



Persuasive powers of cuteness

**Exploring cuteness in donation
collection tools**

Under the guidance of **Prof. Girish Dalvi**

Vaishnavi Pabboju

22m2249

Project Approval

The Project Titled "Persuasive Powers of Cuteness: Exploring cuteness in donation collection tools" by Pabboju Vaishnavi is approved for partial fulfillment of the requirement for the degree of 'Master of Design' in Interaction Design at Industrial Design Centre, Indian Institute of Technology, Bombay.

Guide:



Chairperson:



Internal Examiner: 

External Examiner:



for external
Vaishnavi
Dalvi

Declaration

I declare that this written document represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources.

I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea, data, fact or source in my submission.

I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

Vaishnavi Pabboju

A handwritten signature in blue ink, appearing to read "Vaishnavi Pabboju".

22m2249

Interaction Design

IDC School of Design, IIT Bombay

Acknowledgement

I would like to extend my gratitude and appreciation to Prof. Girish Dalvi for his guidance, mentorship and invaluable support. His insightful feedback and encouragement throughout the course of the project has helped in more ways than one. His teachings not only shaped my academic potential, but also shaped my personal growth, for which I am extremely thankful.

I would also like to extend my gratitude towards other faculty members of the IDC, for providing their expertise and feedback.

I'm extremely indebted to my classmates, friends and family members, who have provided me with their time, invaluable inputs and unwavering support.

Abstract

In an attempt to disengage and explore cuteness's potential from its overtly commodified and infantilized reputation, we investigate it as a design aesthetic through the lens of prosocial behavior. Focusing on Indian audience to understand how cuteness shapes itself in this culture, we apply mixed method research aided through the creation and deployment of donation collection tools.

After collecting visual traits through typicality scale that might be responsible for creating the perception of cuteness amongst Indian university students, we designed 3 donation boxes based around these findings and further deployed them in student residential areas to collect empirical evidence to observe any impact by cuteness on one's philanthropic tendencies. ANOVA and Partial Eta Square measurements were applied to data and further interviews were conducted to uncover any possible influences of cuteness on the donation drive's outcome.

Findings from the donation drive do suggest an impact of cuteness on the over-all success of a donation box.

While we could not uncover whether cuteness indeed was responsible for one's decision to donate, eliminating the possibility of induced prosocial behavior from a intentionalist perspective, evidence does hint at an impact on prosocial behavior from a consequentialist perspective. Interviews with the donors managed to provide some insights that explains the role cuteness might have played.

Decision to donate was made considering many other factors such as the convenience and availability of the resources which might have resulted due to impulse buying, bulk buying and/or panic purchasing, lack of skepticism around the drive, the amount of sympathy the cause managed to garner due to the gender of the donors and the benefactors and its part in mainstream media. What we understood was that the cuteness played its role in bridging the gap between potential donors and the drive itself. It helped in hijacking attention, providing approach motivation and conveyed "helplessness" through its presence.

Keywords - Cute, cute aesthetics, prosocial behavior, donation drives, donation box design, symbiotic relationships

Contents

Abstract		
1. Introduction	1	
2. Theoretical background	3	
2.1 Establishing cute		
2.2 Cuteness in culture and media		
2.3 Prosocial behavior, donation box designs and cuteness		
3. Cuteness in donation collection tools	8	
3.1 Donation boxes		
3.2 QR designs		
3.3 Cuteness in donation boxes		
3.4 Cuteness in qr code designs		
3.5 Themes extracted from the findings		
4. Design Explorations	15	
5. The donation boxes	21	
6. Research protocol	24	
6.1 Quantitative research protocol		
6.2 Qualitative research protocol		
6.3 Ethics and informed consent		
7. Quantitative research		29
7.1 Quantitative data obtained		
7.2 Quantitative data analysis		
8. Qualitative research		33
8.1 Qualitative data analysis		
8.2 Qualitative data findings		
9. Discussion		46
10. Limitations and Future directions		48
11. Conclusion		49
12. References		52

1. Introduction

Any entity that can elicit emotions resembling the “aww” expression is generally categorized as “cute”. In simpler terms, the “aww” factor is usually associated with cuteness [1]. While some countries have embraced cuteness as part of their culture such as Japan’s “kawaii subculture” or Korean’s “aegyo”, not every country has discovered and embraced the potentials of cuteness, India being one of them. But a significant wave of awareness towards its existence has been noticed in the recent years. Due to the rise of social media usage and since the advent of ai, cultural spillover lead to individuals discovering and virtually experiencing trends from across the world. Now, cuteness has permeated every faucet of the physical and the digital realm.

