Gender-Inclusive Children's Toy Package Design: An Alternative Approach to Gender-Neutral Design Based on Children's Perceptions

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Abstract

Background   Traditionally, toys have been categorized by gender in stores, associating blue with boys and pink with girls. While some gender-neutral packaging designs have emerged, they often lack appeal to children. Moreover, toys labeled as gender-neutral are not always presented in a manner that communicates their inclusivity for all genders. This study investigates how to effectively convey gender inclusivity in children's toy packaging by considering children's perceptions.

Methods   This study employed phenomenology to gain an objective understanding of children's perspectives and conducted a content analysis of current toy package designs and a modified van Kaam analysis of interviews with children aged 3-6. The findings from these analyses were used to develop guidelines for creating gender-inclusive package designs for children.

Results   The study's findings suggest that effective gender-inclusive package designs for children should incorporate bright colors, regular and round sans-serif fonts, polygons with rounded corners, and iconic signs for imagery. Additionally, it is essential to convey messages clearly, as children tend to interpret things literally.

Conclusions   This study highlights the significance of avoiding gender labels in designing toys for children, as they can harm children's perceptions and impose limitations on their activities and aspirations, potentially affecting them long-term.

Keywords   Gender-inclusive Design, Toy Package Design, Children's Perceptions

1. Introduction

1. 1. Rationale and Background of the Study

Toy gender labeling and color coding have shaped children's society's ideas on progress. According to Martin and Halverson (1981), children who play with gender-stereotyped toys may adopt societal stereotypes. While biological factors influence choices, society impacts children's behavior and attitudes (Atkinson, 2014; Frisoli, 2019). Atkinson (2014) states that social norms and prejudices heavily influence children's toy preferences. The study found that boys liked trucks and tools and girls dolls and kitchen sets. The synchronicity with gender-stereotyped toys shows how society shapes children's choices.

Frisoli (2019) favors society's effect on children's behavior and views. Color-coded toys and gender-stereotyped messaging reinforce gender norms and societal expectations. Marketing methods limit children's play and interests. Stereotypes—widely held, oversimplified beliefs or expectations about proper gender roles, actions, and features—perpetuate rigid perceptions of femininity and masculinity (United et al., 2019). Preconceptions impede progress, opportunities, and inequality.

Gender stereotypes affect self-image and thoughts about abilities and tasks in many fields. Female caregiving and submissiveness stereotypes and male leadership and aggressiveness stereotypes can influence competence and career choices. Stereotypes make "inappropriate" gender-bent vocations and interests unattractive and impede career advancement. In 2021, Coombs emphasized that the UN's Sustainable Development Goal 5 (SDG 5) aims to eliminate gender stereotypes, promote gender equality, and empower women and girls, as outlined by the United Nations in 2020. SDG 5 strives to end gender discrimination, ensure equal access to education, and enhance women's decision-making abilities.

Fighting gender stereotypes and fostering gender equality requires changing cultural gender roles. Awareness programs that promote non-stereotypical gender portrayals in media, schools, and workplaces can help. Engaging with biased and diverse role models can also break gender preconceptions. Remember that multidimensional gender inequity affects all genders. That is why Gender and Development promotes equal rights and opportunities. Strategy rather than practice can reduce gender inequality for everyone (CEDPA, 1996).

The Philippines struggles to break gender assumptions, roles, and habits despite progress. Online learning during COVID-19 revealed DepEd gender stereotyping. Some parents defy gender stereotypes, others agree. Gender biases in media globally, including in the Philippines, were found by the Geena Davis Institute. Males dreaded censure for opposite-gender behaviors. STEM inequality is caused by social gender bias in encouragement.

Bian and Leslie (2018) showed that parents pushed boys more than girls to study science, perpetuating sexual inequality in STEM fields. Class, race, and social status affect hobbies and interests. Higher-class people can participate in some activities, although ethnicity and race can limit it. These aspects must be considered for equality and inclusion. Outside

parental influence, societal norms and cultural representations affect opportunities and motives. It limits children's choices, reinforces stereotypes, and slows progress.

