

Findings from an Evaluation of Sesame Workshop's Play Every Day

May 2019



Project Overview

Who?

- Multi-country project team: India, Mexico, and South Africa
- Partners for on-the-ground implementation
- Children, caregivers, and communities.

What?

- Iterative program development to support scaled-up intervention
- Curriculum and multimedia content design
- Ongoing research through project development, project piloting, and intervention evaluation.

How?

- 12 week intervention
- Weekly in-person workshops or home visits
- Follow-up check-ins via WhatsApp or other digital platforms
- Community events and public distribution of resources



Objectives:

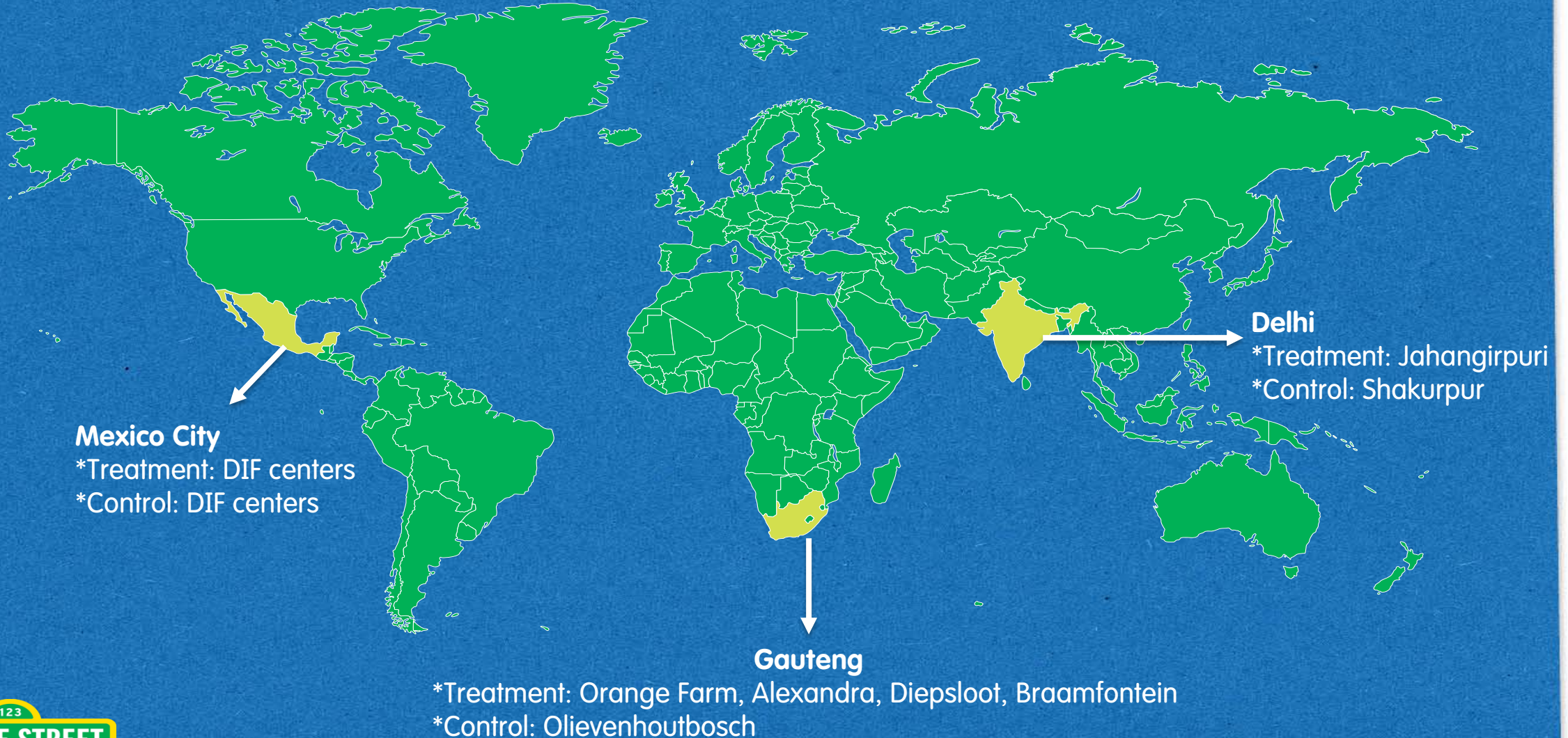
- Shift caregiver's perceptions around play and its relationship to child development and learning
- Empower caregivers to effectively guide children in learning through play
- Reach and inspire children and caregivers with guided play-based activities and complementary learning materials
- Contribute to global knowledge of best practices for promoting playful learning



How does participating in *Play Every Day* :

- change caregivers' knowledge, behavior, and attitude regarding the value of and benefits from play in their child's development?
- change caregivers' time spent engaging with their child through different guided play activities using different materials?
- affect the quality of the caregiver-child interaction during play activities, specifically in the context of using feeling words, joy, affection, and warmth?
- affect caregivers' confidence as a play mentor for their child?
- change children's creative, imaginative, and flexible thinking skills?
- increase children's use of more and varied language and/or expression?

Impact Evaluation Sites (n=1,164)



Data Collection and Analysis: Impact Evaluation



Data was collected using a mixed-methods approach through baseline and endline quantitative interviews and home observations, and analyzed through Difference-in-Difference analysis:

Baseline: August-October 2018 | **Endline:** November 2018-February 2019

- 2,714 quantitative face-to-face interviews (baseline + endline)
- 54 ethnographies (caregiver-child home-based free play observation)**

	India		Mexico		South Africa	
	Baseline	Endline	Baseline	Endline	Baseline	Endline
Treatment: Caregiver	126	118	137	98	111	79
Treatment: Child	124	120	132	94	115	79
Control: Caregiver	128	122	148	76	126	94
Control: Child	127	120	136	72	140	92
Total	505	480	553	340	492	344

*Loss to follow-up between baseline and endline varied by country and across treatment and control, though, on average LTF by country: India (5%), Mexico (39%), and South Africa (30%).

**Results of these observations were determined to be inconclusive.

Surveys were administered in the following **languages**:

- India: Hindi
- Mexico: Spanish
- South Africa: Zulu, Xhosa, and Sotho

Interview sites:

- India: Respondent homes
- Mexico: ECD centers
- South Africa:
 - Treatment, play workshops: Play workshops
 - Treatment, home visit: Respondent homes
 - Control: Respondent homes

The **caregiver survey** included the following sections:

- Caregiver demographics
- Frequency and type of play in household
- Perceptions and value of play
- Caregiver confidence in being a play mentor

The **child survey** included the following sections:

- Play knowledge and attitudes
- Play behavior and preferences
- Knowledge of Sesame Street
- Preference of relevant Sesame co-production characters
- Playing ideas and imagination

Summary of Evaluation Findings



While the context, content, and needs of India, Mexico, and South African families varied around the role and value of play in their families, and thus the findings vary from country to country, there are some key takeaways from the global evaluation of Play Every Day:

- Caregivers in all three countries **reported increased time spent playing** with their child, **increased confidence** as play mentors, **increased understanding of the role and value of play** in children's development.
- Imaginative play was a primary focus of Play Every Day. As such, **rates of pretend play**, including pretending one thing is something else and playing to pretend to be someone else, **increased in all three countries**.
 - As such, reported rates of physical play, social play, play with rules, and play with song and dance varied at endline from country to country, showing both increases and decreases in frequency.
- Take-home materials, specifically **textless storybooks**, appear to have **supported reported changes in time spent reading and telling stories** with their children as all three countries saw increases. India and South Africa are particularly of note where knowledge of targeted communities showed low literacy levels.
- **Children's participation** in Play Every Day appeared to **affect their favorite places to play** in line with messaging that play can happen anywhere, anytime.
- Children also showed **increases in creative thinking around uses for common household items** and how those items could be transformed into play objects.
- India and South Africa demonstrated statistically significant changes in knowledge and attitudes in play. While Mexico did not show statistically significant results, there were important changes reported from caregivers. Mexico's implementation and evaluation was challenged by both internal and external factors, including limited access to treatment and control centers due to partner challenges and changes in national government.

Summary of Recommendations for Scaling & Future Evaluation Considerations



The global evaluation of Play Every Day provided insights on scaling considerations in all three contexts as well as thoughts on future play workshop evaluation:

- While the external evaluator **recommended scaling up in India and South Africa** because of statistically significant changes among caregivers and children, we believe that **the data also supports scale up in Mexico**. As this presentation will show, when focusing on individual measures from Mexico, the data shows important increases in the perceptions of play and the increased role of pretend play at home.
- Related to high baselines, **future evaluations of play interventions** would benefit from **larger sample sizes** and **analyzing changes in behavior** to fully assess the impact of the intervention and enable us to make causal claims.
- Given high baselines across a variety of measures, future implementation will need to ensure that communities demonstrate clear need for a play-based interventions as well as evolving the focus **to consider improving quality of existing play** along with frequency.
- **Testing different dosage models and the effects of workshop sites** (ECD centers vs. community centers, for example) would provide important insights for global learnings around best practices in low-resource settings, particularly as implementation opportunities may vary and areas where attrition will be a concern.

Findings, Caregivers: Play Indices



D3 created 4 main indices from the primary caregiver survey.

Based on these indices, India showed statistically significant (***) increases in types of play at home, perceptions of play, and caregiver confidence as a play mentor. South Africa showed statistically significant increases in caregiver confidence in play.

	India	Mexico	South Africa
Types of Play Activities with Child at Home (5 items)	+***	-	+
Perceptions of Importance of Play (7 items)	+***	-	-
Perceptions of Importance of Play for Child's Academic Success (9 items, 11 in Mexico)	+	-	-
Primary Caregiver Confidence as Play Mentor (5 items)	+***	+	+***

As will be discussed in this presentation, analysis by indices provides only a partial narrative of what happened in each country, as the data shows increases for all countries within each index.

Findings, Children: Play Indices



D3 created one main index from the child survey to estimate causal affects.

Based on this index, India showed statistically significant (**) increases in interest or appeal of more types of play activities. For South Africa and Mexico, there were no significant differences in expressed interest or liking in more types of play activities.

	India	Mexico	South Africa
What do you like to play? (6 items, 7 in Mexico)	+**	-	-

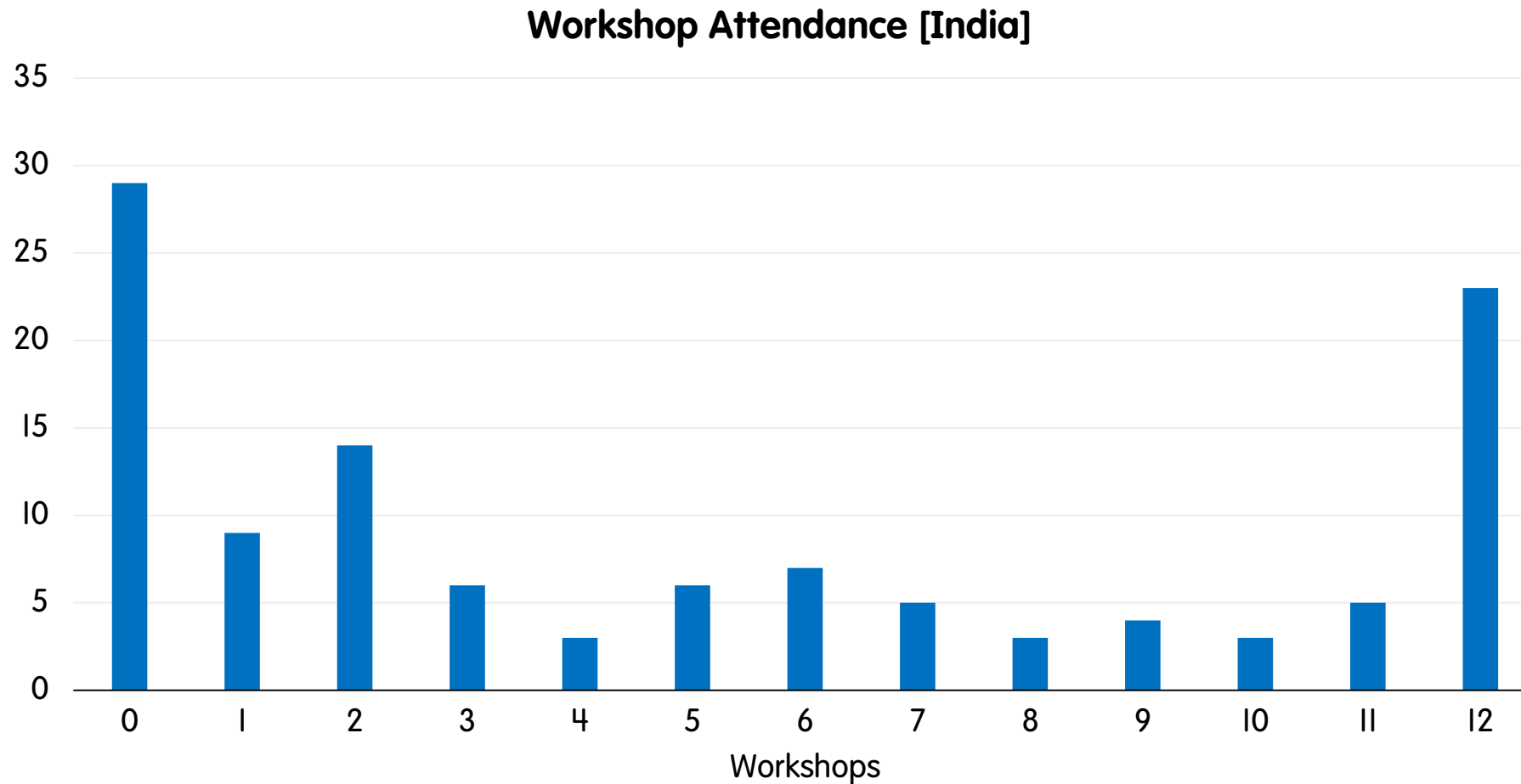
Also as noted on the previous slide and will be discussed in this presentation, analysis by index provides only a partial narrative in each country, as the data shows increases for all countries within the child index.

Findings from India

Findings from India: Workshop Attendance



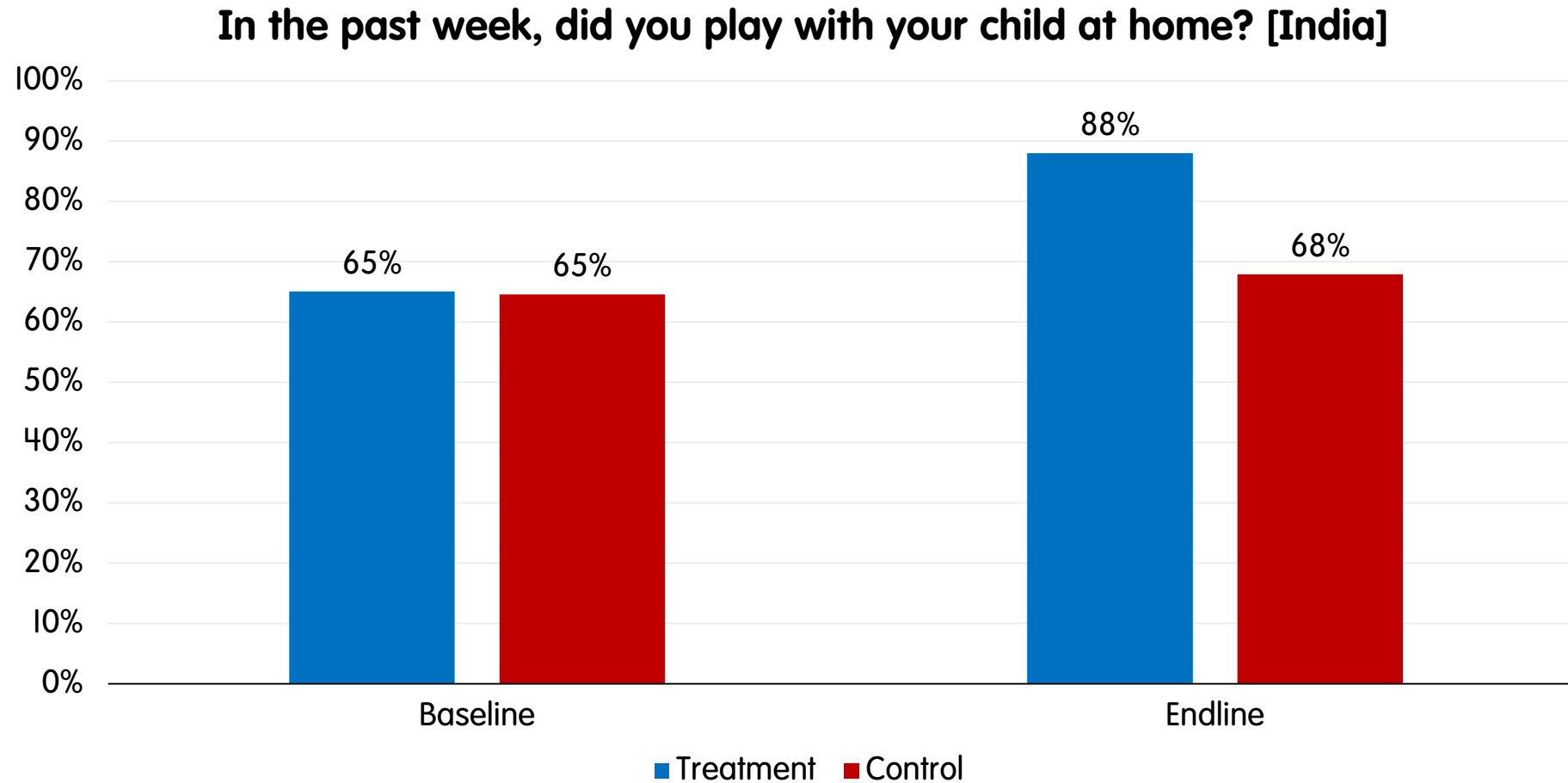
Self-reports of workshop attendance showed that in India, families were most likely to attend either 0-1 workshops or 12 workshops.