In the recent 2010's, East Asian cultures experienced tremendous growth and managed to capture international attention. Especially in India, amongst the youth amid pandemic, positive reception has been observed when it comes to entertainment industry (Anime, K-pop, K-dramas), lifestyle stores and products (Miniso, Winterbear) from countries such as Japan, Korea and China which are entrenched with cuteness and cute aesthetics [4].



Fig.01 Winterbear (Mumbai, Maharashtra) specializes in Korean and Japanese merchandise



Fig.02 Miniso (Hyderabad, Telangana) specializes in Chinese lifestyle products

But the spillover of cultural trends and norms is heavily tailored and commercialized. Indians displaying a preference towards it does not necessarily mean that their definition and understanding of cuteness aligns with it. The current state of “cute” calls for a rethinking and reimagining as a concept in a new culture and its potential beyond commercial gains. This project investigates cuteness from an Indian perspective, whether the impact and understanding of cuteness is based purely in biology and psychology, or cultural factors also influence and reshape its existence. An attempt to reevaluate ways in which its existence can be understood and explored beyond the current narrative. We also investigate our relationship with cuteness by closely observing our responses upon interacting with it, what our actions and decisions say about us and the relationship we have with it.

First, we begin with exploring existing theories to understand what the current narrative around the cuteness is. We then proceed by investigating and developing visual traits that might contribute in creating the perception of cuteness in design, to cross-examine if these traits align with or oppose the existing theories. Second, we build upon these findings by developing our own artifacts around these traits and deploy them to observe their impact on prosocial behavior within the selected participant

group. Third, we uncover the outcome of the deployment and try to create our own theories in order to offer newer perspectives about cuteness, to expand and add to its current narrative.

This study does not aim to draw a cultural comparison around the manifestation of cuteness in different countries. It also does not investigate the impact of cuteness from a biological and psychological angles, only explores it as concept from visual and design perspective. The study is highly contingent to a specific localized area and a set a participant group, hence the findings further discussed can not be generalized to the entire culture, they only represent a part of the population.

2. Theoretical background

2.1 Establishing cute

Cuteness was recognized and proposed by Charles Darwin (1872) as a “quality” possessed by infants that influences the adults of the same species to care for them, implying the “quality” to work as a form of survival mechanism. However, its origins dates further back as an aesthetic around the 17th century in Edo-era of Japan where it is said to have appeared in paintings and prints, only finding its way to west during the 19th century [1].

It's not until 1943 that official studies around cuteness began when Konrad Lorenz put forth the Kindchenschema theory. In his theory, also known as baby schema theory, Lorenz listed out juvenile features present in animal infants, including puppies, kitties and even human children, such as large eyes, a head too big for the body, chubby cheeks, small chin are capable of triggering physical and emotional response out of the observer towards the being observed. These instincts were later associated with a wide range of actions and emotions such as parental care, empathy and compassion [10]. This theory cemented its roots in the cute studies and provided

foundational data on what cute is and how cute can be created, effects of which are still seen across different physical and digital fields.



Fig.03 Influence of Kindchenschema on Micky Mouse's evolution

The evolution of Mickey Mouse shows how the Baby schema influenced its design and softened it into a more infantile character over the years, resulting in its rise to popularity and likability amongst children. In the recent years, it also lead to the creation of a whole new art style called “Chibi art” originated in the Japanese comics “Manga”.