Researching gender-inclusive children's toy package design promotes equity, challenges prejudices, and encourages inclusive play (Dyson, 2012). Toy packaging shapes children's preferences (Sharma & Joshi, 2017). Color theory concepts like contrast and harmony can create gender-neutral child packaging (Lindell & Sundh, 2019). Famous artists and scientists created color harmony to generate beautiful color combinations. Ostwald, Munsell, and Itten's color connections and Johannes Wolfgang Goethe's and Eugene Chevreul's complementary colors can help build harmonious color palettes (Marmaras et al., 2019). Children's visual development, especially their preference for brighter hues, can help designers build appealing and harmonious packaging (Franklin & Sowden, 2019).

Using a diverse color palette instead of "gendered" colors like pink and blue allows designers to challenge gender stereotypes. Inclusive education lets children choose based on their interests rather than cultural norms (Sharma & Joshi, 2017). Color theory can be used to design packaging that defies gender norms and gives children fun new ways to play (Lindell & Sundh, 2019).

Cognitive perception states that people actively analyze and make conclusions from visual data (Bloomer, 2018). Mental processes include selectivity, habituation, and salience. Focusing on specific visual aspects and ignoring others is mind selectivity. Unconsciously, people notice relevant or enticing things (Bloomer, 2018). Designers of toy packaging must create appealing images.

The mind ignores familiar visuals due to habituation. Toy packaging designers must use familiar toys in innovative ways to engage audiences. Viewers notice and value visual elements that are relevant or expert. Consider the target audience's interests, tastes, and culture while creating attractive toy packaging. Other than showcasing things, toy packaging can affect perception. Understand how the brain processes visual information to create packaging that communicates and enhances product impact.

Children can grasp gender-inclusive design using visual communication perception theories. Toy stores are dominated by gendered marketing, so understanding how children may gravitate toward gender-neutral design owing to its unfamiliarity is vital. Gender schema theory states that newborns actively seek and assimilate gender-related information from their surroundings. Their gender-appropriate behavior follows this pattern. Scheme incongruity theory suggests that non-categorical information is more likely to be uncovered and trigger positive responses (Mandler, 1982 as cited in Lee & Schumann, 2004). According to integrated theories, gender schema affects cognitive categories. Schemas make people prefer gender-related products. According to schema incongruity theory, gender-inclusive design may appeal.

Figure 1 Gender–Neutral Toy Package Design by Marty Furgal (2016)

1. 2. Purpose of the Study

The study identified gender-neutral design components as black, white, muted colors, outlined shapes, and plain typography. Despite these rules, toy packaging commonly uses gender-associated pink and blue. Geschlechted packaging reinforced gender-specific items and interests, impeding gender equality and inclusivity.

Package design was used to encourage youngsters to explore new hobbies without gender limits, contributing to a more inclusive society. The study investigated how package components affected children's gender and inclusion perceptions of gender-inclusive toy packages. Children needed gender-neutral toy packaging that showed inclusivity. Understanding children's design choices helped promote gender inclusion. This insight could help designers and manufacturers make packaging for various children, defying prejudices. To empower children to pursue their interests regardless of gender conventions was the goal. The comprehensive study improved gender-inclusive design and children's perspectives. Design and manufacturing should promote diversity and dismantle gender preconceptions with this evidence-based approach. The research gave youngsters the freedom to express themselves and pursue their interests regardless of gender.

These insights could improve marketing and advertising beyond packaging design. Gender-inclusive design challenged and debunked gender stereotypes addressed gender role biases, promoted workplace gender equality, and removed barriers to personal growth. In addition, the study enhanced gender equality research and activism by providing gender-inclusive design approaches for other researchers. Beyond container design, it promoted gender equality and inclusive practices. They were dismantling gender preconceptions and supporting equality, and the research empowered them. Aina and Cameron (2011) explored gender-neutral toy packaging for Filipino children ages 3-6 to challenge preschool gender norms. The study improved inclusive design for young children's development.

The study focused on packaging aesthetic design, ignoring other considerations and acknowledging its limits. Future research could examine these elements to understand how container design affects gender inclusion. For health and safety considerations, the COVID-19

pandemic limited Filipino volunteers from different locations to a homogeneous pool. The findings may reflect a less diverse sample, so future research should aim for a broader and more diverse participant pool to capture more children's opinions.

The solitary researcher may have limited the study's scope and data collection. A more extensive study team may produce better outcomes. The research increased gender-inclusive toy package design by illuminating young children's perceptions and packaging graphic aspects, providing the groundwork for future research. Designers, producers, and advocates might create gender-neutral packaging that promotes equality.

