The Secure Base Phenomenon: Organization of Behavior and Narratives in Two Cultures

Eunjung Kim1, Jill Trumbell1, Sandra Plata2, & Germán Posada1
1Human Development and Family Studies Department, Purdue University
2Pontificia Universidad Javeriana

Introduction

The secure base phenomenon has been hypothesized to be species characteristic and evident in all children (Bowlby, 1982). Supporting evidence indicates that children use their caregivers as a secure base across different cultures (Posada et al., 2013).

During preschool, an important transformation occurs, as children gradually transition from a sensorimotor modus operandi of attachment relationships to a more complex one that integrates representations.

Researchers have suggested that such representations are stored cognitively as a secure base script (Bowlby, 1982). Importantly, initial evidence suggest that an association exists between child secure base behavior and secure base scripts during early childhood (Waters et al., 1998).

An adaption of Waters and colleagues’ (1998) was used to code three stories (Spilled Juice, Hurt Knee, and Monster in the Bedroom) for secure base script scores.

Results

Colombian covariates

Children who had mothers with more years of education had significantly higher secure base script scores, $\beta = .36$, $p = .01$.

Children from families with higher monthly incomes had higher secure base script scores, $\beta = .29$, $p = .03$.

Girls had significantly higher secure base script scores than boys, $\beta = -.30$, $p = .03$.

Table 1. Demographic and Descriptive Information for Key Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>United States</th>
<th>Colombia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Age</td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Child Gender (%)</td>
<td>.52 ( .23)</td>
<td>.52 ( .23)</td>
</tr>
<tr>
<td>Maternal Age</td>
<td>31.37 (5.95)</td>
<td>31.76 (6.49)</td>
</tr>
<tr>
<td>Maternal Ed.</td>
<td>15.64 (2.27)</td>
<td>13.32 (3.82)</td>
</tr>
<tr>
<td>Income</td>
<td>.36 ( .22)</td>
<td>.29 (.06)</td>
</tr>
<tr>
<td>Secure Base Behavior</td>
<td>.47 ( .27)</td>
<td>.47 ( .27)</td>
</tr>
</tbody>
</table>

Notes: Child Age in months. Maternal Education in years completed. Income Household Income in thousand of dollars in the United States and millions of pesos in Colombia. Secure Base Scripts were standardized.

Discussion

As hypothesized, 3–4 year old children who were more adept at using their mothers as a secure base in naturalistic settings produced attachment-related narratives that more closely followed the secure base script. Further, our findings indicate this to be true both in samples from Colombia and the United States.

Conclusions

The current study assessed general secure base scripts as they relate to using any member of the family as a secure base. Future research should consider a more relationship specific assessment of the secure base script as it relates to child–mother interactions and using mother as a secure base from which to explore.

Participants

United States
Participants included 158 mother-preschooler dyads (74 boys, 84 girls) from two independent studies. Children were predominantly non-Hispanic Caucasian and were on average 48 months of age.

Colombia
55 dyads (26 girls, 29 boys) participated. Children were approximately 43 months of age.

Procedures and Assessment

Secure base behavior
Assessed at home and playgrounds by trained observers using the Attachment Questionnaire (Waters, 1995).

Inter-observer reliability ranged from .60-.92 ($M = .78$, SD = .07) for the U.S. and .64-.95 ($M = .85$, SD = .06) for Colombia.

Composite descriptions of children’s secure base behavior across visits were calculated and compared to the criterion sort for the ideally securely attached children. The resulting correlation coefficient (range: -1 to 1) is a child’s security score.

Secure base scripts
Children’s attachment-related narratives were assessed in the home using the MacArthur Attachment Story Completion Task (Bretherton et al., 1990).

Language skills
Assessed using the Peabody Picture Vocabulary Test (PPVT III; Dunn et al., 1997) in the U.S. and the Spanish version of the vocabulary subset from the Wechsler Preschool and Primary Scale of Intelligence (WPPSI; Wechsler, 1996) in Colombia.

Raw scores of language skills were examined as potential covariates in both countries.

Results

Preliminary analyses revealed language skills were not related to secure base script scores in either culture.

U.S. covariates

Girls had higher secure base script scores than boys, $\beta = .32$, $p < .001$.

Older children had higher secure base script scores than younger children, $\beta = .18$, $p = .03$.

Table 2. Regression Analyses Predicting Standardized Secure Base Script Scores from Secure Base Behavior

<table>
<thead>
<tr>
<th>Variable</th>
<th>United States</th>
<th>Colombia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study</td>
<td>$F = 7.73$, **</td>
<td>$F = 6.78$, ***</td>
</tr>
<tr>
<td>Child Age</td>
<td>.29 ( .06)</td>
<td>.29 (.06)</td>
</tr>
<tr>
<td>Child Gender (%)</td>
<td>.29 ( .15)</td>
<td>.29 (.06)</td>
</tr>
<tr>
<td>Maternal Age</td>
<td>15.64 (2.27)</td>
<td>13.32 (3.82)</td>
</tr>
<tr>
<td>Maternal Ed.</td>
<td>.36 ( .22)</td>
<td>.29 (.06)</td>
</tr>
<tr>
<td>Income</td>
<td>.36 ( .22)</td>
<td>.29 (.06)</td>
</tr>
</tbody>
</table>

Notes: Child Age in months. Maternal Education in years completed. Income Household Income in thousand of dollars in the United States and millions of pesos in Colombia. Secure Base Scripts were standardized.


correspondence can be addressed to: Jill Trumbell, jtrumbell@purdue.edu, or Germán Posada, gposada@purdue.edu

Note. This research was funded by NSF Grant #BCS-0645530.