Fig.04 Popular chibi characters

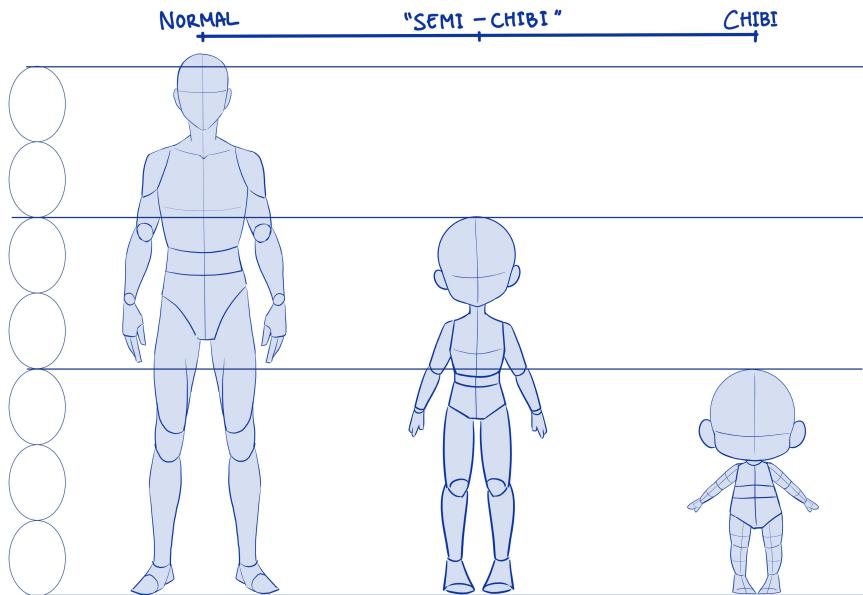


Fig.05 The Chibi art-style

While Lorenz's theory cemented certain association regarding cuteness to biology and psychology, another theory put-forth by Nenkov and Scott in 2014 provided a different perspective. Here, they proposed a different type of cuteness, called "Whimsical cuteness". Any inanimate object consisting of dimensions of fun, playfulness, humor and independence can be categorized as Whimsical cute [7].



Fig.06 Examples of Whimsical cuteness

Although cuteness is mostly hailed as a "positive" aesthetic asset, mainly associated with affective responses that were desirable, it does not exist without fault. It's been proven that context effects the desirability of cuteness, resulting in inappropriate perception regarding its presence and creates distraction which leads to users overlooking the important information being conveyed, proving that cuteness is not always a welcomed asset [6]. Deviating from its existence as a design aesthetic, cuteness has issues at societal level as well. Due to its reputation being infantilized and its misplaced association with femininity, it reinforced harmful stereotypes which propagated traditional gender roles [5].

2.2 Cuteness in culture and media

Cuteness has significance in many cultures, especially cultures originating from the East Asia. The Japanese for example have an entire popular consumer sector dedicated to the cute aesthetics which includes cutification of their scripts, vocabulary, visuals, etc, called the “Kawaii subculture”. All of these summed up to create the Kawaii genre as a significant and remunerative market segment which has taken over Japan. This becomes blatantly observable when one engages with its popular illustrative media like Anime or Manga, equivalent to the cartoon and comics of the west, globalization of which takes part responsibility for introducing the Japanese Kawaii culture to different parts of the world. Not only does the Japanese media is entrenched with Kawaii culture, but its government has also embraced its potential by introducing elements of it in their municipal mascots across many prefectures and signages to convey public welfare and civic duties [6].



Fig.07 Examples of “cute” warning signs in Japan

Japan is not the only country that has fully accepted and adapted to the cute. The South Korean culture, which has seen tremendous rise in popularity amongst Indian youth in recent times, has also adopted the cuteness. While the Japanese presented their dedication to cuteness through visuals and brands, cuteness in Korea took behavioral roots through dialect, gestures and expressions famously tagged as “Aegyo”. Mostly demanded out from young women, Aegyo presents itself mainly in mainstream media through actors and pop-stars. Its manifested as coquettish display of flirtation through baby lingo [15]. While some of these cultural preferences might be problematic when viewed from a gender perspective, the point of understanding where and how the obsession with cuteness comes from helps us understand our own cultural shift towards it.

As internet usages rose in India due to affordable data plans and convenient recharge options, many started to indulge in various online platforms from social media sites to streaming services. This addiction reached a fever-pitch once the pandemic hit where most had nothing else to do except stay online for entertainment and news updates, which the case especially for the teenagers and young adults. While East Asian media was globally recognized, its popularity sky-rocketed during the pandemic where many individuals from different cultural background became privy of its existence. From music to web-series, Indian interest and demand rose exponentially, which also marked the beginning of cultural curiosity towards cuteness as an aesthetic. No longer a foreign phenomena, cuteness is very much accepted and adapted into the Indian aesthetics. To understand this, we have to look no further than the ai generated religious and cultural images making rounds across WhatsApp groups and Instagram pages.