2. Method

2. 1. Research Design

Phenomenology analyzed children's views on gendered, gender-neutral, and gender-inclusive design. Moustakas (1994) states that phenomenology studies human experience to investigate stereotypes and design. Langdridge (2007) says phenomenology helps researchers suspend biases through epoché. Thus, researchers can objectively define the phenomena. Using phenomenology, researchers impartially examined children's perceptions of gendered, gender-neutral, and gender-inclusive design.

Phenomenology also considers participants co-researchers, acknowledging their crucial role in research. Moustakas (1994) says phenomena occur from people's experiences, not academics' interpretations. Co-researchers aimed to collect children's honest thoughts and ensure their instructions were truthful and practical. It was suitable for child-centered recommendation-making. Our study team employed phenomenology to understand and combat design biases.

2. 2. Research Instruments

The investigation required qualitative methods. Semi-structured interviews examined gender-neutral toy packaging. Conversational interviews are more comfortable and provide more responses from youngsters than formal Q&A sessions, according to Fleer and Li (2016). Thus, a semi-structured strategy allowed participant responses to adapt questions and encourage natural speech.

The research collected "educational toys" packaging designs and interviews for secondary data. The designs gave further info. Secondary data strengthened the study on children's interview responses—additional perspective and insights into educational toy packaging. Semi-structured interviews and secondary data captured participant perspectives and tangible representations of gendered and gender-neutral toy packaging design. This multidimensional method improves validity, depth, and understanding.

2. 3. Sample and Sampling Method

The study focused on children ages 3-6 due to developmental factors. According to Aina and Cameron (2011), children acquire gender identities and stereotypes around this age. The children learn pink for girls and blue for boys. This age group starts identifying brands and making independent judgments, including gender-influenced toy selection (McNeal, 1992, 2007; Brown, 2014). Thus, children's views, attitudes, and choices are critical from 3-6.

Young children can speak (Clark & Statham, 2005; Dayan & Ziv, 2012). Although practical, interviewing parents or guardians may not represent children's ideas. In order to research children's views, their participation was meaningful. The most excellent interviewers were children, who cooperated and were asked about their experiences. The children are "experts" and share their opinions and experiences.

The study's approach resembles purposeful sampling. For exact data, deliberate sampling selects the best samples (Patton, 2002). Because it sought children's perspectives, this research was ideal. Educational toys created gender-neutral toy packages (Blakemore & Centers, 2005). Thus, purposive sampling selected respondents and toy box designs for a targeted and relevant study.

2. 4. Data Collection Procedures

Four Philippine toy stores provided box designs for this study. For COVID-19, the designs were pulled from toy retailer websites. Landes and Hobbes had 80 educational toys, the fewest. The study's population has 320 toy package designs for equitable representation. Following a 10% sample size, 45 toy package designs from each shop were chosen for customer appeal (Starnes & Tabor, 2018).

Since pandemic limitations were eliminated, child interviews were possible. Before interviews, parents signed a detailed consent form. The form defined the study, safeguarded confidentiality, discussed risks and benefits, and stressed informants' freedom to withdraw. Sample sizes are advised in phenomenological research. Bernard (2013) recommended 10–20, Creswell (1998) 5–25, Morse (1994) 6–8, and Guest et al. (2006) 6–12. The study interviewed 13 participants using these parameters. Metro Manila children all.

2. 5. Data Preparation and Analysis

Analysis of toy packaging. Content analysis is an extensive description, per Bloor and Wood (2006). This research examined package design images. Content analysis helps Elliott (2008) and Chrysochou and Festila (2019) develop packages. They were designed for women or men. Visual gender stereotype interpretations were constrained to reduce subjectivity. Packaging is gendered. This system encoded color, value/saturation, fonts, lines/shapes, photos, and gender-specific product labels. Everyone was masculine, female, or neutral. Visual communication gender preconceptions drove Velarde's (2017) and Darstaru's (2020) coding. They were assessing feminine, masculine, and neutral qualities objectively.

They coded all package-design pictures. Bright or pastel hues made women or men (intense, black). Curled fonts were feminine, angular fonts masculine. Gentle or sharp curves are

feminine/masculine. Symbols, figures, and stuff checked. Flowers and butterflies were female, tools and sports gear male. They analyzed package gender labels. "For women" and "Us". Normalized ratings reduced subjective coding. Visual multi-coder and inter-rater reliability tests agreed—gender-conformed shortcode. Discrimination and tight standards made photographs female or male.