Findings from India: Frequency of Play



Caregivers in India participating in Play Every Day reported increased frequency of play by **23%**.



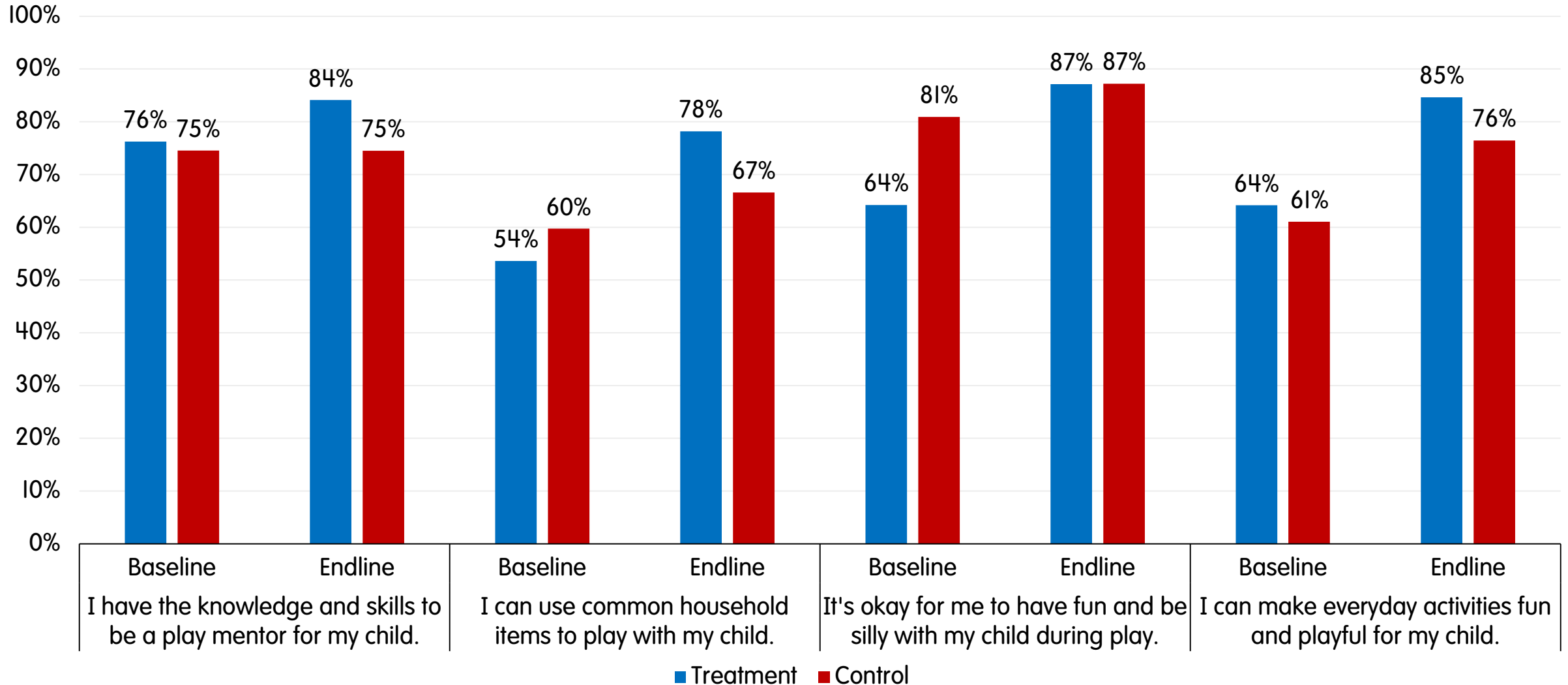
For questions around caregivers' confidence in themselves as play mentors, Indian caregivers participating in Play Every Day reported increases in:

- **+8% in knowledge and skills** as play mentors
- **+24% in confidence in use of recycled materials** as play objects
- **+23% in comfort being silly** with their child
- **+21% in ability to make everyday activities playful**

Findings from India: Caregiver Confidence as a Play Mentor



Caregiver Confidence as a Play Mentor [India]



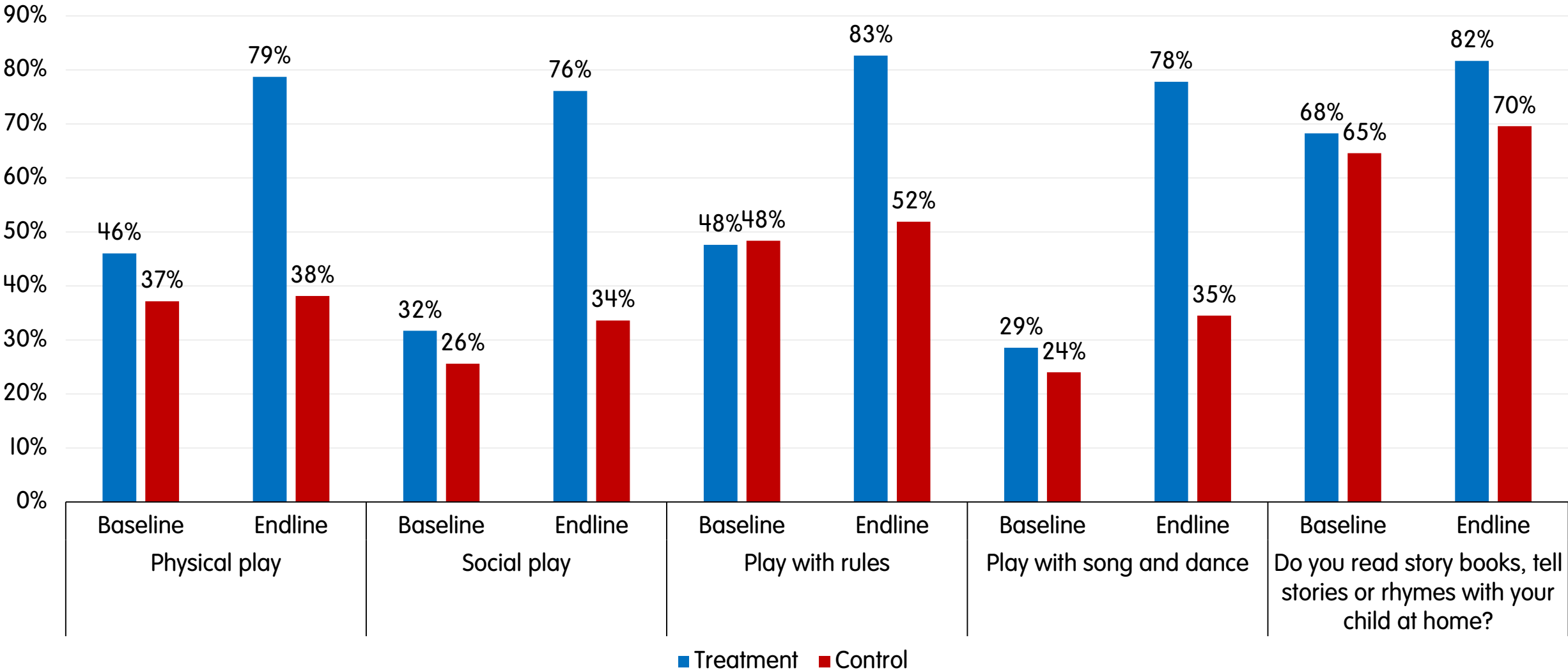
In line with increases in frequency of play and increased confidence as a play mentor, caregivers participating in Play Every Day reported increases in a variety of play activities at the end of the intervention:

- **+33% in physical play** [ring a ring roses, pakdam pakdai, poshampa, blindfold games, etc.]
- **+44% in social play** [playing in a group, sharing, interacting with others]
- **+39% in play activities with rules** [hide and seek, stapoo, marbles, carom, ludo, Gutte, etc.]
- **+49% in play activities involving singing and dancing** with music or musical instruments
- **+14%** in time spent **reading story books or telling stories** or rhymes

Findings from India: Types of Play



Types of play activities done at home with child [India]



Findings from India: Imaginative Play



Physical play, social play, play with rules, and musical play were not the only types of play to see an increase post-Play Every Day. A priority focus of Play Every Day activities and materials were designed to promote imaginative play among caregivers and children, in part because of initial research during Play Every Day planning and piloting showing limited knowledge of the value of imaginative play and little time spent in imaginative play.

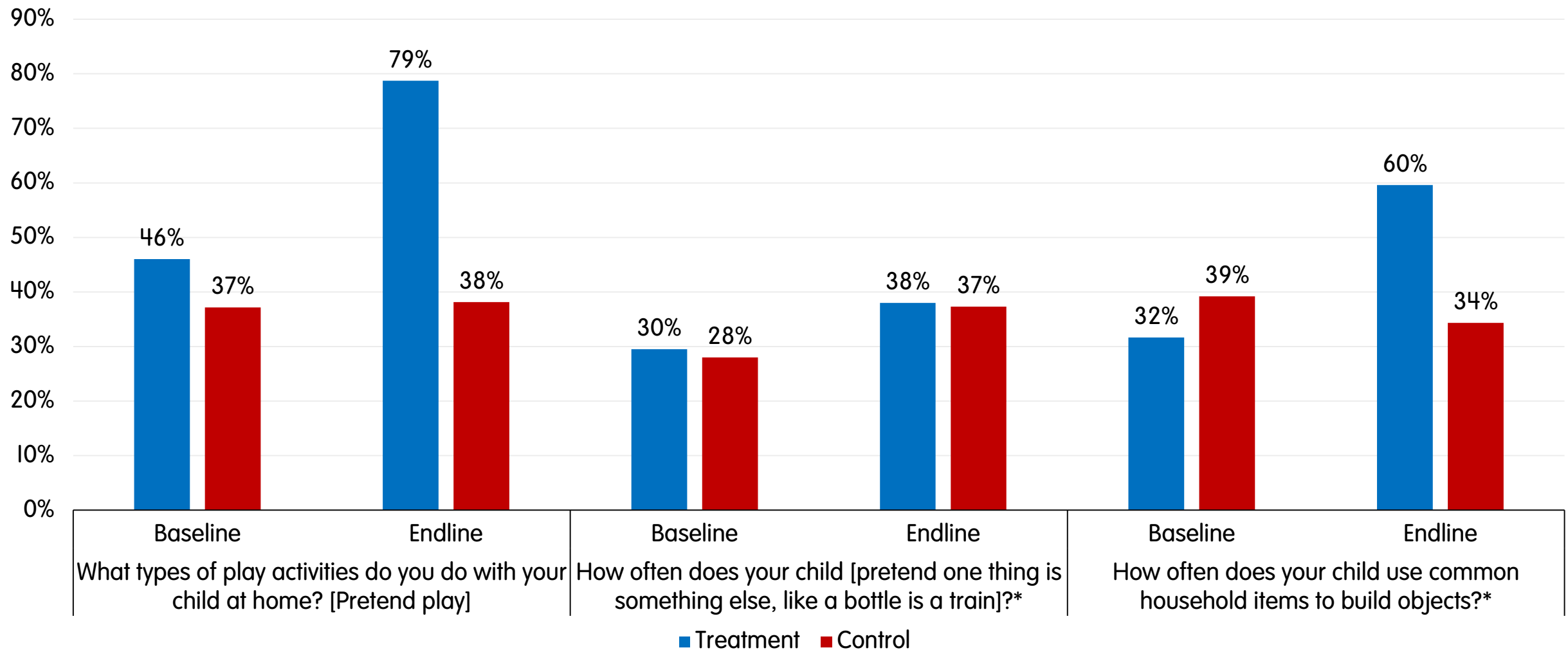
Through the Play Every Day intervention, Indian caregivers reported increases in the frequency and value of imaginative play with their children:

- **+33%** from baseline to endline **in references to pretend play when discussing types of play activities** caregiver and child do together at home
- **+8%** in **time spent in pretend play with their child at home**, specifically pretending one thing is something else
- **+28%** in daily occurrences of **using common household objects to build things**

Findings from India: Imaginative Play



Role of Imaginative Play [India]



*every day/almost every day

Needs assessment data and formative research findings demonstrated that Indian caregivers prioritized academic learning and struggled to see the link between play and academic success. Given this background, the intervention in India largely focused on supporting caregivers' understanding of play's role in children's academic development.