But does this shift indicate? Its important to ask whether it means we are adapting our preferences to fit what we are being fed through other cultures, or do we have our own understanding and definition when it comes to cuteness and cute aesthetics. When we compare the manifestation of cuteness between the east and the west, its quite notable even at a

superficial level how cultures not only accept cuteness but also reshape its identity and associations.

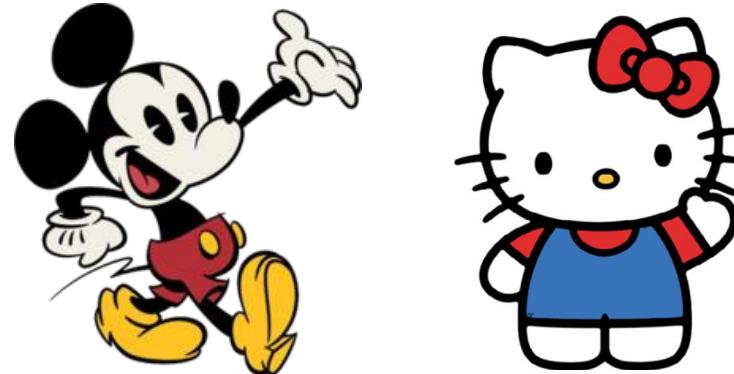


Fig.08 Popular west mascot (Mickey Mouse) and East mascot (Hello Kitty)

Currently what India's experiencing in terms of cute popularity is coming from outside of its boundaries and culture. The definition and its manifestation is foreign, meaning its not India's cute rather its Korea's cute or Japan's cute that we are witnessing. Through this study, we attempt to understand how cuteness might manifest within the Indian culture when given the opportunity. We try to identify which aspects of a design creates such perceptions and whether they align with the existing attributes utilized by other cultures to manifest their cuteness. These findings might provide us with foundational data on how to design cute for selected Indian audience, based on which we might explore the studies of cuteness further.

2.3 Prosocial behavior, donation collection tools and cuteness

Donation boxes are cornerstone in the space of charity. They are contingent to the cause, potential donors being targeted, environment they are located in and the culture they exist within, all which is evident through the design choices made. Not all donation boxes are designed the same, which further proves that the “design” of a donation box is considered essential to its existence and success. The most commonly designed and utilized donation boxes are found in business establishments and religious establishments. The designs here use textual and visual information to convey the cause and the benefactors, often times provocative in nature to evoke and bank on emotions such as sympathy, guilt, fear and gratitude. While design of the box being used as a manipulative tactic can be ethically questionable, its purpose and existence is irrefutable to its transformation, functionality and the success. Below presented boxes represent the two boxes. In this project, we challenge the existence of these traditional donation boxes by designing and deploying “cute” donation boxes as a way to further develop its association with empathy and compassion by investigating the participant response while interacting with it.



Fig.09 Examples of the 2 traditional donation boxes

Regardless of what they are collecting and who they are benefitting, the box symbolizes an opportunity to benefit another. According to Batson and Powell (2003), actions intended to benefit one or more people is considered Prosocial behavior emphasizing intentions. Here, the importance is given to the intention regardless of whether or not the action has benefitted another or not. When the action benefits another regardless of the intentions behind it, it is perceived as Prosocial behavior emphasizing on consequences, Schroeder and Graziano (2015). While exploring the impact of cuteness through the donation box design, we attempted to understand the intentions of the participant group, but could not find any concrete evidence that points to either altruistic, selfish or other motives.

3. Cuteness in donation collection tools

As a way to explore cuteness and its impact on prosocial behavior through its association with empathy and compassion, we primarily selected two artifacts to investigate in this research; Donation box design and qr code design, both successful ways to collect charitable contributions. In this section, we exclusively focus on identifying and understanding the visual traits of a donation collection tool to see which contribute towards the perception of cuteness. For this experiment, we asked Indian university students to partake in ranking donation collection tools on a typicality scale. The scale consisted of 7-statement options ranging from “very cute” to “not cute at all” which led to the categorization of these artifacts between different degrees of cuteness based on their subjective opinion. All the artifacts studied in this experiment were acquired from the internet.