The following tables list coding methods and categories. Chrysochou and Festila (2018) coded organic packaging design content analysis.

Table 1 Coding scheme of packaging design elements

Visual package design elements	Coding
Hue	What color takes up most of the front of the packaging?
Value/Saturation	What is the value/saturation of the colors? (bright, dark, muted)
Font	What type of font is the main text in the packaging? What is the most frequent font type if there is no central text?
Lines/Shapes	What is the most frequent line/shape used in the packaging?
Imagery	What is depicted in the front of the package design?
Verbal package design elements	Coding
Label	Is there a label on the product? If yes, what is it? (gender, age)

Table 2 Categories for coding

Visual package design elements	Feminine	Masculine	Neutral
Hue	red, violet, pink	blue	blue
Value/Saturation	muted	dark	bright
Font	cursive, thin, decorated	geometric, straight, bold	classic (Helvetica, Roboto, Garamond)
Lines/Shapes	round, curved, wavy	geometric, straight, technical looking	minimalist, outline, smooth
Imagery	feminine stereotypes	masculine stereotypes	balance in masculine/feminine elements; no stereotypes
Verbal package design elements	Feminine	Masculine	Neutral
Label	"for girls"	"for boys"	age

The modified van Kaam method analyzed interview data thoroughly. Epoché, where the researcher acknowledged and overcame personal biases regarding the subject, began this investigation. Horizontalization, reduction, theme clustering, data comparison, textural and structural descriptions, composite structural descriptions, and amalgamation followed (Moustakas, 1994).

Horizontalization needed reduction and thematic grouping to remove irrelevant responses and group significant themes. Textual descriptions used interview transcripts. The researcher then used structural descriptions to assess responses by examining how experiences or perceptions evolved. Then, common themes were combined into a complete phenomena description.

3. Result

Using two robust methods, the researchers examined educational toy packaging and children's perceptions. Color and design were explored for "boyish," "girlish," and neutral toy packaging. Second, van Kaam's analysis directly questioned children about these items.

Packages were boy and girl-themed. The findings will be explained. Gender opinions on objects were repeated in youngster conversations. Separate lectures will present these findings. This study attempted to explain package visual cues and children's attitudes holistically. The method improves study findings.

3. 1. Content Analysis of Educational Toy Package Designs

The extensive examination of 180 educational toy package designs from four stores targeting children ages 3-6 shows how the toy industry portrays gender. Color, language, visuals, and gender designations showed how packaging reinforces or challenges gender norms. These findings affect toymakers, parents, educators, and society. Educational toys shape gender. Container design determines if the industry promotes diversity and gender norms. Categorize gender research on educational toy packaging. This data helps toy companies assess their gender impact on children and design choices.

The modified van Kaam technique explains child interview gender preferences and educational toy assessments. Comparing packaging to youngsters' interests improves representations. The toy industry must break gender stereotypes, says this report. Diversifying packages makes all children clever, creative, and confident. One hundred eighty educational toy box designs and children's opinions changed the toy industry. These findings help stakeholders make informed decisions for a more inclusive and forward-thinking future where children may explore, learn, and develop their identities beyond gender stereotypes.

3. 1. 1. Color

Table 3 Main colors used in the package design of educational toys for children aged 3–6 years old

Masculine	Neutral	Feminine
Blue (42)	white	violet
	green	pink
	yellow	peach
	black	red
	orange	
	brown	
	beige	
	gray	

3. 1. 2. Value/Saturation

Table 4 Main value/saturation of the colors used in the package design of educational toys for children aged 3–6 years old

Masculine	Neutral	Feminine
dark	bright	muted

This study shows fascinating color trends in educational toy boxes. White designs may have been used to create a neutral, gender-neutral look. The second most popular color was blue. Traditional masculinity and male goods suggest gendered color associations in designs.

Green was standard, signifying education and environment above gender. Color saturation encouraged children's imagination with vibrant colors. Most toy boxes were "neutral" to appeal to all children, regardless of gender. These findings emphasize toy package color and gender stereotypes. The toy industry may promote creativity, invention, and equal education for all children by employing neutral colors and appealing features.