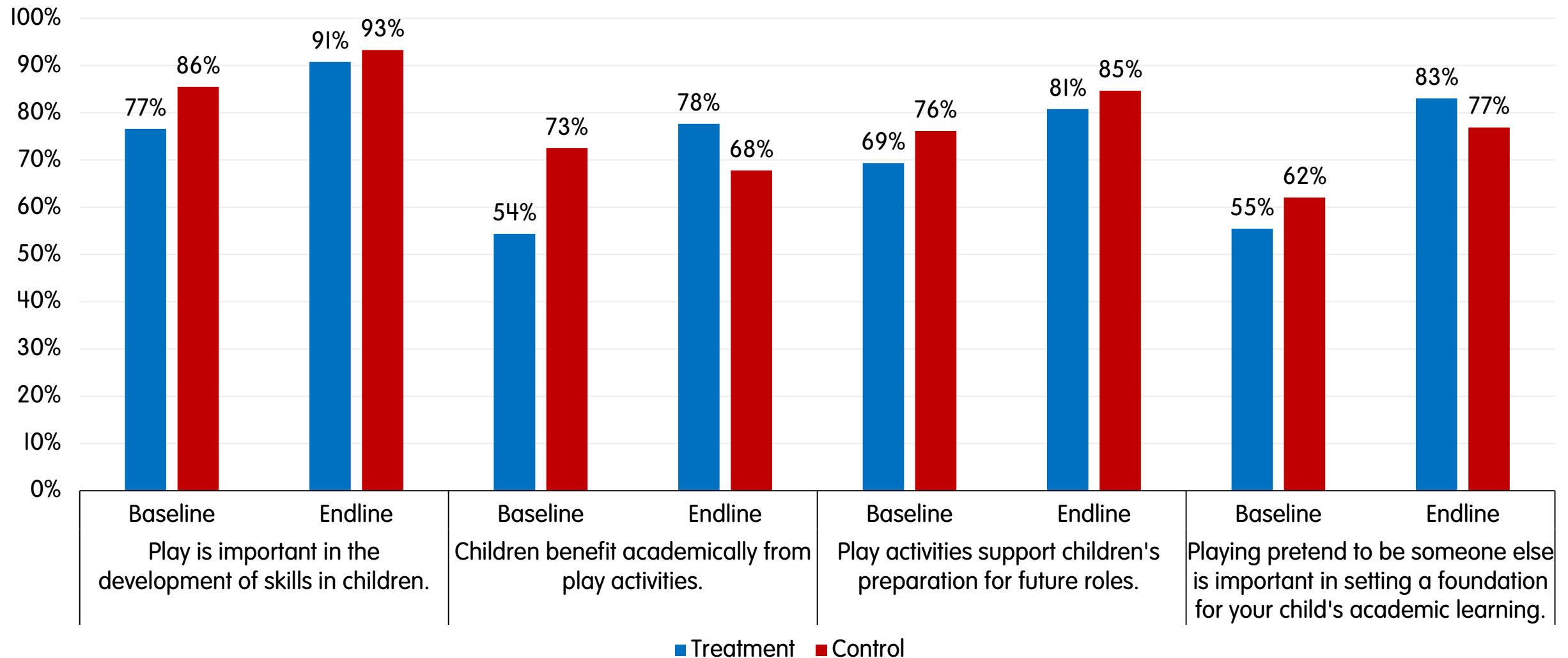
From baseline to endline, Indian caregivers showed increased understanding of the connection between play and academic success. While the main index around this measure was positive but not statistically significant, and often mirrored results from the control groups, individual questions provide some promise and insight for future consideration, including the following findings:

- **+14%** in play's role in **children's development**
- **+24%** in the **academic benefits** of play for children
- **+12%** in play's ability to **prepare children for future roles**
- **+28%** in link between **pretend play as a foundation academic learning**

Findings from India: Play and Academic Success



Linking play and academic success [India]



Findings from India: Children's Favorite Place to Play



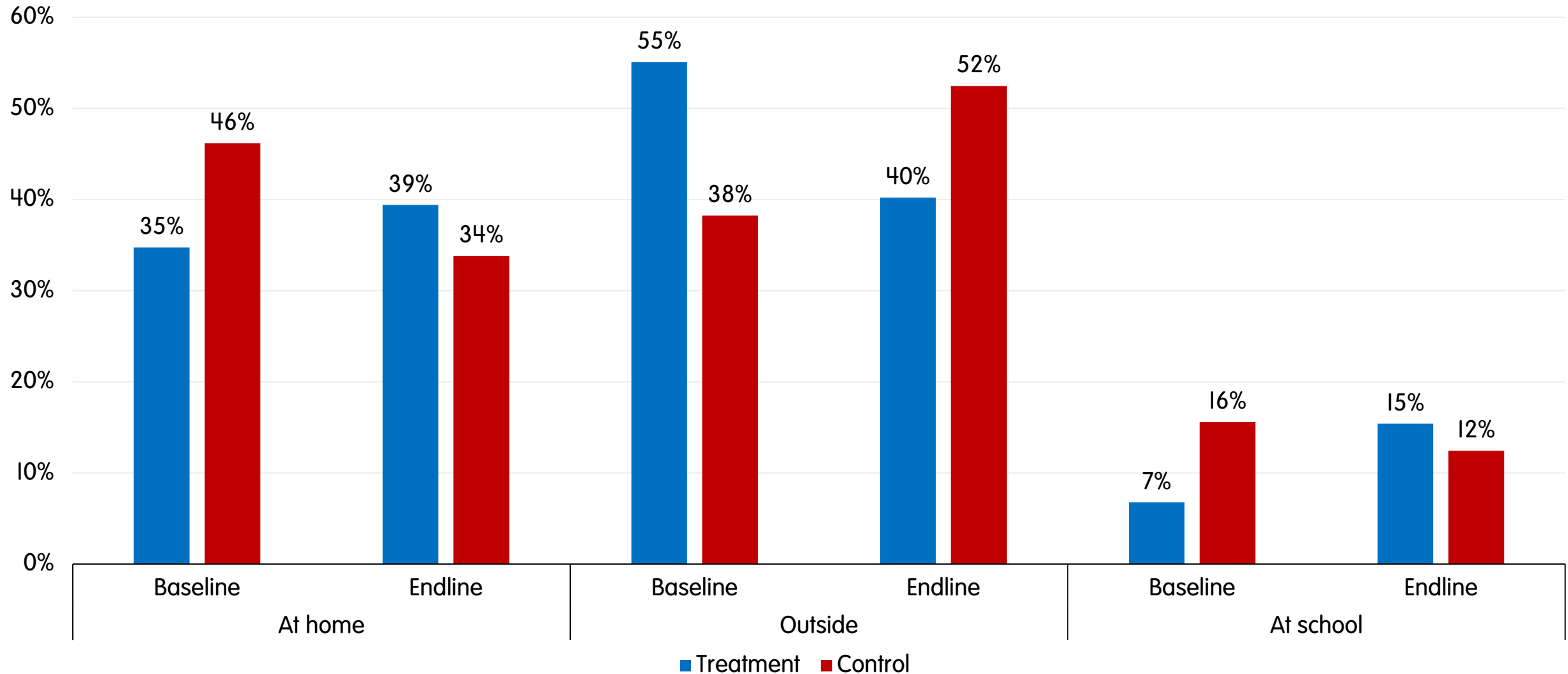
In light of messaging that play can happen anywhere, children's participation in Play Every Day in India affected their favorite places to play:

- **+4%** for **home**
- **-15%** for **outside**
- **+8%** for **school**

Findings from India: Children's Favorite Places to Play



Favorite places to play [India]



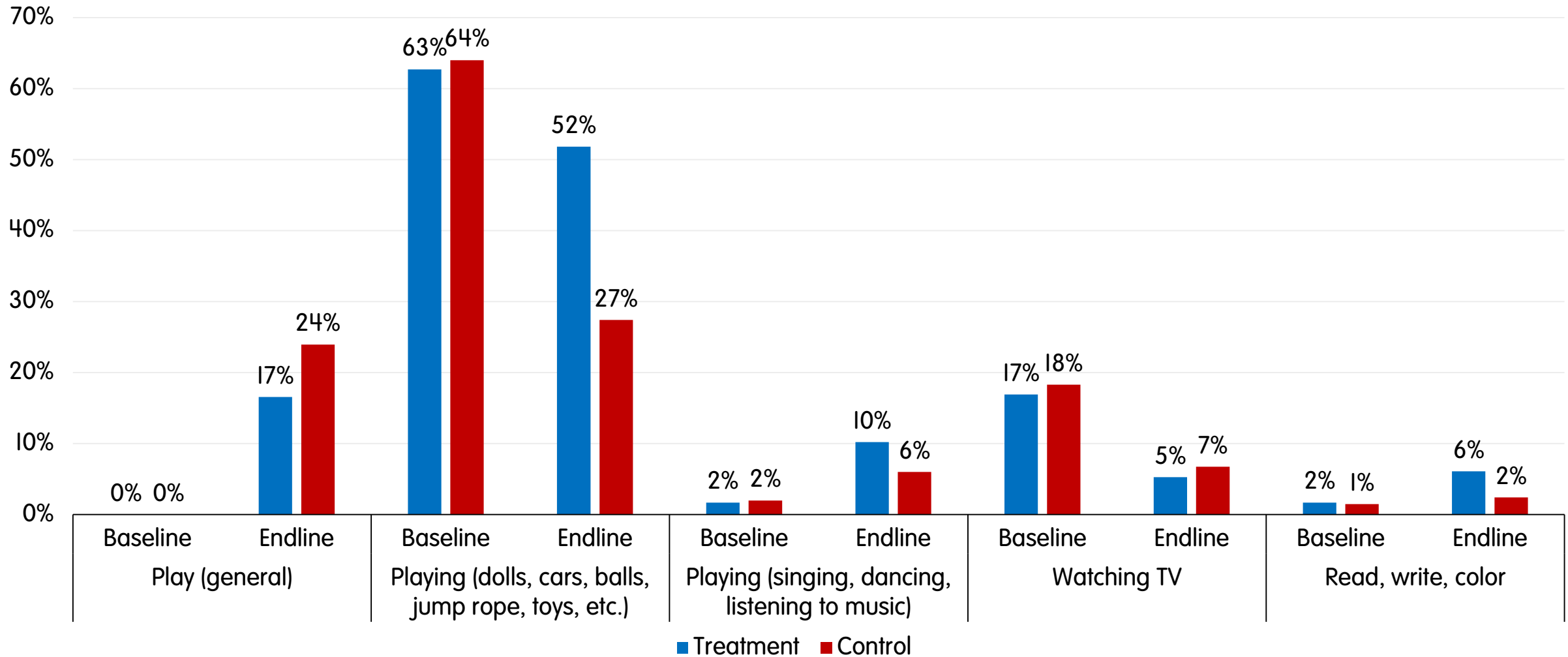
Asked about their favorite things to do at home, Indian children reported increases in different types of play and a reduction in time spent watching TV:

- **+17%** in **general play**
- **-11%** in play with dolls, cars, balls, jump rope, toys, etc.
- **+8%** in play with **singing, dancing, and listening to music**
- **-12%** for **watching TV**
- **+3%** for **reading, writing, and coloring**

Findings from India: Children's Favorite Things to do at Home



Favorite things to do at home [India]



Researchers showed children images of different common household materials and asked children twice for each image about what they could do or play with those items. Images included pictures of plastic containers, play kitchen set, stationery items, sand or clay, and recyclable items including plastic bottles, cans, and cardboard.

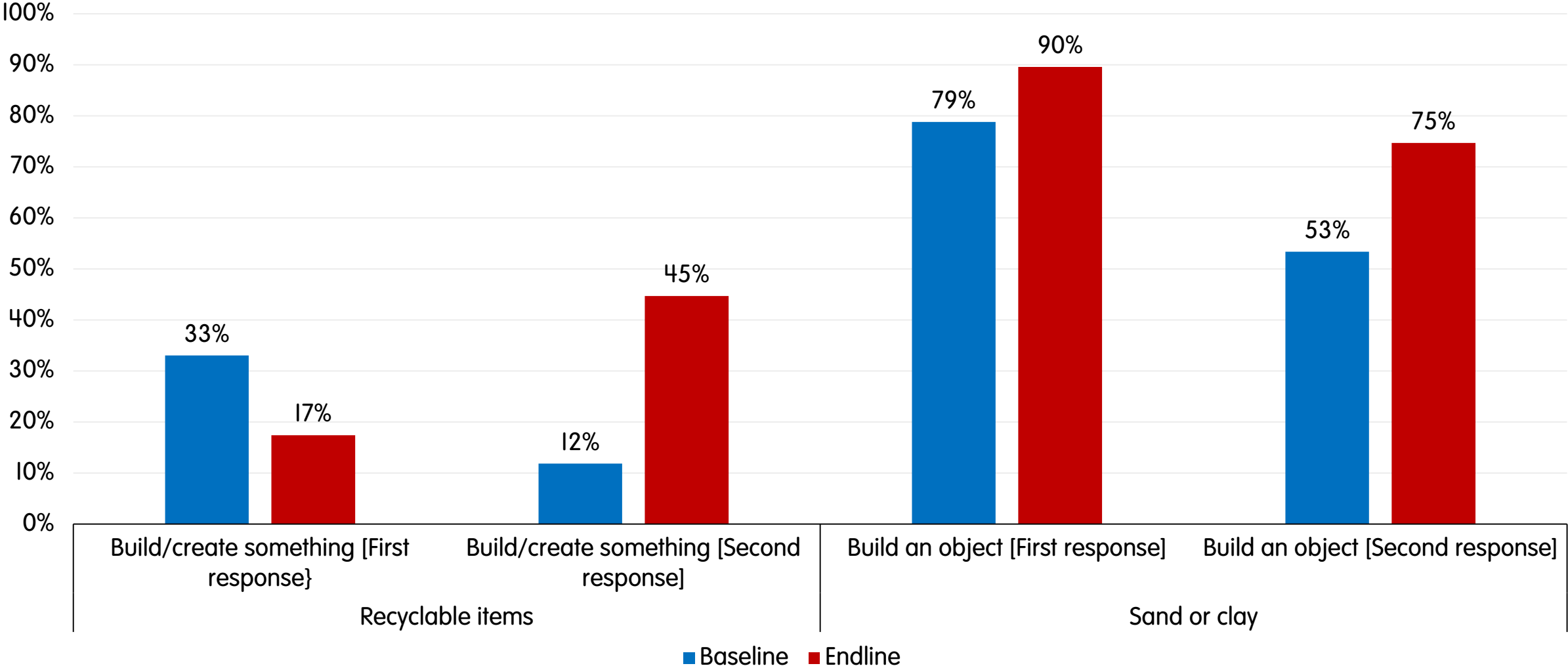
Showcasing two of the items, findings show that children thought more creatively around the use of these items:

- For **recyclable items**, while build/create something decreased 16% on first response at endline, **build/create something increased 33%** at endline.
- For **sand or clay**, **build an object increased 11% in first responses** and **increased 22% in second responses** at endline.

Findings from India: Creative Thinking



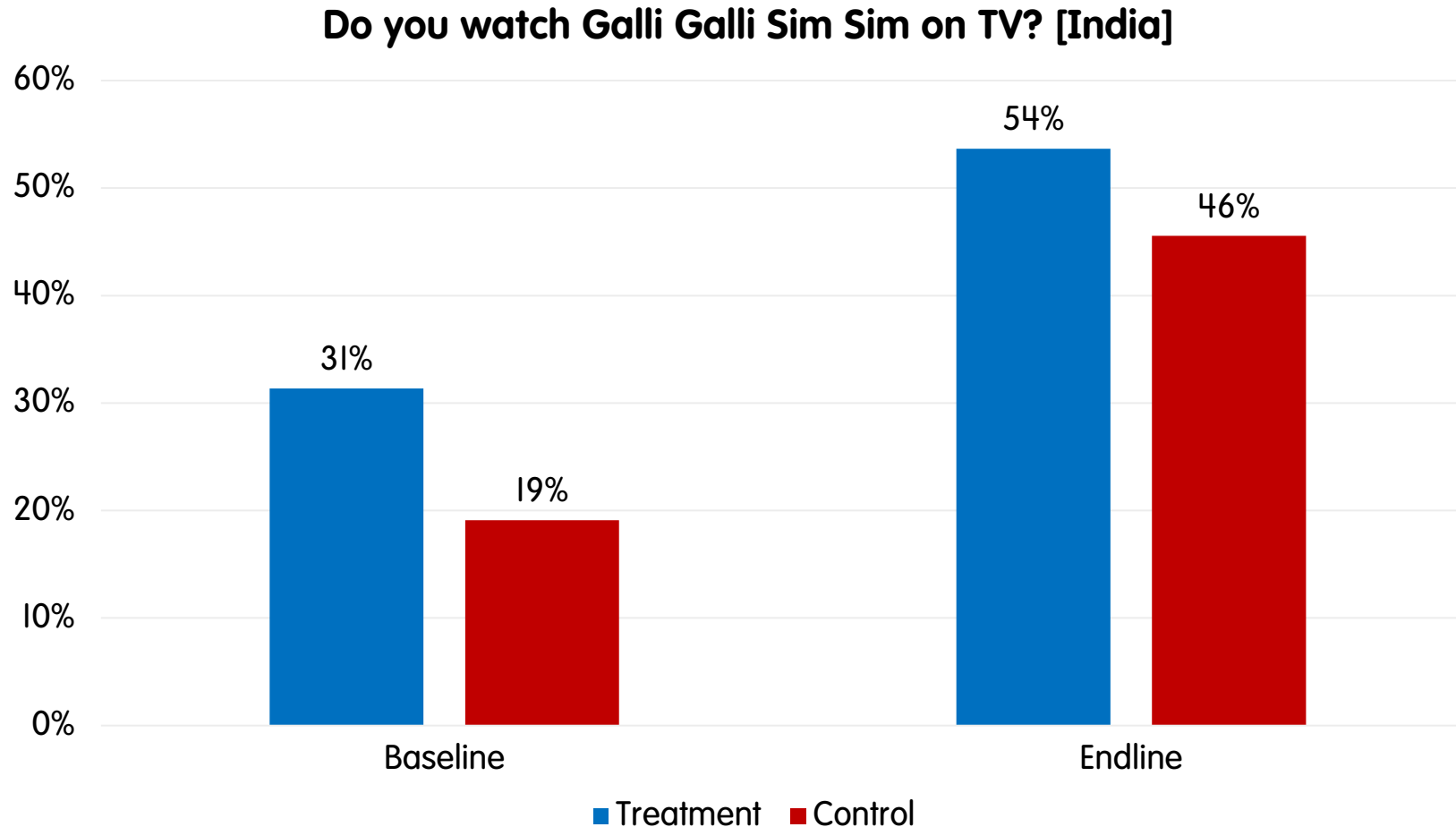
Can you tell me all the things you could do or play with these things? [India]



Findings from India: Sesame Viewership



Child participants in the treatment group in India reported a 23% increase in Galli Galli Sim Sim viewership after the end of the Play Every Day intervention.

