the sample, namely, the different pathways to parenthood, child ages and the inclusion of twins. Since there are very few studies that have assessed parents’ secure base support (i.e., sensitivity) and child secure base behavior (i.e., security) among same-sex parents, it proves difficult to draw direct comparisons between this study’s findings and that of others.

Having said that, the mean score obtained for sensitivity among lesbian and gay parents was .56, which is comparable to the one reported for Canadian gay fathers ($M = .53$; Feugé et al., 2020). Regarding secure base behavior (i.e., security), the mean score obtained was .47, also analogous to the mean score reported in the same Quebecois study ($M = .41$; Feugé et al., 2020). Further, based on studies that dichotomize global AQS scores to distinguish between secure and insecure children (where children with scores $> .44$ are considered secure; Posada et al., 2018) we observed that virtually all children were secure.

Regarding our first research question, the lack of significant differences between mothers and fathers’ sensitivity is somewhat encouraging, and an important addition to the literature regarding the quality of parenting by lesbian mothers and gay fathers. Given that sensitive parenting relies heavily on the correct interpretation of child signals, more time spent with them leads to a more accurate understanding of their needs, resulting in higher levels of sensitivity. Moreover, the absence of differences between lesbian
mothers and gay fathers may reflect an equally distributed and democratic division of duties, which has shown to be more common among same-sex parents when compared to different-sex couples (e.g., Goldberg, Smith, & Perry-Jenkins, 2012). Further, within same-sex partners, no differences have been found regarding the division of parenthood tasks between biological and non-biological parents (Tornello et al., 2015). These findings are also consistent with recent Canadian evidence, since gay primary caregivers’ level of sensitivity was not significantly different from that of secondary caregivers (Feugé et al., 2020).

Although we did not find significant differences between mothers and fathers’ sensitivity, scores were higher for parents of younger children, which answers our second question, i.e., potential differences could be accounted for child’s age. A potential explanation is that throughout infancy – i.e., children aged between 12–36 months – there is greater parental apprehension and need for an adequate interpretation due to the babies’ incipient verbal responses. In contrast, preschoolers (i.e., 3–6-year-old-children) are better at communicating verbally their needs and interests than are young infants (Cerezo et al., 2017; Posada & Waters, 2018). This could lead to the adult paying more attention to the rest of nonverbal cues resulting in higher levels of sensitivity. However, this may also be a feature of the measurement instruments – i.e., MBQS vs MBPQS – which warrants further investigation.

In the present study, sensitivity scores were also higher for parents who were raising girls, which also answers our second question, i.e., potential differences could be accounted for child’s gender. The biosocial theory states that caregivers use gender-differentiated parenting as a means of gender-role socialization and gender schema theories declare that parenting would be affected by mothers’ and fathers’ gender-role stereotypes (Cerezo et al., 2017). Either way, socialization during childhood may affect differently the quality of attachment (Granot & Mayseless, 2001). Additionally, in the Mexican culture girls are considered more vulnerable and defenseless than boys are and are thus more spoiled and less punished (Rocha & Díaz-Loving, 2011).

Assuming the socially shared belief that girls are more vulnerable and helpless than boys, greater sensitivity to them would indicate that same-sex parents do not detach from culturally learned gender roles. In fact, it has been argued that lesbian and gay identities aim to normalize monogamy, as well as uphold and expand the normative family models rather than challenge them (Goldberg, Downing, & Moyer, 2012; Rabun & Oswald, 2009), thus claiming a homonormative family model. However, it is important to remember that we did not find differences between boys’ and girls’ attachment security, neither between fathers’ and mothers’ sensitivity, so it is likely that our participants’ system of beliefs and practices around child rearing is in transition. Mexican lesbian mothers and gay fathers of infants are able to reflect on their roles (Salinas-Quiroz et al., 2018), but they still report social pressures to maintain genderized parenting practices, for example, in the use of “female” and “male” toys (Rodríguez-Sánchez et al., 2020).
In addition, we found that sensitivity predicted security for the whole sample, i.e., the sensitivity hypothesis, which states that sensitivity has an impact on child’ attachment security (fourth research question). The Siegel regression model estimates the regression slope based on the mean absolute deviation (MAD). This prediction is similar to that of a Canadian report that found that higher levels of gay fathers’ sensitivity (β = .36, p = .003) were related to higher levels of attachment security (Feugé et al., 2020): our study suggests that these findings are likely to be found among other family configurations and in different contexts, namely, in familistic societies as Mexico (Luna et al., 1996). While our sample was smaller than Feugé et al. (2020)’s, which consisted of 68 adoptive gay fathers and their children, we used the 90-item full version of the MBQS, recorded longer interactions, and calculated intraclass correlations on the 100% of the sample (i.e., two independent trained observers always described parent sensitivity/child security).