3. 1. 3. Font

Table 5 Main fonts used in the package design of educational toys for children aged 3–6 years old

Masculine	Neutral	Feminine
Sans serif – bold	Sans serif – round	sans serif – curved
sans serif – edgy, geometric	Sans serif – regular	script
Sans serif – sharp, geometric	Sans serif – soft, fluid	sans serif – curved, wavy
Sans serif – straight, edgy	serif – regular	script – cursive
slab serif		serif – curved, decorative
Sans serif – sharp		Sans serif – decorative
		sans serif – round, wavy
		serif – decorative
		Sans serif – soft, fluid
		Sans serif – thin, curved
		serif – thin

3. 1. 4. Lines/Shapes

Table 6 Main lines and shapes used in the package design of educational toys for children aged 3–6 years old

Masculine	Neutral	Feminine
polygons	outline	curved
straight	polygons, curved	circles
	polygons, circles	wavy

Round sans-serif typefaces made packaging friendly and approachable for tiny children in the target age bracket. Modern, basic designs used regular and circular sans-serif. Polygons and curves were made. Curves seemed smooth to children. Instructional polygons offered toys structure and shape.

Children's imagination and curiosity were encouraged by curves and polygons. Designs increased user experience and mood. The packaging designs strategically use round and regular sans-serif fonts, curved lines, and polygons. It made objects more appealing to youngsters and made play more fun by creating an inclusive visual language.

3. 1. 5. Imagery

Table 7 Type of Image or illustration used in the package design of educational toys for children aged 3–6 years old

Masculine	Neutral	Feminine
product image with other elements	product image with other elements	product image with other elements
product image only	product image only	product with a real female user
illustration only	illustration only	female user illustration
male user illustration	Product image variation demonstration	illustration only
Product image variation demonstration	balance in user illustration	balance in user illustration
product with real neutral user	product with real neutral user	Product image variation demonstration
	product illustration	product with real neutral user

Table 8 Main theme or concept of the image/illustration used in the package design of educational toys for children aged 3–6 years old

Masculine	Neutral	Feminine
fight scene, obstacles	nature/animals	animals
construction	musical instrument, music	princess
dinosaurs	various	science
occupation	food	Unicorn
police	science/experiments	blocks
science, technology	blocks	fashion
animals	board/games/puzzles	people, social event
sports	people/social events/leisure	flower
tools	princess	occupations
hero and villains	dinosaurs, dragon	
male villain	creatives	
tops	Fight scene/obstacle.	
animals	occupations	
	Unicorn	
	numbers and letters	

Carefully designed toy packaging aids selection. Toy images were accurate, improving confidence and eliminating box-content disputes. Nature and animal photos served two functions. It captivated children with nature's beauty. This Image sparked creativity and adventure. To encourage imaginative play, toy makers integrated these elements with storylines. Nature and animals inspired creative stories that improved cognitive and social development.

Animal and wildlife packing is also valuable. Products aligned with nature promoted environmental awareness, conservation, and animal sympathy. Designs teach environmental responsibility. Product and nature/animal photos on toy packaging helped. Positive values, creativity, and honesty were emphasized. These characteristics make toy packaging more appealing and influential, benefiting customers and society.

3. 1. 6. Label

Table 9 Label used in the package design of educational toys for children aged 3–6 years old

Masculine	Neutral	Feminine
fight scene, obstacles	age (169)	animals
	no label (11)	

Age labels on toys determine safety, suitability, and development. These age suggestions help parents and caregivers choose safer play based on their child's development. Eliminating gender-specific descriptions boosted inclusivity and refuted stereotypes. To create an inclusive play environment, producers avoided gender-specific toys. This strategy advised children to play with toys based on their interests, not gender or society.

Toy packaging removed gender labels, encouraging children to play with many interests and develop cognitively and socially. Children were encouraged to express themselves and taste. Eliminating early gender-based limitations and biases lets children play freely, fostering diversity and equality. The lack of gender-specific toy packaging showed a greater appreciation for gender diversity. This novel technique promoted gender equality and self-expression. Gender-neutral toy packaging taught children acceptance and helped them find themselves. Toy packaging with age labels provided safety and appropriateness, while gender-free labeling promoted inclusivity, fought stereotypes, and helped children grow. These packaging methods let children explore, express themselves, and play without judgment, producing a more diverse and equitable society.

3. 2. Modified van Kaam Analysis of Interviews

The second phase examined 13 Metro Manila 3–6-year-olds. These interviews were processed using the qualitative data interpretation method modified by van Kaam. Interviewing children this age is vital due to rapid cognitive, social, and emotional development. Research says the 3–6 age group learns independence, language, and self-identity.