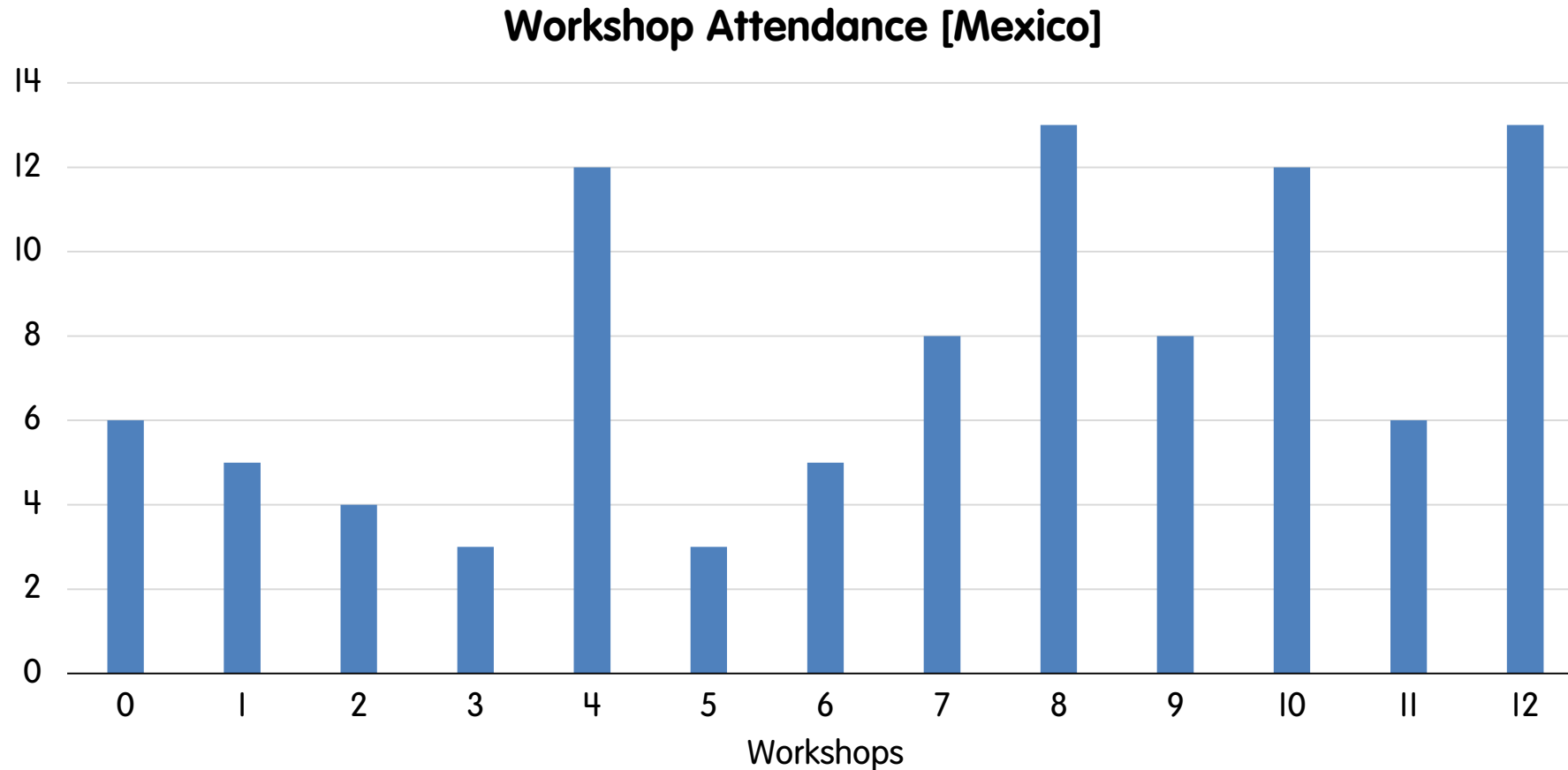


Findings from *Mexico*

Findings from Mexico: Workshop Attendance



Self-reports of workshop attendance in Mexico showed greater variance, with most families falling into attending 0-4, 5-8, 9-10, or 11-12 workshops.

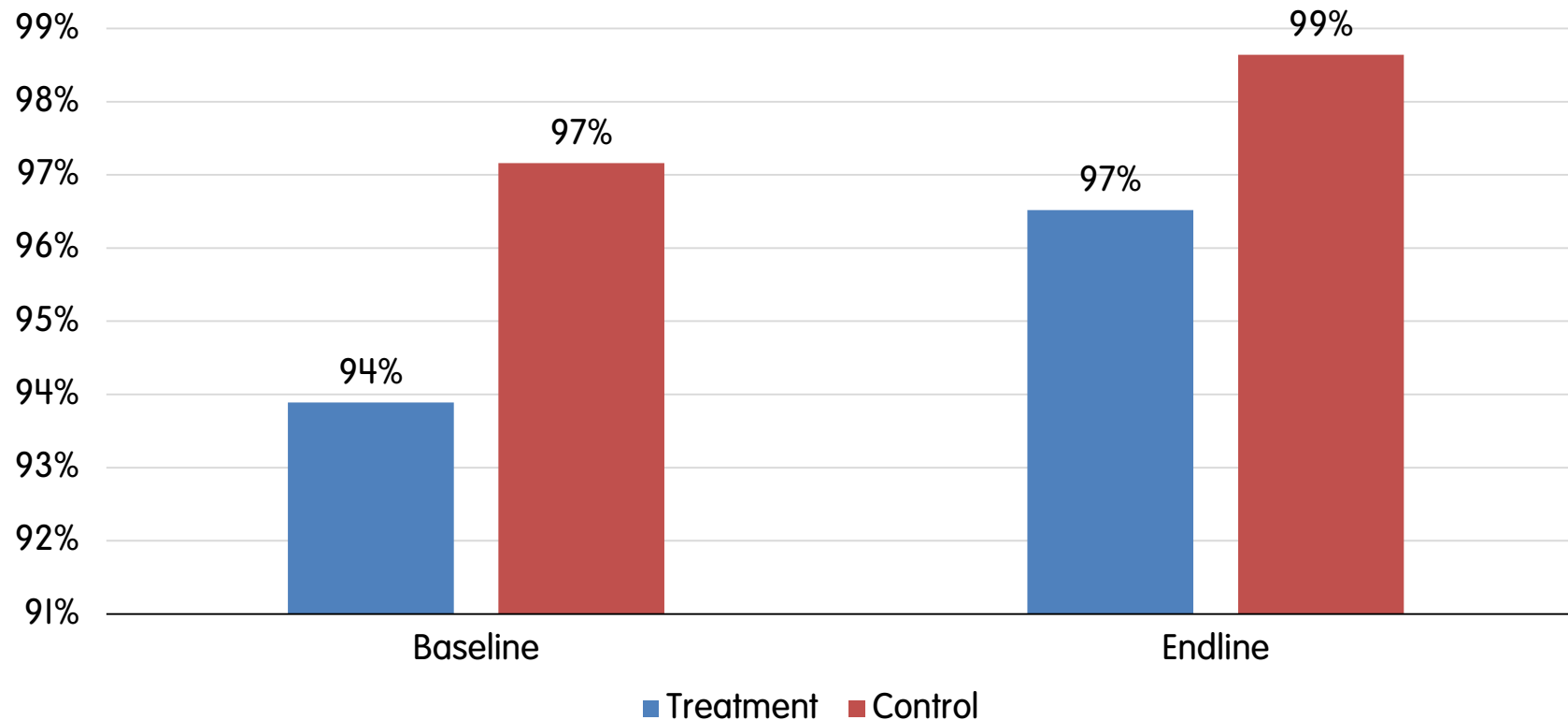


Findings from Mexico: Frequency of Play



Caregivers in Mexico participating in Play Every Day reported increased frequency of play by **3%**.

**In the past week, did you play with your child at home?
[Mexico]**



Findings from Mexico: Caregiver Confidence as Play Mentor



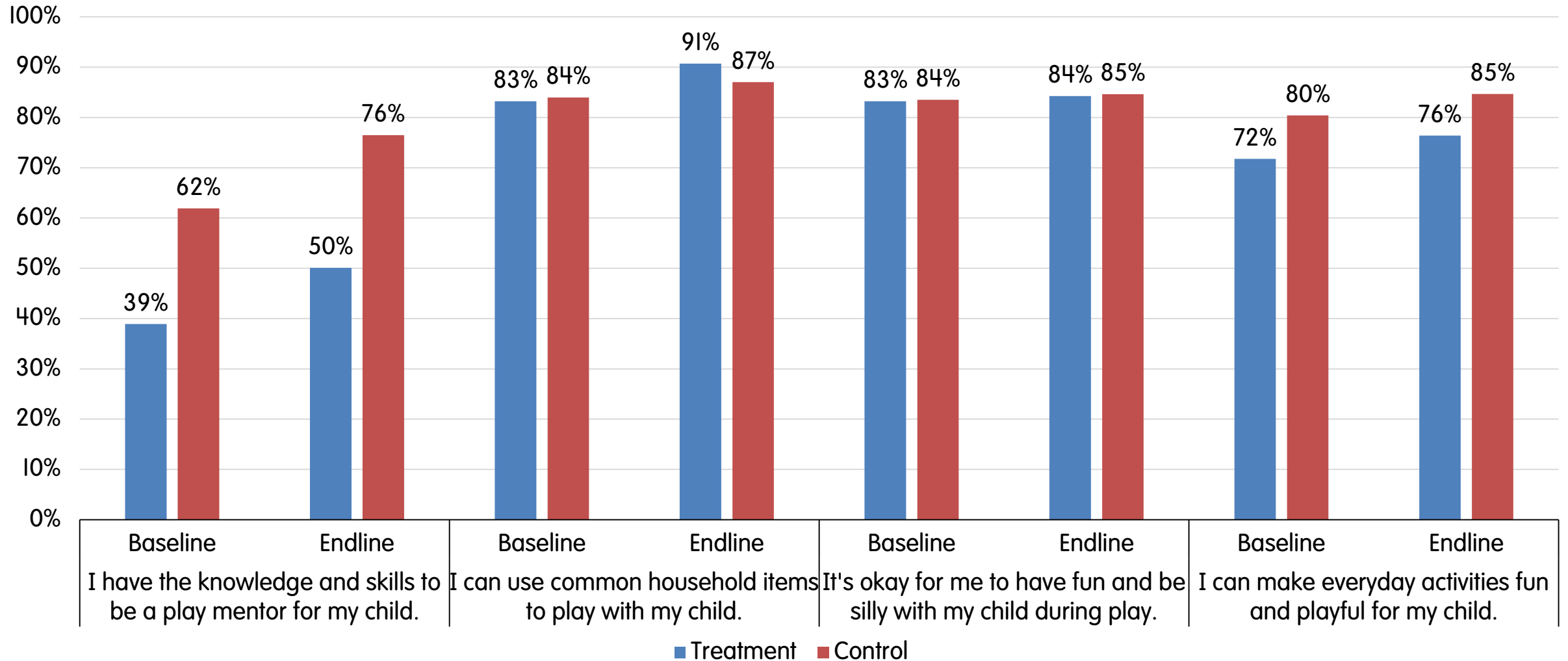
For questions around caregivers' confidence in themselves as play mentors, Mexican caregivers participating in Play Every Day reported increases in:

- **+11% in knowledge and skills** as play mentors
- **+8% in confidence in use of recycled materials** as play objects
- **+1%** in comfort **being silly** with their child
- **+4%** in ability to **make everyday activities playful**

Findings from Mexico: Caregiver Confidence as Play Mentor



Caregiver Confidence as a Play Mentor [Mexico]



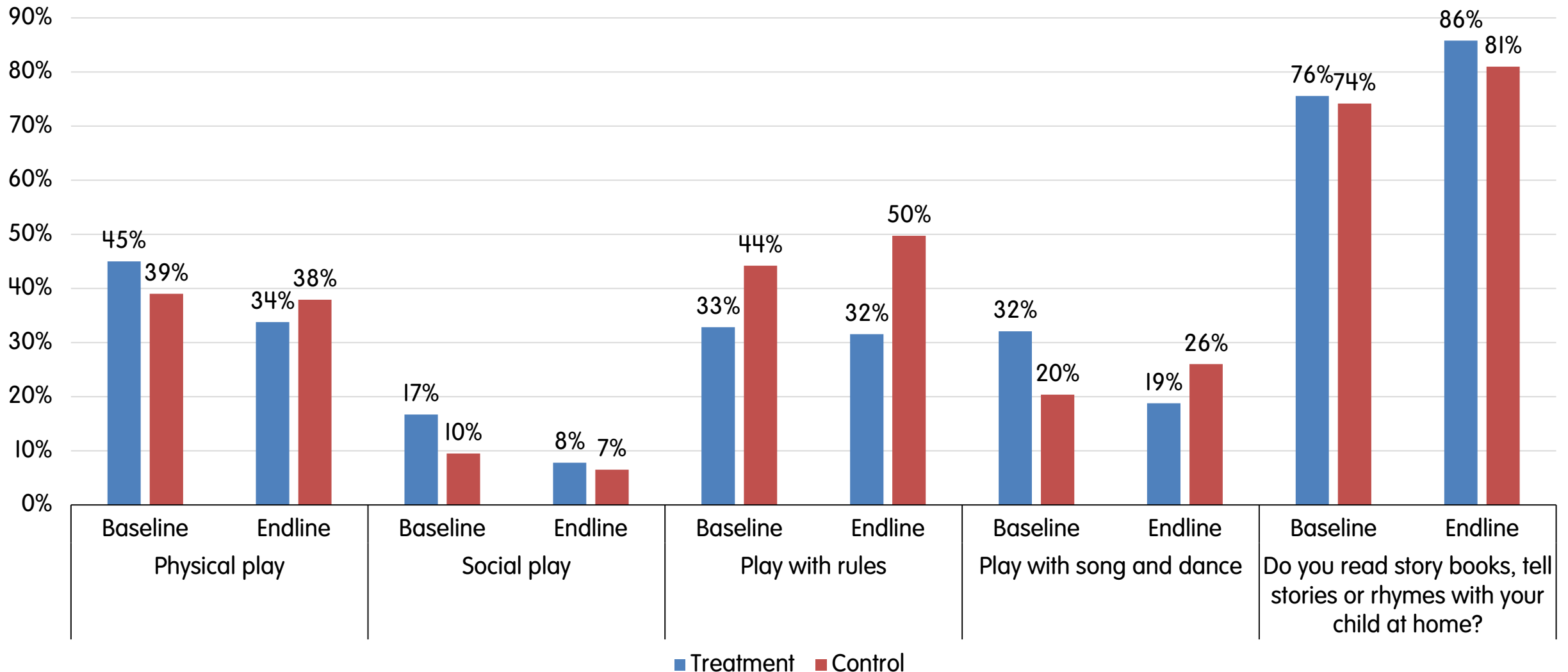
Findings from Mexico: Types of Play

While Mexican caregivers reported increases in frequency of play and increased confidence as a play mentor, they also reported variances types of play activities at the end of the intervention:

- **-11% in physical play** [soccer, baseball, basketball, American football, ping pong, boxing, lasso, cycling, jumping the rope, wrestling, etc.]
- **-9% in social play** [playing in a group, sharing, interacting with others]
- **-1% in play activities with rules** [encantados, escondidillas, bote pateado, avioncito, cancias, matatena, etc.]
- **-13% in play activities involving singing and dancing** with music or musical instruments
- **+10%** in time spent **reading story books or telling stories** or rhymes

Findings from Mexico: Types of Play

Types of play activities done at home with child [Mexico]



Findings from Mexico: Imaginative Play



While physical play, social play, play with rules, and musical play did not see growth as hoped, there were importance increases across various pretend play measures. As in India, a priority focus of Play Every Day activities and materials were designed to promote imaginative play among caregivers and children, in part because of initial research during Play Every Day planning and piloting showing limited knowledge of the value of imaginative play and little time spent in imaginative play.