Even though differences in family structure should not be equated with detrimental outcomes in children (Farr, 2017), neither research on adoption and fostering can be generalized to research on donor insemination/surrogacy, nor lesbian mothers’ findings can be extrapolated to gay fathers, since the complexities or different parental arrangements may result in different outcomes for children (Carone et al., 2018). For example, Carone and colleagues (2020b) found that the degree of parental scaffolding observed in Italian gay fathers during discussions with their children about their surrogacy conception longitudinally predicted children’s greater exploration of their surrogacy origins only in more secure children. Whilst is likely that this could also be true for children conceived through donor insemination with two mothers, and/or for children adopted by gay fathers, the lack of specific evidence indicates new venues of research in the field.

One of the main limitations of the present study has to do with the assessment tools. Given the age’ range analyzed (1 to 6-year-old children), we had to use two different instruments to assess the same construct (i.e., sensitivity): MBQS and MBPQS. Researchers who use attachment theory as a conceptual framework often face this methodological difficulty; after children turn three years old, attachment behaviors are less obvious, which complicates their observation, recording, and interpretation. The same goes for sensitivity, as the use of the adult as a safety heaven/secure base also changes as child’s development progresses. On the basis of the foregoing, there are fewer instruments to assess preschoolers/older children interacting with their caregivers through long periods of time at an observational level: this is why most literature has used self-report measures of perceived attachment security or evaluated attachment representations. In fact, Posada and colleagues stated that “a call to investigate mother–child dyadic exchanges during early childhood (and childhood overall) has [already] been issued” (Posada et al., 2018, p. 37). Clearly, this is a relatively new and growing field of inquiry where longitudinal, multi-informant and mixed designs are especially useful.

Lastly, there was a context-specific limitation. To date, only two of the recruited families have agreed to continue collaborating with us, since in Mexico there is little
culture of participation in research projects. In fact, recruiting the families in this study and examining the 22 dyads took more than 48 months. This underscores the adversities in doing research in Latin America; in obtaining access to funding sources; and in recruiting families that are visible, not fearful of being openly involved in same-sex families’ research, and willing to take time of their daily duties to participate. This leads to the continuing need for researchers to carry out studies with brown and black LGBTQ parents, more disadvantaged socioeconomic levels as well as in other less privileged and less accepting contexts, as unfortunately most of the country is.

Conclusions

After almost 40 years of research, there is still controversy over the effects for children growing up with a lesbian or gay parent based on the argument that these family configurations may hinder normative child development (e.g., Costa & Salinas-Quiroz, 2019; Farr, 2017; Fedewa et al., 2015). “One of [its] core aspects...is attachment, specifically the role of the main caregiver as a secure base who allows children to organize their behavior, feel secure and learn about their environment” (Carneiro et al., 2017, p. 11). The universality hypothesis (van Ijzendoorn & Sagi-Schwartz, 2008) states that all children if exposed to ordinary parental care, become attached to highly personalized caregivers and our findings provided evidence in support of this hypothesis. The sensitivity-security link in infancy and preschool years has been defined as the sensitivity hypothesis and its empirical support has been well documented (e.g., Cadman et al., 2018; Posada et al., 2018; Verhage et al., 2016; Zeegers et al., 2017). As indicated earlier, some studies have found that higher levels of sensitivity were related to higher levels of attachment security (Feugé et al., 2020). Our results also provide some empirical support for this hypothesis with lesbian and gay families from Mexico City.

We must remember that both sensitivity and attachment security are fundamentally relational constructs, not caregiver/child’s traits; they are relationship specific, as the results of the regression analysis showed. Despite the sample size and the variability within it, our findings prove attachment theory as a useful theoretical framework to study caregiver-child interactions no matter parents’ sexual orientation neither the family structure (e.g., Carone et al., 2020a, 2020b; Feugé et al., 2020; Golombek & Tasker, 2015; McConnachie et al., 2020; Salinas-Quiroz et al., 2018). Together with Feugé and colleagues (2020), the present study is pioneer in testing the universality and the sensitivity hypotheses with other than heterosexual parents and their 1–6-year-old children.
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