Due to sociocultural and environmental implications on toy experiences, Metro Manila children were recruited to ensure a representative sample. Toy and play habits vary by city. The modified van Kaam analysis method structured and analyzed qualitative data for study reliability. This method highlighted children's themes, patterns, and nuances. A diversified sample and modified van Kaam analysis supported the study. These findings increase Metro Manila children's toy impressions and child development comprehension. These findings can help toymakers, educators, and parents improve young children's play.

The modified van Kaam approach to the second data collecting phase interviews with 3–6-year-olds from many Metro Manila cities increased the study's validity and comprehensiveness. This study analyzes children's growth and the origins of toy perceptions. It teaches stakeholders how to optimize young children's play.

The following table lists process minor and significant themes.

Table 10 Minor and significant themes developed

Minor themes	Major themes
Response based on experience, habit, and because of someone they know	Personalness
Favorite/own preference/most preferred	
For self only	
The reason is related to one's sex or gender.	
Plain description/identification	Simplicity
Description with narrative	
Liking just because	
The reason is simply that the child does not want to	
Inclusion of opposite sex	Gender Inclusivity
Refusal to include opposite sex	
For girls only	
For boys only	
Okay, with toys for the opposite sex	
Not okay with toys for the opposite sex	
Neutral about toys for the opposite sex	
Non–gender–related reason	Perception of Package Design Elements
Stereotypical response	
Non–stereotypical response	
Masculine package design	Package Design Choices
Feminine package design	
Gender–neutral package design	
Gender–inclusive package design	
Change in elements (addition, removal)	
Change in color (box, elements)	

Detailed data analysis revealed five major themes from twenty-four minor themes about children's toy box design. The first theme, "Personalness," includes children's preferences and environment. That suggests children evaluate product packaging depending on their preferences and experiences.

Second, "Simplicity" shows newborns prefer simple, appealing packaging with essential reactions. The third primary theme, "Gender Inclusivity," examines positive and negative gender portrayals in toys and play. Children prefer gender-neutral packaging for inclusive play.

The fourth issue, "Perception of Package Design Elements," shows newborns gender colors, illustrations, and text. The last issue, "Package Design Choices," examines children's aesthetic preferences and toy package expectations.

Themes explain youngsters' toy packaging preferences. These features help toymakers, marketers, and designers produce children-friendly, fascinating packaging.

3. 3. Discussion

The study recommends gender-inclusive toy packaging. Package design followed content

analysis: Van Kaam, toy packaging studies, altered gender, and appearance. Key results follow. Toy packaging colors, graphics, typography, and other aesthetics influence youngsters' preferences, according to content study. Graphics can affect toy packaging gender representation and inclusivity, according to this study.

Modified van Kaam's research and developed packaging using data analysis. Research themes and patterns shaped gender-inclusive packaging. Systematic data analysis and interpretation improved the study's rigor and depth. Content and modified van Kaam analysis make gender-inclusive toys. These strategies can assist toymakers and designers in promoting gender diversity, inclusion, and cross-gender child interests. Modified van Kaam analysis and study content suggest gender-inclusive toy packaging. For more inclusive and appealing toy packaging, consider aesthetics and gender.

3. 3. 1. Existing Gender-Neutral Package Design Elements

Gender and image impact packaging. Culture creates stereotypes, not images. Packaging designers must understand cultural symbols to reduce gender stereotypes. Transforming gender stereotypes requires addressing visible and hidden imagery. Fonts, lines, forms, and photographs on toy packaging indicate gender. Compatible round and regular sans-serif typefaces eliminate gender bias in gender-neutral designs. Blending feminine and masculine lines and shapes defies gender roles and fosters diversity. Round corners and polygons are gender-inclusive.

Toy packaging needs images since youngsters judge products visually. Product graphics and packaging affect gender. Choose and state these attributes carefully to prevent gender stereotypes. All designs must include gender-neutral items. Toy packaging explores gender—inclusive creatures and designs. Designers should avoid gender and job stereotypes. Balance themes and question gender norms.

Packaging impacts toy buyers. Instead of "for boys" or "for girls," gender-inclusive design employs ages. Age indicates toy suitability without gender. All children can choose toys based on their interests and growth without gender labels. Package designers can challenge gender preconceptions via typefaces, lines, forms, images, themes, and context-specific stereotype signifiers. Designers can build gender-neutral play packaging using children's interests.