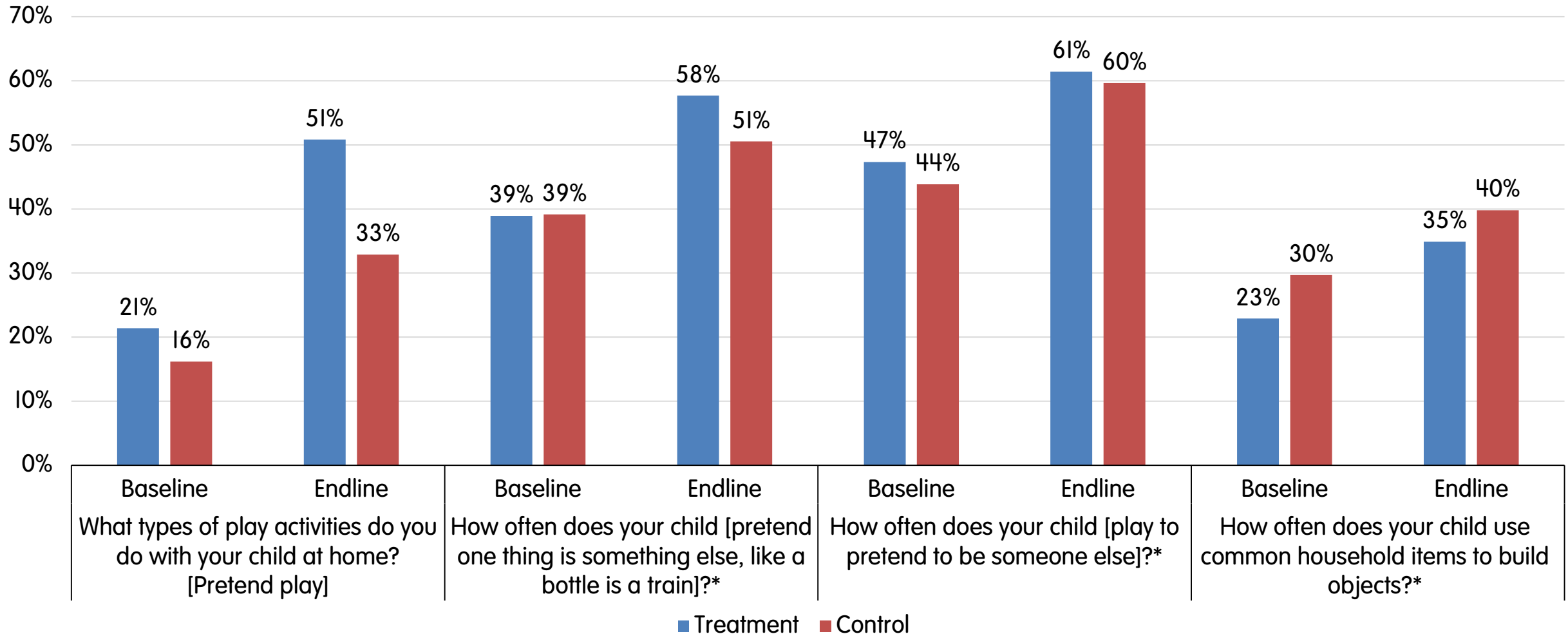
Through the Play Every Day intervention, Mexican caregivers reported increases in the frequency and value of imaginative play with their children:

- **+31%** from baseline to endline **in references to pretend play when discussing types of play activities** caregiver and child do together at home
- Increases in time spent in pretend play with their child at home
 - **+19%** in daily occurrences of **pretending one thing is something else**
 - **+14%** in daily occurrences of **playing to pretend to be someone else**
 - **+13%** in daily occurrences of **using common household items to build objects**

Findings from Mexico: Imaginative Play



Role of Imaginative Play [Mexico]



*every day/almost every day

Findings from Mexico: Play and Academic Success



For perceptions of the link between play and academic success, many Mexican caregivers had a positive understanding of the relationship between the two, particularly in its holistic role in child development. There were some discrepancies in that caregivers report play as importance to children's development and academic success, but then fewer parents strongly agreed that play prepares children for future roles.

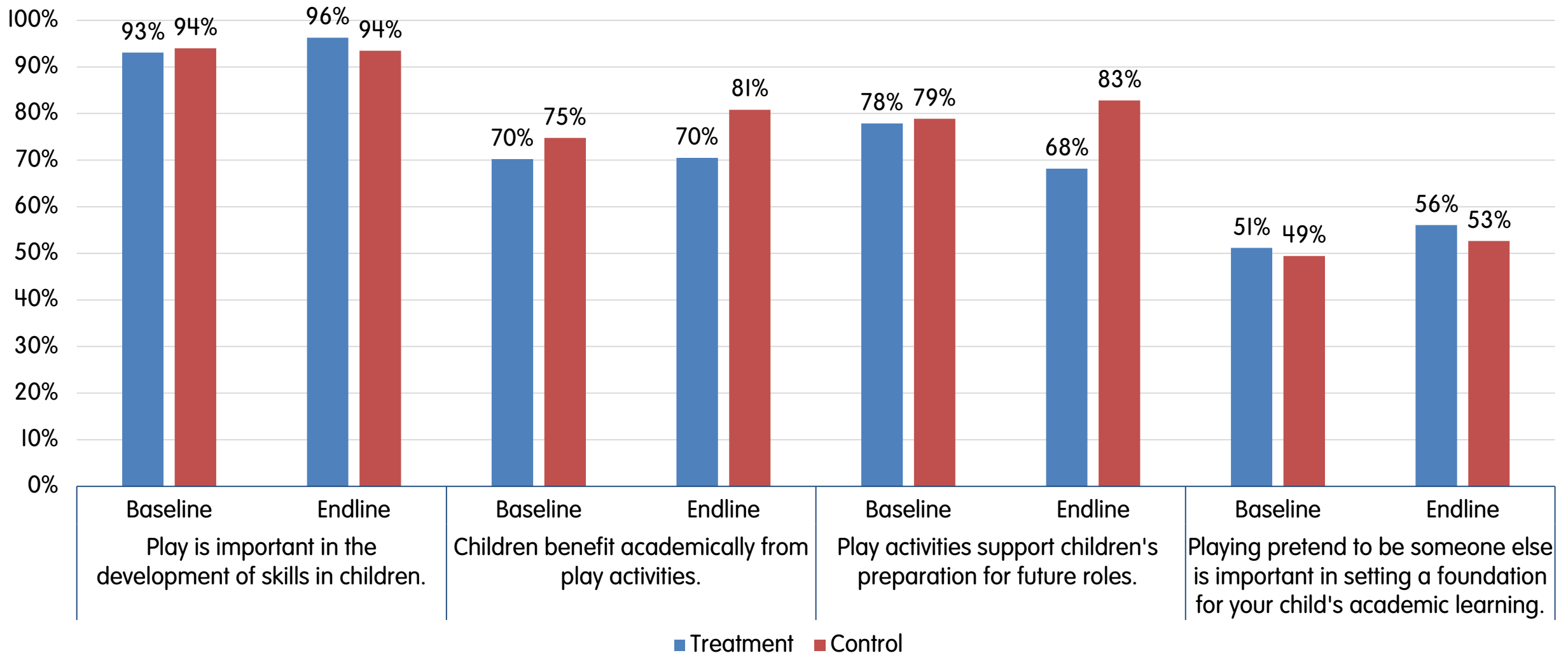
In line with the increased presence of imaginative play at home, caregivers reported an increase in the role of pretend play in academic success:

- **+3%** in play's role in **children's development**
- No change reported **in the academic benefits** of play for children
- **-10%** in play's ability to **prepare children for future roles**
- **+5%** in link between **pretend play as a foundation academic learning**

Findings from Mexico: Play and Academic Success



Linking play and academic success [Mexico]



Findings from Mexico: Children's Favorite Places to Play



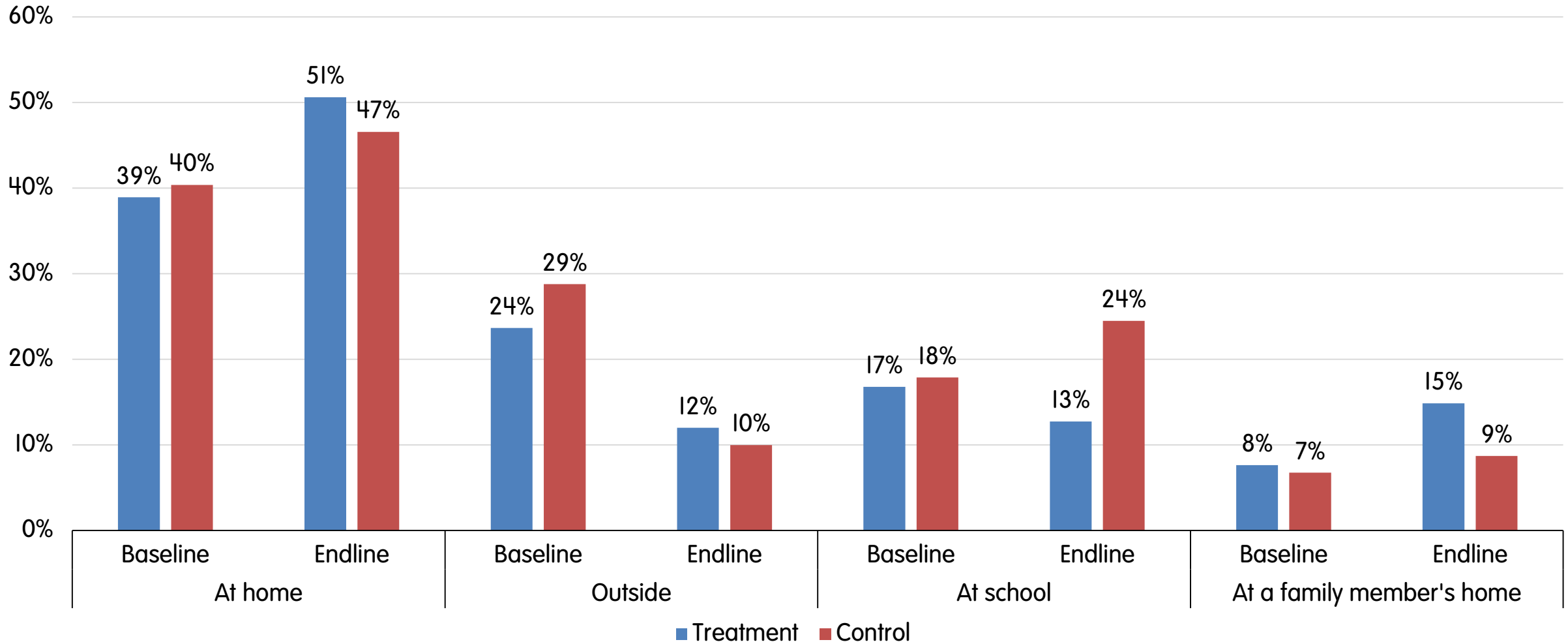
In light of messaging that play can happen anywhere, children's participation in Play Every Day in Mexico affected their favorite places to play, increasing preferences for play at either their house or a family member's house:

- **+7%** for **home**
- **-12%** for **outside**
- **-4%** for **school**
- **+7%** for a **family member's house**

Findings from Mexico: Children's Favorite Places to Play



Favorite things to do at home [Mexico]



Findings from Mexico: Children's Favorite Things to do at Home



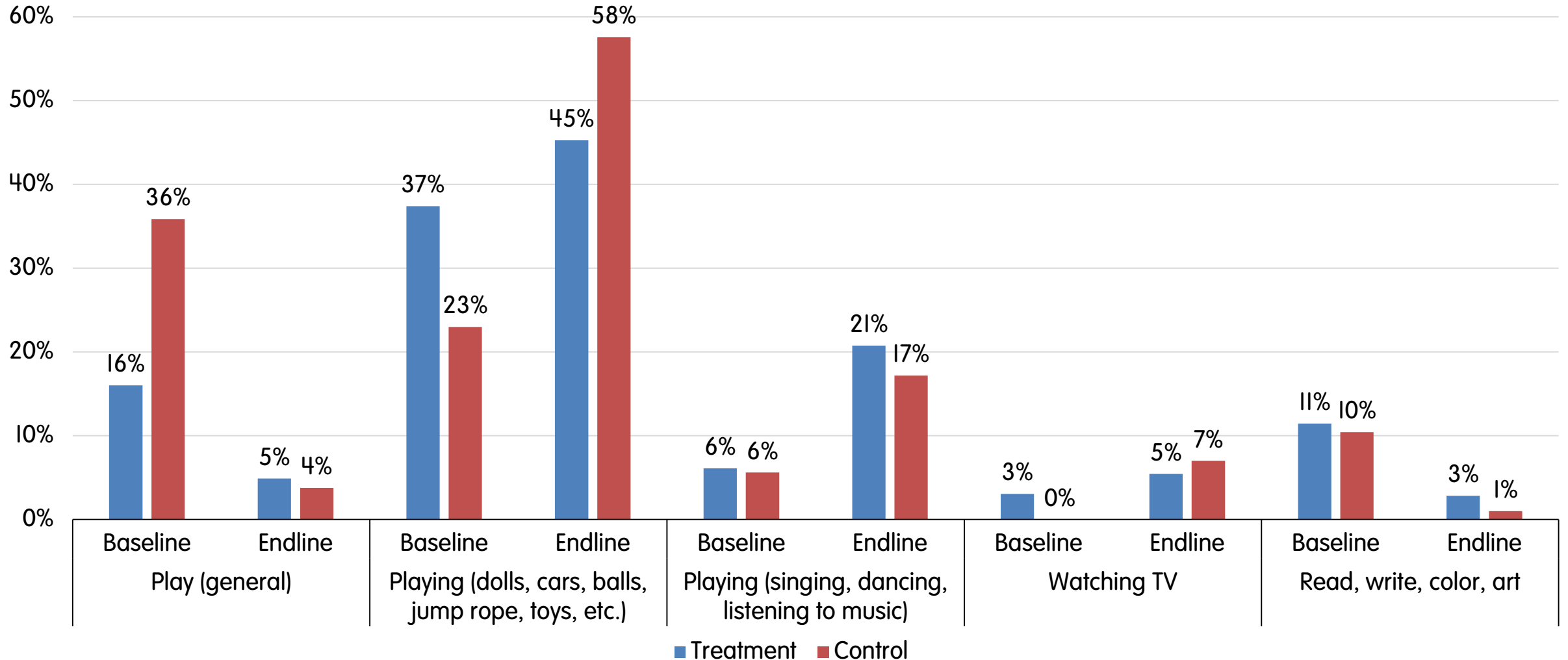
Asked about their favorite things to do at home, Mexican children reported increases in more specific types of play over general play:

- -32% in general play
- **+8%** in **play with dolls, cars, balls, jump rope, toys, etc.**
- **+15%** in play with **singing, dancing, and listening to music**
- **+2%** for **watching TV**
- -8% for reading, writing, and coloring

Findings from Mexico: Children's Favorite Things to do at Home



Favorite things to do at home [Mexico]



Findings from Mexico: Creative Thinking

Researchers showed children images of different common household materials and asked children twice for each image about what they could do or play with those items. Images included pictures of plastic containers, play kitchen set, stationery items, sand or clay, and recyclable items including plastic bottles, cans, and cardboard.