3. 3. 2. Getting Children's Attention

Attention is essential for audience participation. Color matters to children when packaging. Pancare (2018) says bright colors help children see. Gender-neutral green and yellow appeal to 2-6-year-olds (Gao, 2021). Green and yellow packets promote diversity. That matters because blue is macho. Even gender-neutral blue packaging promotes boys. Better tactics use gender-neutral colors and less blue (Gao, 2021).

Understanding children's packaging design preferences may improve product interaction. Children's preferences depend on their environment, habits, and classmates (Shutts et al., 2009; Hennefield & Markson, 2017). Children design age-appropriate packaging. Gender-

neutral colors and avoiding gender-associated hues help designers create inclusive products. Include children's preferences and experiences to boost product engagement.

3. 3. 3. Children's Perception of Package Design Regarding Gender

Gender and toy package reactions vary. Children did not correlate package design with gender. One source responded "'Yong pambabae" (for ladies) but afterward altered it to "Yong pink" when asked about their box design—selecting children by wish, not gender. The colors and styles of toy boxes expressed gender. Gender-inclusive designs need color choices. Use neutral yellow and green. Designers could pick feminine or masculine colors. Get rid of gender-specific dolls and toys.

Experiences and environment shaped children's play and toy preferences. Different children hated playing with opposite sexes. Girl misidentified male and female goods. Children preferred opposite-sex toys because "toys are pare-parehas lang naman" (all toys are identical). Gender classification stopped some children from playing with opposite-sex toys. The study found that gender labeling on children's favored colors affected their choices. Children disliked gendered toys. Gender-free play lets youngsters play with whatever they want without social pressure.

Most chose masculine, feminine, neutral, and inclusive packaging. They were designing inclusive perceptual visual communication theory through selection and habituation. Presenting gender-neutral toys without images gives inclusive design a familiar yet new perspective. Most boys who thought the toy was for boys liked the inclusive design. Girls who assumed the toy was for girls chose pink. The last blue was boyish. Neutral colors may help children feel male or female. Remove gendered and color-coded toy packaging.

Color preferences made children reject the gender-inclusive box. Shows how colors affect children's choices. Packaging designers wanted to remove the toy penguin. Data reveals children preferred packaging color over product. It implies that packaging design, especially colors, influences youngsters' decisions. Research promotes gender-neutral, color-code-free toy packaging. Environment and experiences determine youngsters' tastes, but packaging design, especially colors, helps. Colorful, gender-inclusive packages help children play.

3. 3. 3. 1. Contents
Table 11 Contents of the drawings the children made

Animals	Nature	People	Places	Objects	Actual Toy
tiger	tree	girls	house	car	Lego
dinosaur	grass	brother	beach	robot	
giraffe	water	hunter			
fox	sky	superheroes			
butterflies	sun				
lion	land				
	flowers				
	cloud				

Table 12 Contents of the drawings the children made were categorized based on their perception of their designs as a whole

Masculine	Inclusive	Feminine
"for boys"	"For both."	"for girls"
car	robot	girls
tiger	brother	house
tree	water	tree
beach	beach	Lego
dinosaur	tree	giraffe
giraffe	fox	sun
superheroes	grass	sky
lion	land	grass
	hunter	water
	Lego	
	flowers	
	butterflies	
	cloud	

3. 3. 3. 2. Box Color

Table 13 Main colors the children used, categorized based on their perception of their designs as a whole

Masculine	Inclusive	Feminine
"for boys"	"For both."	"for girls"
yellow	no color	red
pink	black	no color
black	light blue	light blue
violet		

3. 3. 3. 3. Elements' colors

Table 14 Other colors the children used, categorized based on their perception of their designs as a whole

Masculine	Inclusive	Feminine
"for boys"	"For both."	"for girls"
blue	blue	pink
red	black	yellow
green	pink	blue
brown	orange	peach
yellow	yellow	orange
white	green	green
black	brown	brown
gold	violet	red

The tables show children's preferences. The chart shows children like animal and environmental toys. Table 7 demonstrates that most "for both" content are "neutral" about these designs. Commercial gender-neutral designs may harm children.