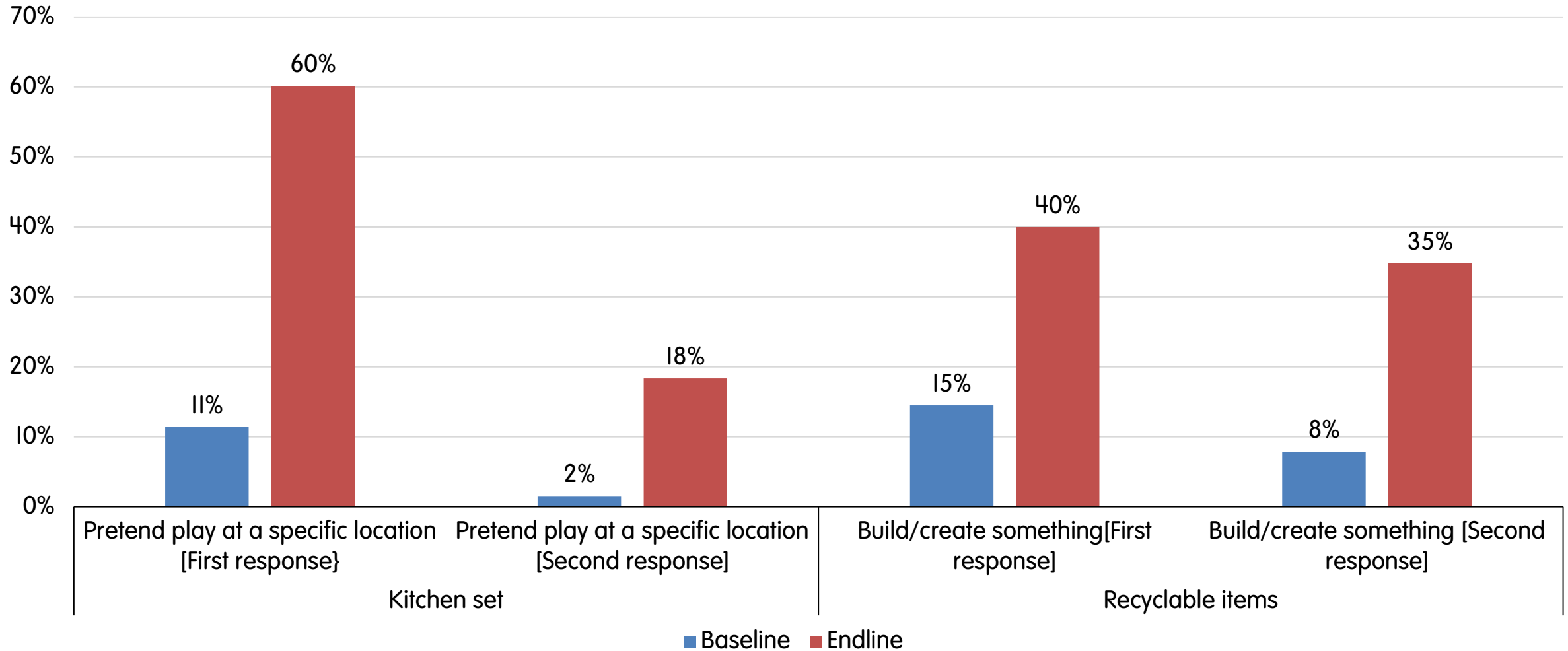
Showcasing two of the items, findings show that children thought more creatively around the use of these items:

- For **kitchen set**, pretend play **increased 49% on first response** and **increased 16% on second response** at endline.
- For **recyclable items**, **build or create something increased 25% in first responses** and **increased 27% in second responses** at endline.

Findings from Mexico: Creative Thinking



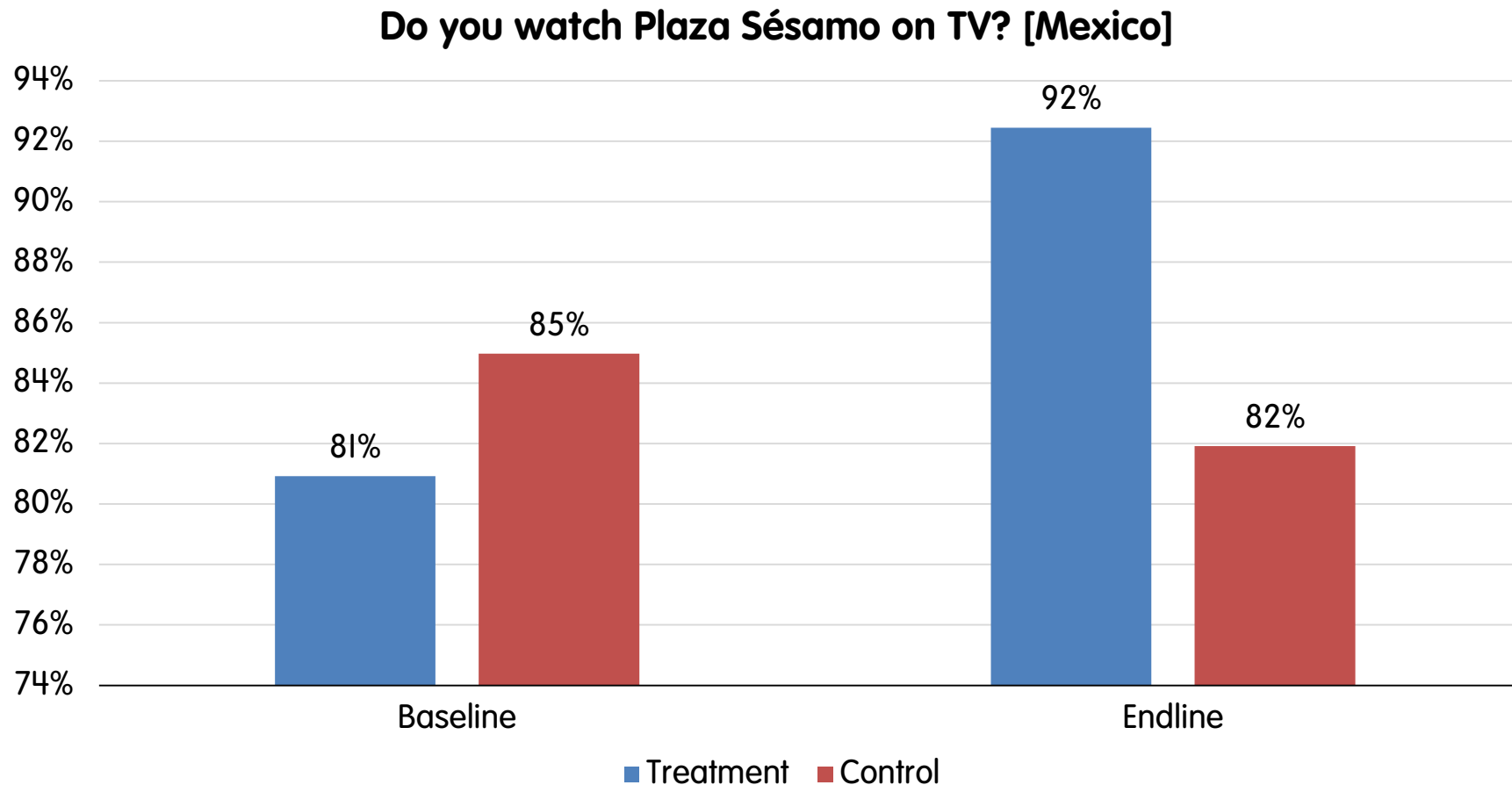
Can you tell me all the things you could do or play with these things? [Mexico]



Findings from Mexico: Sesame Viewership



Child participants in the treatment group in Mexico reported 11% increase in Plaza Sésamo viewership after the end of the Play Every Day intervention.

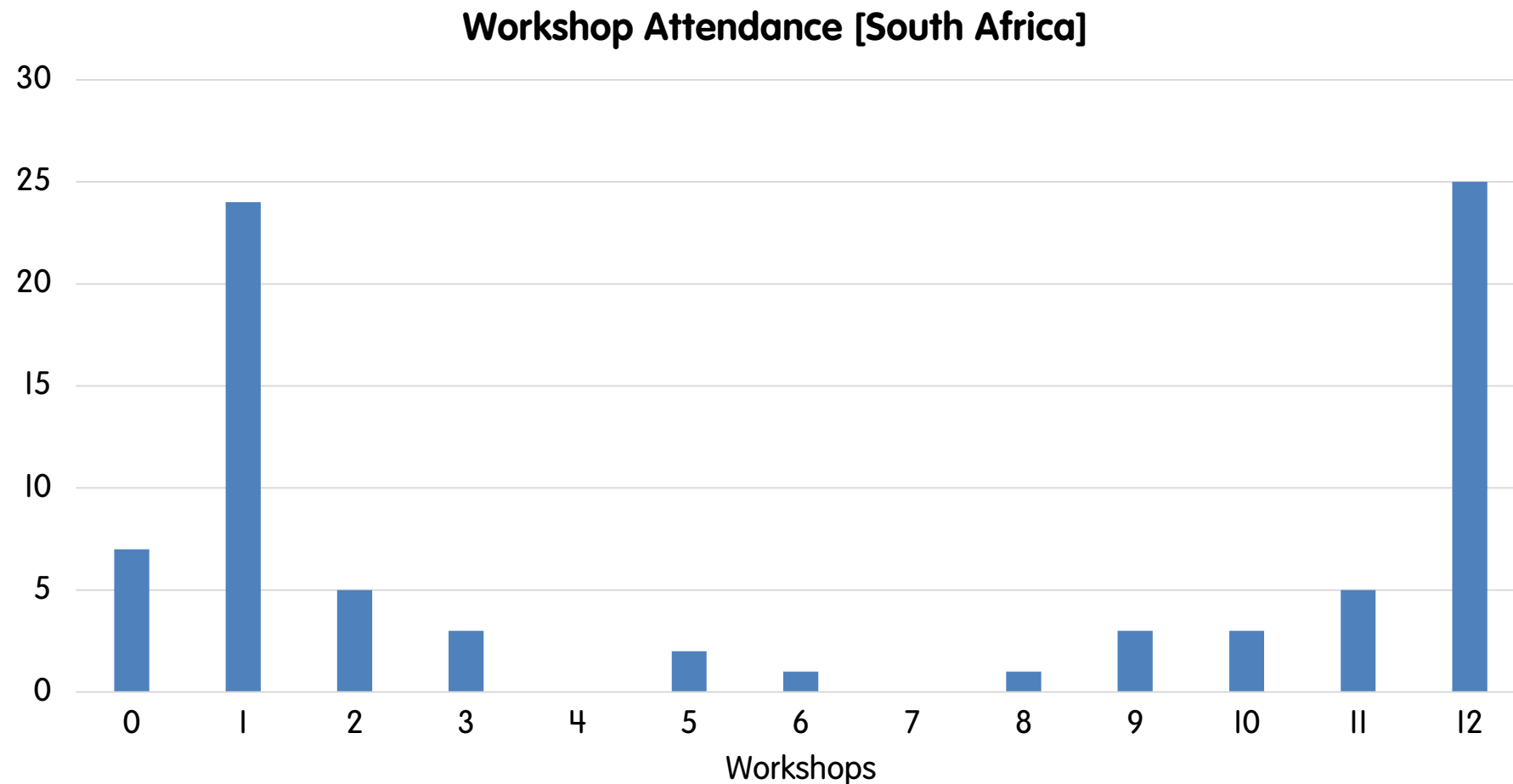


Findings from South Africa

Findings from South Africa: Workshop Attendance



Self-reports of workshop attendance showed that in South Africa, families were most likely to attend either 0-1 workshops or 12 workshops.

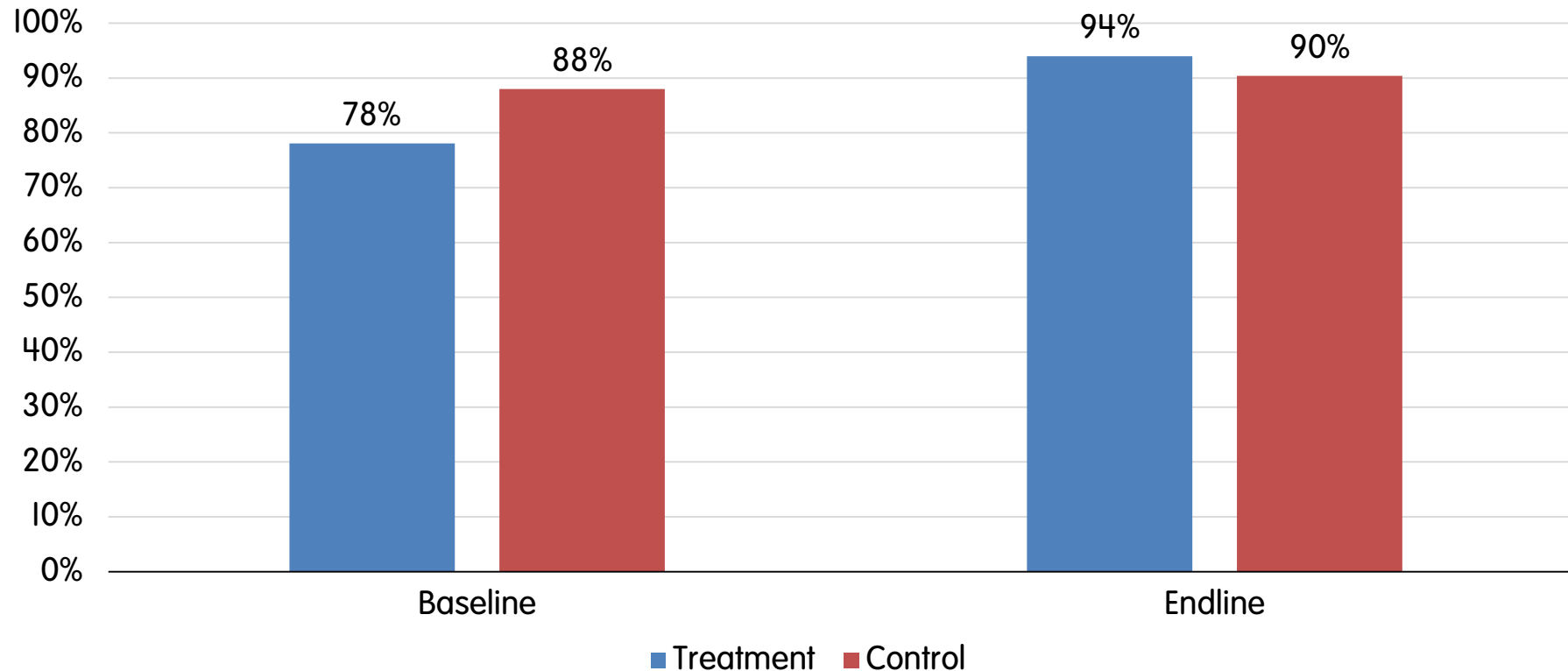


Findings from South Africa: Frequency of Play



Caregivers in South Africa participating in Play Every Day reported increased frequency of play by **15%**.

In the past week, did you play with your child at home? [South Africa]



Findings from South Africa: Caregiver Confidence as Play Mentor



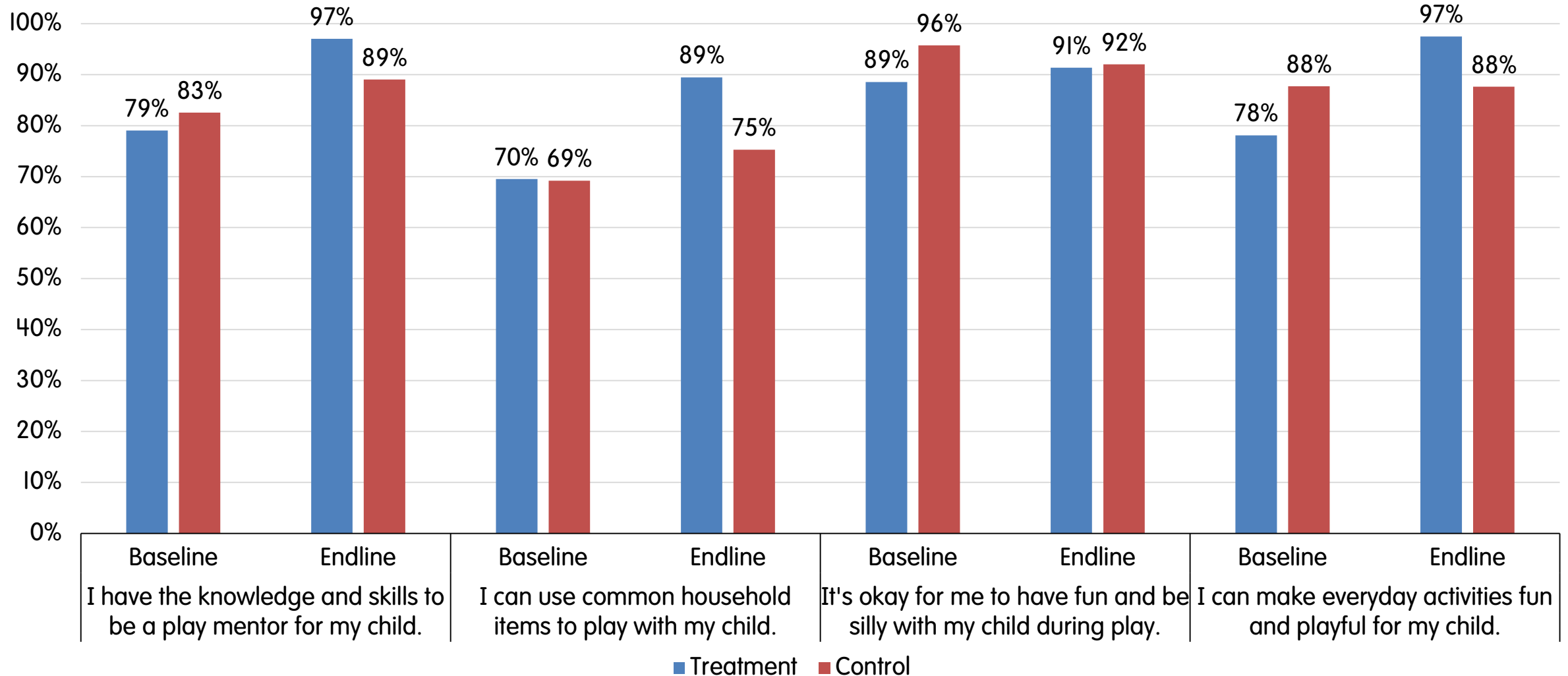
For questions around caregivers' confidence in themselves as play mentors, South African caregivers participating in Play Every Day reported increases in:

- **+18% in knowledge and skills** as play mentors
- **+19% in confidence in use of recycled materials** as play objects
- **+3%** in comfort **being silly** with their child
- **+19%** in ability to **make everyday activities playful**

Findings from South Africa: Caregiver Confidence as Play Mentor



Caregiver Confidence as a Play Mentor [South Africa]



Findings from South Africa: Types of Play

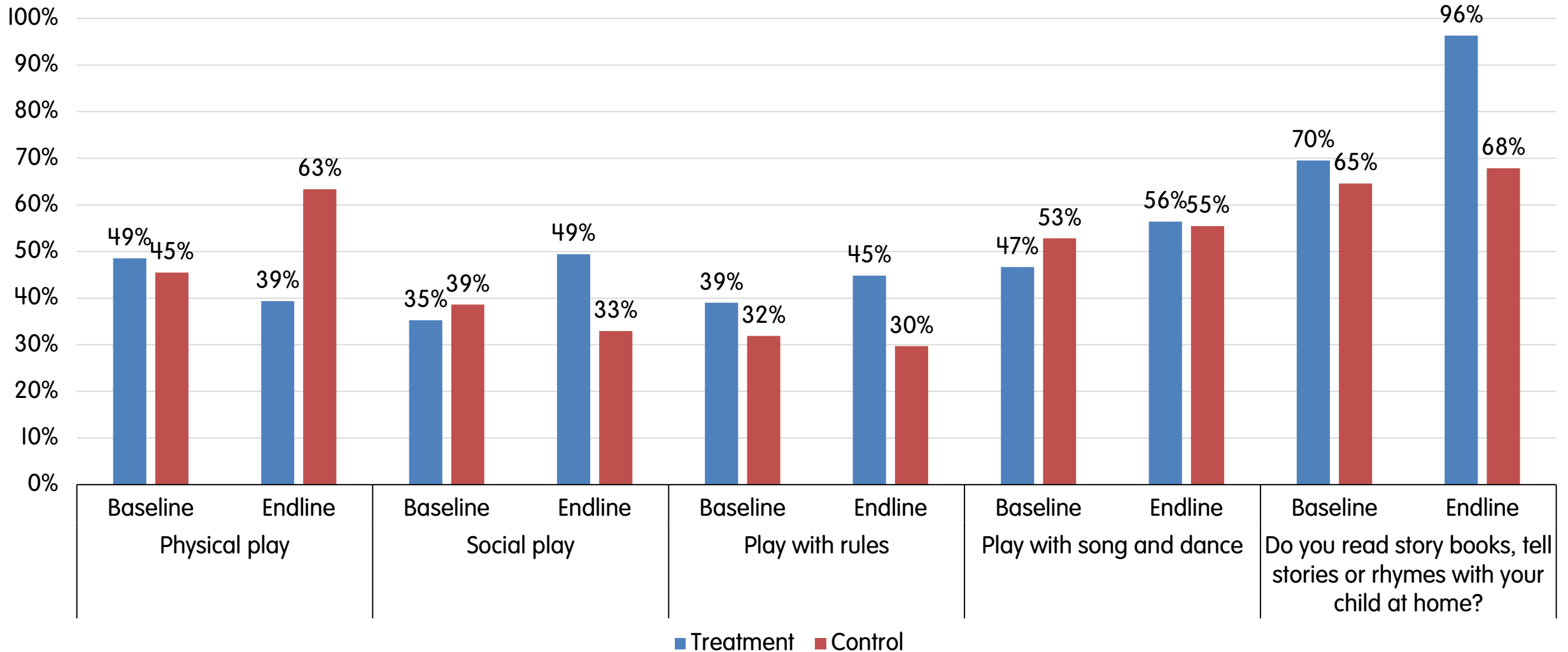
While South Africa caregivers reported increases in frequency of play and increased confidence as a play mentor, they also reported variances types of play activities at the end of the intervention:

- **-10% in physical play** [soccer, cricket, dancing, rugby, netball, riding a bike, jungle gym/tree climbing, etc.]
- **+14% in social play** [playing in a group, sharing, interacting with others]
- **+6% in play activities with rules** [hide and seek, jump rope, hopscotch, rotten egg, musical chairs, running red rovers, etc.]
- **+9% in play activities involving singing and dancing** with music or musical instruments
- **+26%** in time spent **reading story books or telling stories** or rhymes

Findings from South Africa: Types of Play



Types of play activities done at home with child [South Africa]



Findings from South Africa: Imaginative Play



As in India and Mexico, South African caregivers reported increases in the role and frequency of pretend play with their child. Most notably, there were initial concerns around access to common household items for play in piloting phases, yet endline still saw some growth in daily use of common household items for pretend play.

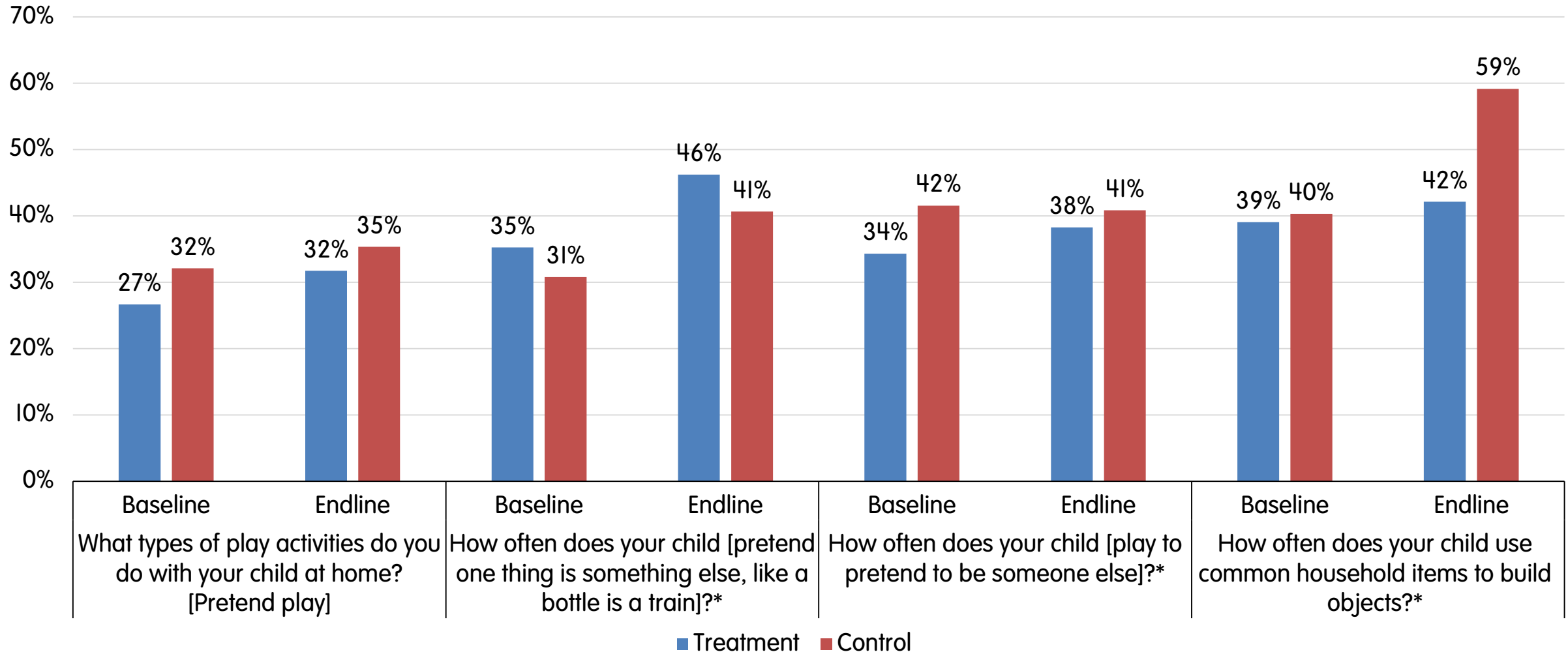
Through the Play Every Day intervention, South African caregivers reported increases in the frequency and value of imaginative play with their children:

- **+5%** from baseline to endline **in references to pretend play when discussing types of play activities** caregiver and child do together at home
- Increases in time spent in pretend play with their child at home
 - **+11%** in daily occurrences of **pretending one thing is something else**
 - **+4%** in daily occurrences of **playing to pretend to be someone else**
 - **+3%** in daily occurrences of **using common household items to build objects**

Findings from South Africa: Imaginative Play



Role of Imaginative Play [South Africa]



*every day/almost every day

Findings from South Africa: Play and Academic Success

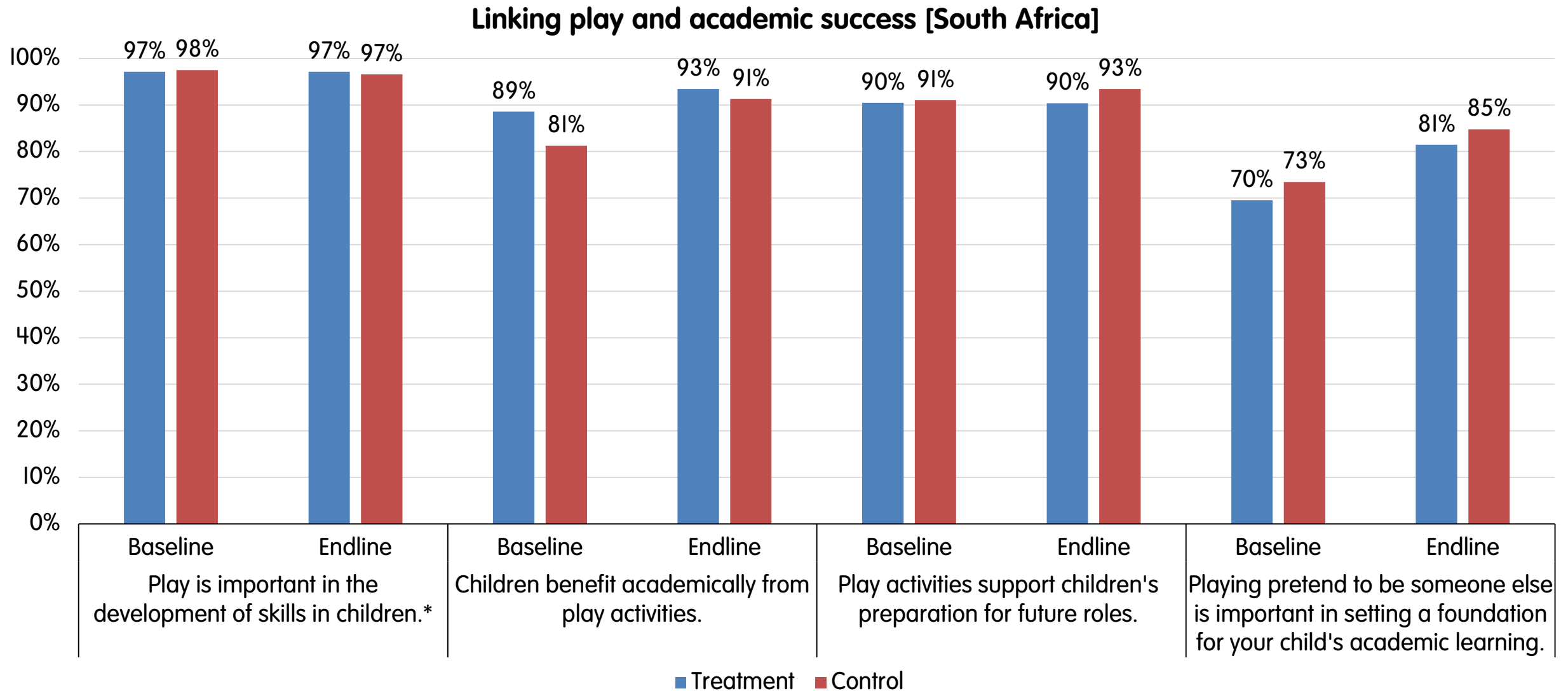


For perceptions of the link between play and academic success, many South African caregivers had a positive understanding of the relationship between the two at baseline, particularly in its holistic role in child development and that play prepares children for future roles.