Not all box and element labels and colors were gender-neutral. Few cases demonstrated color-based gender bias. Color and hobbies influence most children's choices. Not coloring boxes, some children focused on elements. Children like animal toys and nature say tables.

Market trends drive gender-neutral designs. Box elements are colored by children's hobbies and traditional colors, not gender.

3. 3. 4. Communicating Gender Inclusivity to Children Through Package Design

Toy packaging must consider children's simple perceptions and responses. Little ones like bundle graphics and literalize. Therefore, designers must simplify graphics. Healthy food package design research reveals that children read graphics and phrases literally (Brierly, 2017). Fruit-flavored packaging may look healthy to children without fruit. Some children think gender-specific toys are for them.

Design is simple, neither minimalist nor depressing. Design for children should utilize simple, appropriate images to avoid confusion. For all children, iconic cues can help gender-inclusive package design.

3. 3. 4. 1. Gender Inclusive Package Design Guidelines
User validation and design-driven iteration created gender-inclusive toy packaging from theory and research. This method seeks inclusive child designs.

Design tips from guidelines and ideas:

Design for Children: Ask children what they like and follow their advice (Druin, 2019). Address children's needs (Carroll et al., 2012).

The package design should involve both sexes to prevent gender prejudice (D4CR, 2012). Remove gender-specific designs for gender equality (D4CR, 2012).

Communicate clearly with simple graphics (Druin, 2019). Visuals should convey toy content and intent (Brierly, 2017).

Yellow and green packaging is gender-neutral (Gao, 2021). Avoid blue, pink, red, and violet (Babu & Rani, 2019).
Bright colors fit youngsters' designs (Gao, 2021).

Use inclusive, gender-neutral, rounded, and regular typefaces (van Leeuwen et al., 2014) instead of forceful, geometric, crisp, curving, cursive, and decorative (van Leeuwen et al., 2014).

Increase packing circular polygons (van Leeuwen et al., 2014). Polygons, curves, and forms are appealing and inclusive (van Leeuwen et al., 2014).

Include the toy in product photos and other materials (Druin, 2019). Children-friendly design features gender-neutral animals and environments (Druin, 2019).

Toy suitability by age, not gender (Babu & Rani, 2019). Avoid gender identifiers to promote tolerance and reduce bias (Babu & Rani, 2019).

Create gender-inclusive toy packages that respect children's rights, challenge stereotypes, and promote inclusive play using these design guidelines and user validation.

3. 3. 4. 2. Sample Package Design

Figure 2 Sample Gender Inclusive Package Design 1

Figure 3 Sample Gender Inclusive Package Design 2

Studies reveal that gender-inclusive toy package designs need iterative, design-driven approaches and user validation to be appealing.

Short research-based design concepts:

The packaging needs gender-neutral white, green, and yellow (Gao, 2021). Use complementary colors instead of macho blue (Babu & Rani, 2019). Bright colors create intriguing patterns for children (Gao, 2021).

Consider Gender-neutral round and regular sans-serif typefaces (van Leeuwen et al., 2014).

Use feminine curved lines and masculine polygons (van Leeuwen et al., 2014).

Package design should include photographs of children of both sexes to encourage diversity and eliminate gender bias (Furgal, 2014). Genders, jobs, interests, and heroes/villains should be balanced in imagery to promote diversity and inclusivity (Shutts et al., 2009; Hennefield & Markson, 2017).

Instead of "for boys" or "for girls," use age labeling for toys (Babu & Rani, 2019). Clear packaging and info eliminate gender bias.

Test design for target-age children. This iterative method requires children's input, changes, and design improvements to reflect their ideas and gender inclusivity.

Gender-inclusive toy packaging that engages youngsters challenges assumptions, and encourages play equality requires design and user validation.

4. Conclusion

The study showed how gender, preferences, and environment influence youngsters' choices. Youth must be addressed directly. Labels and opposite-gender play were child gender beliefs. Children liked gendered toys. Playable toys were gender-neutral. They were avoiding toy gender labeling. Photo content analysis of animals and the environment improved children's packaging. Toy packaging should include similar images. The study indicated that children favored gender-inclusive designs. Every boy who liked this design thought it was boy-friendly. Color, not toys, determined their choice. Packaging should attract children and show that the product is for all children to learn from and enjoy, regardless of gender.

Finally, content analysis, modified van Kaam analysis, and D4CR principles assist designers in making child-friendly packaging.

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