In line with the increased presence of imaginative play at home, caregivers reported an increase in the role of pretend play in academic success:

- No change in play's role in **children's development**
- **+4%** reported **in the academic benefits** of play for children
- No change in play's ability to **prepare children for future roles**
- **+11%** in link between **pretend play as a foundation academic learning**

Findings from South Africa: Play and Academic Success



*data in report was reverse coded

Findings from South Africa: Children's Favorite Places to Play



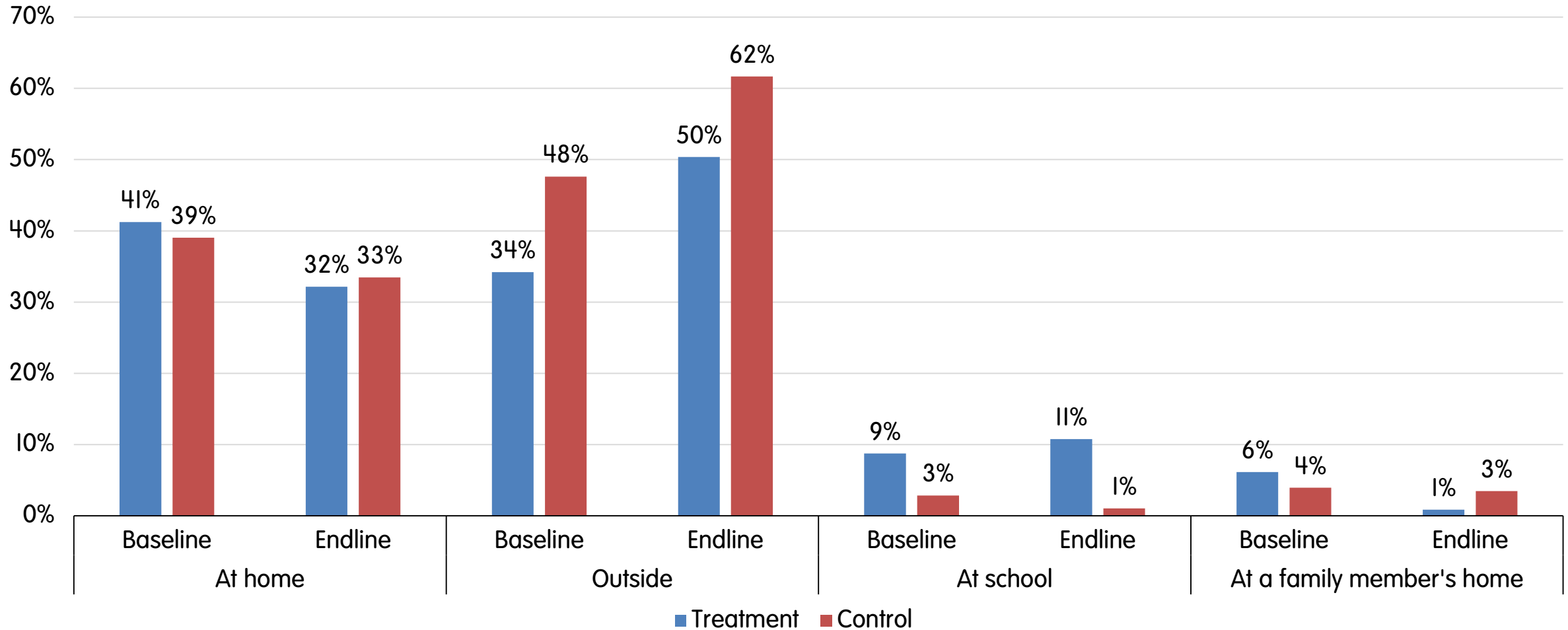
In light of messaging that play can happen anywhere, children's participation in Play Every Day in South Africa affected their favorite places to play:

- +7% for home
- -12% for outside
- -4% for school
- +7% for a family member's house

Findings from South Africa: Children's Favorite Places to Play



Favorite things to do at home [South Africa']



Findings from South Africa: Children's Favorite Things to do at Home



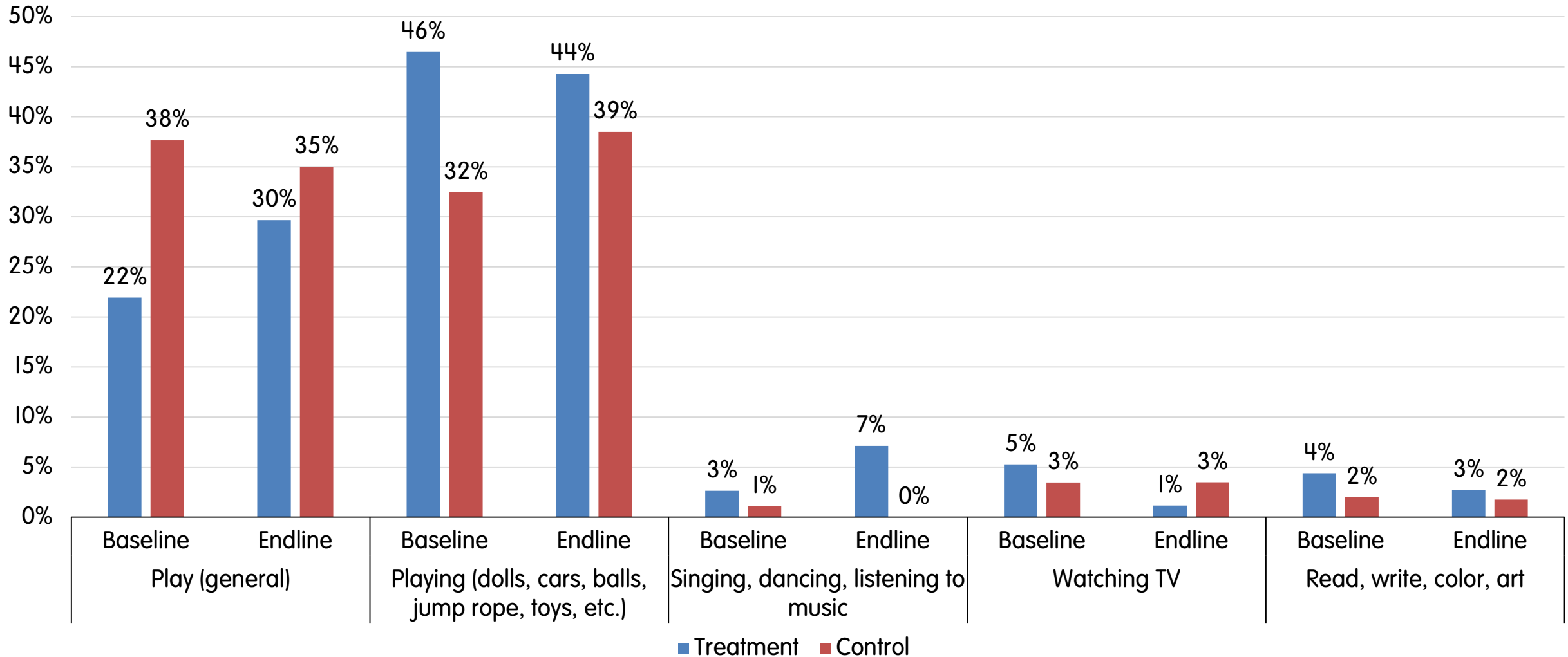
Asked about their favorite things to do at home, South African children reported some increases in more specific types of play over general play:

- **+8% in general play**
- -2% in play with dolls, cars, balls, jump rope, toys, etc.
- **+4% in play with singing, dancing, and listening to music**
- -4% for watching TV
- -1% for reading, writing, and coloring

Findings from South Africa: Children's Favorite Things to do at Home



Favorite things to do at home [South Africa]



Findings from South Africa: Creative Thinking

Researchers showed children images of different common household materials and asked children twice for each image about what they could do or play with those items. Images included pictures of plastic containers, play kitchen set, stationery items, sand or clay, and recyclable items including plastic bottles, cans, and cardboard.

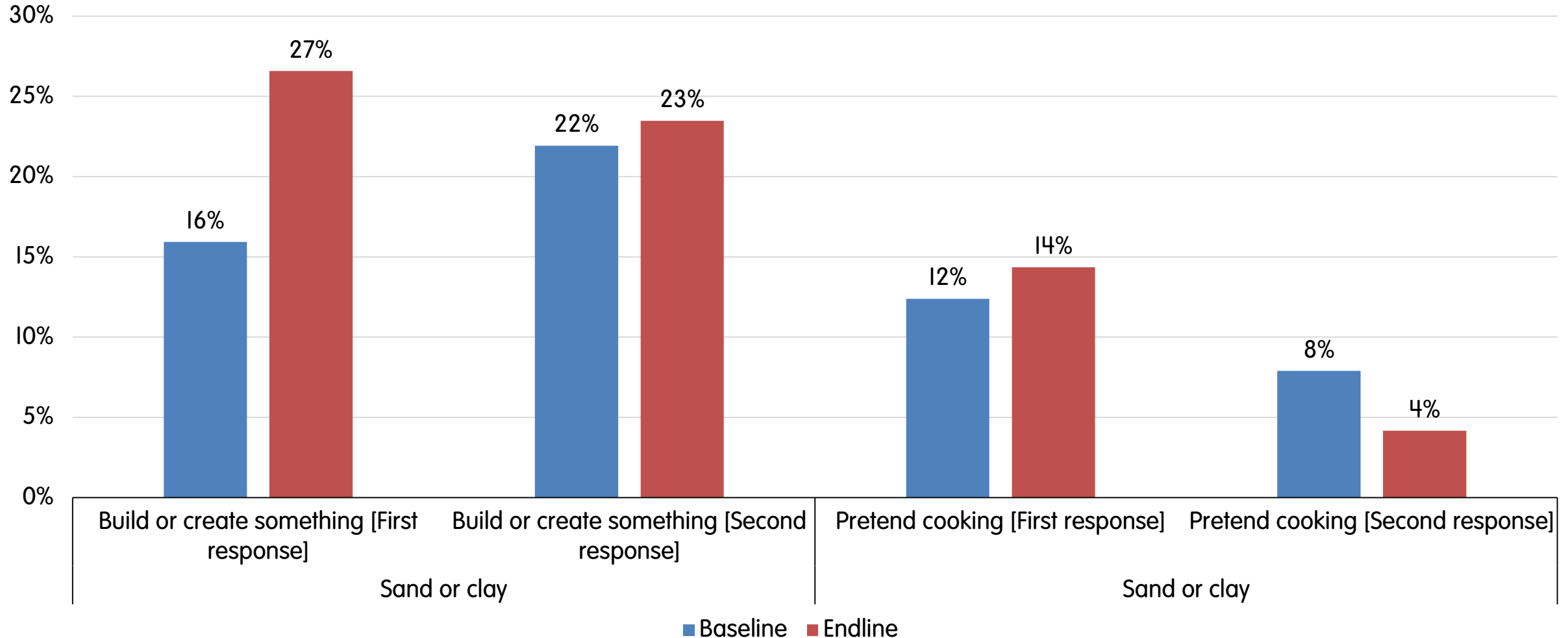
Showcasing two of the items, findings show that children thought more creatively around the use of these items:

- For **kitchen set**, pretend play **increased 49% on first response** and **increased 16% on second response** at endline.
- For **recyclable items**, **build or create something increased 25% in first responses** and **increased 27% in second responses** at endline.

Findings from South Africa: Creative Thinking



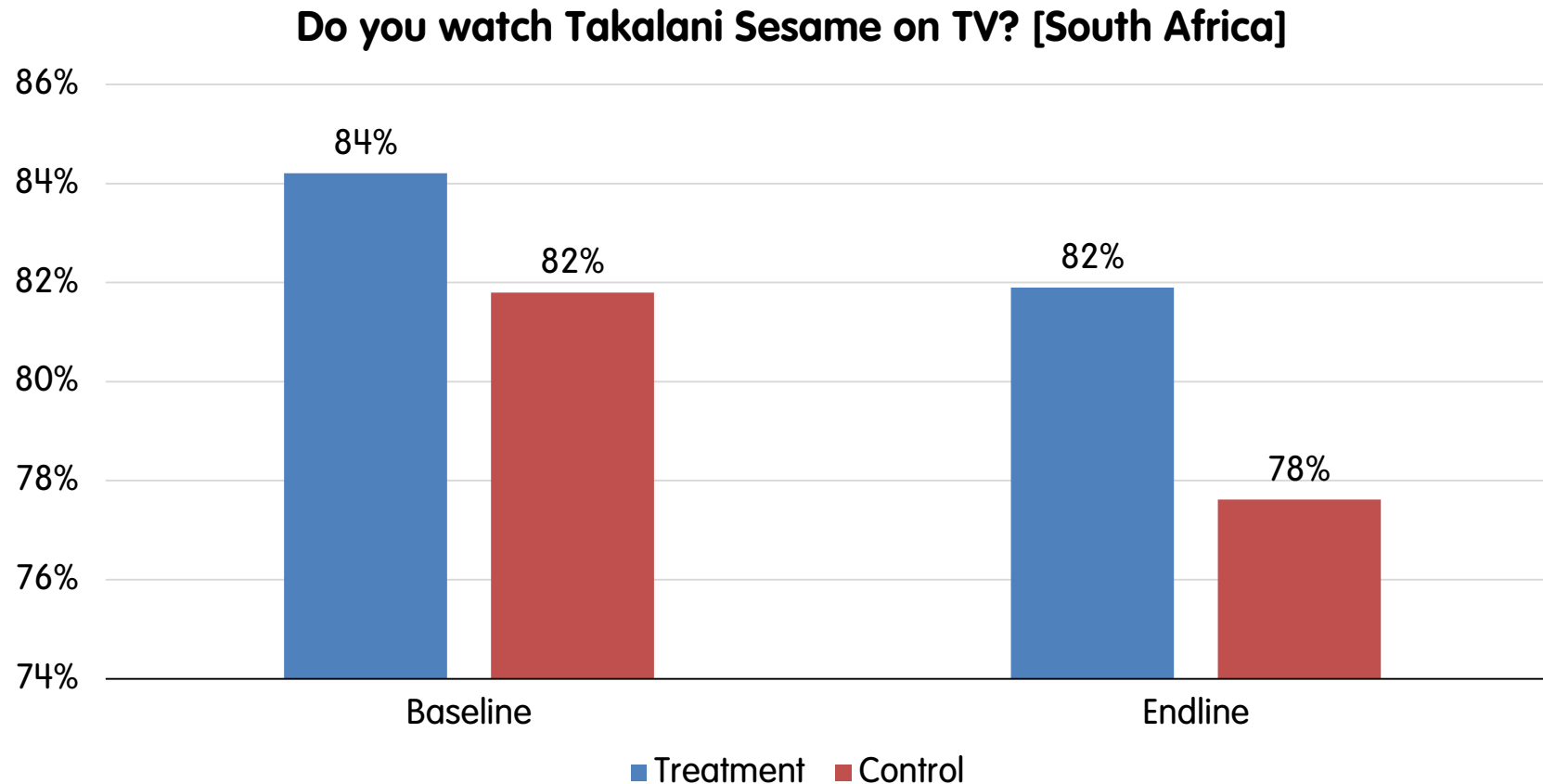
Can you tell me all the things you could do or play with these things? [South Africa]



Findings from South Africa: Sesame Viewership



Child participants in the treatment group in South Africa reported increased viewership after the end of the intervention, with a viewership increase in India of **23%** and **11%** in Mexico.



Conclusions and Moving Forward

Summary of Evaluation Findings



While the context, content, and needs of India, Mexico, and South African families varied around the role and value of play in their families, and thus the findings vary from country to country, there are some key takeaways from the global evaluation of Play Every Day:

- Caregivers in all three countries **reported increased time spent playing** with their child, **increased confidence** as play mentors, **increased understanding of the role and value of play** in children's development.
- Imaginative play was a primary focus of Play Every Day. As such, **rates of pretend play**, including pretending one thing is something else and playing to pretend to be someone else, **increased in all three countries**.
 - As such, reported rates of physical play, social play, play with rules, and play with song and dance varied at endline from country to country, showing both increases and decreases in frequency.
- Take-home materials, specifically **textless storybooks**, appear to have **supported reported changes in time spent reading and telling stories** with their children as all three countries saw increases. India and South Africa are particularly of note where knowledge of targeted communities showed low literacy levels.
- **Children's participation** in Play Every Day appeared to **affect their favorite places to play** in line with messaging that play can happen anywhere, anytime.
- Children also showed **increases in creative thinking around uses for common household items** and how those items could be transformed into play objects.
- India and South Africa demonstrated statistically significant changes in knowledge and attitudes in play. While Mexico did not show statistically significant results, there were important changes reported from caregivers. Mexico's implementation and evaluation was challenged by both internal and external factors, including limited access to treatment and control centers due to partner challenges and changes in national government.

Summary of Recommendations for Scaling & Future Evaluation Considerations



The global evaluation of Play Every Day provided insights on scaling considerations in all three contexts as well as thoughts on future play workshop evaluation:

- While the external evaluator **recommended scaling up in India and South Africa** because of statistically significant changes among caregivers and children, we believe that **the data also supports scale up in Mexico**. As this presentation will show, when focusing on individual measures from Mexico, the data shows important increases in the perceptions of play and the increased role of pretend play at home.
- Related to high baselines, **future evaluations of play interventions** would benefit from **larger sample sizes** and **analyzing changes in behavior** to fully assess the impact of the intervention and enable us to make causal claims.
- Given high baselines across a variety of measures, future implementation will need to ensure that communities demonstrate clear need for a play-based interventions as well as evolving the focus **to consider improving quality of existing play** along with frequency.
- **Testing different dosage models and the effects of workshop sites** (ECD centers vs. community centers, for example) would provide important insights for global learnings around best practices in low-resource settings, particularly as implementation opportunities may vary and areas where attrition will be a concern.