3.1 Donation collection boxes

27 donation box designs were collected from the internet and were printed out so that the ranking could be done physically. This was done to avoid dubious responses by the participants.



Fig. 10 Artifacts from the 27 donation box designs

Convenient sampling was considered for the sake of feasibility. 5 participants (3 female and 2 male) between the ages of 21-25 partook in the ranking process. The number of participants was deliberately kept low so as to have a deeper analysis of the ranked objects. Depth and object analysis was of the main focus over breadth and subjective perspectives of the participant. We aimed at collecting family resemblances within and between the categories. Recurring resemblances were noted down.



Fig. 11 Participants interacting with the artifacts

A makeshift scale with the 7-statement options was crafted. Each rank for every participant was first analyzed within subject, then was analyzed between subjects.



Fig. 12 Makeshift scale and the artifacts

3.2 QR code designs

35 QR code designs were collected from the internet for this experiment. As we move forward with virtual payments, digital donation drives have been taking place across India, an escalation of which was especially observed during the pandemic. Scannable qr codes are on their way to replace cash transactions in most cities and towns.

A combination of AI generated and professionally designed qr codes were considered for this ranking. With the rise of AI, its important to acknowledge its role in how design has been evolving and how many corporates are utilizing the open-source, free to use AI

text to image AI tools such as Dall-E, Stable Diffusion, Mid-journey, etc. For this ranking, a different set of participants were considered (3 male and 3 female). This ranking was conducted online using Google Forms.



Fig. 13 Example of AI generated QR designs



Fig. 14 Example of professionally designed QR designs

3.3 Cuteness in donation boxes

The visual traits that were identified using the above mentioned ranking methodology only provided a fraction of the understanding of what is perceived as cute by Indian youth. The limited number of participants does not sufficiently encompass the entirety of the population, hence the findings only hint at some characteristics. After merging the findings across participants, we managed to identify 6 main dimensions: text, material, form, color, graphics, and design execution.

Text:

Designs with limited textual information, that is, limited to a few words written out in big and bold handwritten style were categorized as “very cute”, “cute” and “a little cute”. On the other hand, lack of any textual information or large textual information (i.e., paragraphs) that were smaller and thinner in size and appeared to be printed were categorized as “little less cute”, “not cute” and “not cute at all”.

Color:

Designs containing a larger variety of colors were categorized as “cute” over lack of variety in colors. A mixture of brighter hues such as blues, yellows, and greens was categorized as “very cute” and “cute”,

showing a preference toward certain palettes. Surprisingly, the colors often tagged as more feminine and associated with cuteness, such as pinks and pastels [9], were not categorized in any of the cute ranks, an insight that goes against the existing norm.

Graphics:

The presence of graphics in the design did influence the overall categorization by the participants. Designs with no graphics were categorized as “not cute” and “not cute at all”. The nature of these graphics also played a role in this categorization. Graphics with animals or animal-adjacent imagery and character-specific designs from popular animated shows, especially those that follow Lorenz's Kindchenschema were considered “very cute” by the ranking participants.

Form:

Donation boxes with form variations, such as boxes shaped like characters, animals, or houses were categorized as “very cute”, “cute” and “a little cute” while donation boxes with no form variation, simply box-shaped, were often categorized as “neutral”, “little less cute”, “not cute” and “not cute at all”.

Material:

Boxes constructed out of materials that are naturally

occurring and more malleable in nature such as cardboard and paper were often categorized as one of the “cute” categories while synthetic and non-malleable materials such as acrylics and metals were relegated to “neutral” and below neutral categories.

Design execution:

While some designs appeared to have been hand-crafted using art supplies, some appeared to have been manufactured using machinery. “Appeared” is the keyword here since no prior information regarding the production of these donation boxes was provided to the participants. The designs appearing “hand-crafted” were categorized as “very cute”, “cute”, “a little cute” and “neutral”, while donation boxes that appeared to have been manufactured or factory-produced were categorized as “neutral” and below “neutral”. Amongst the “hand-crafted” donation boxes, the amount of visible manual labor was also an influencing factor here. Designs with accurate hand drawings, precise cut-outs, and several artistic elements (doodles, colors, and design add-ons) were categorized as “very cute”, “cute” and “a little cute” over designs that showcased little effort in product value.

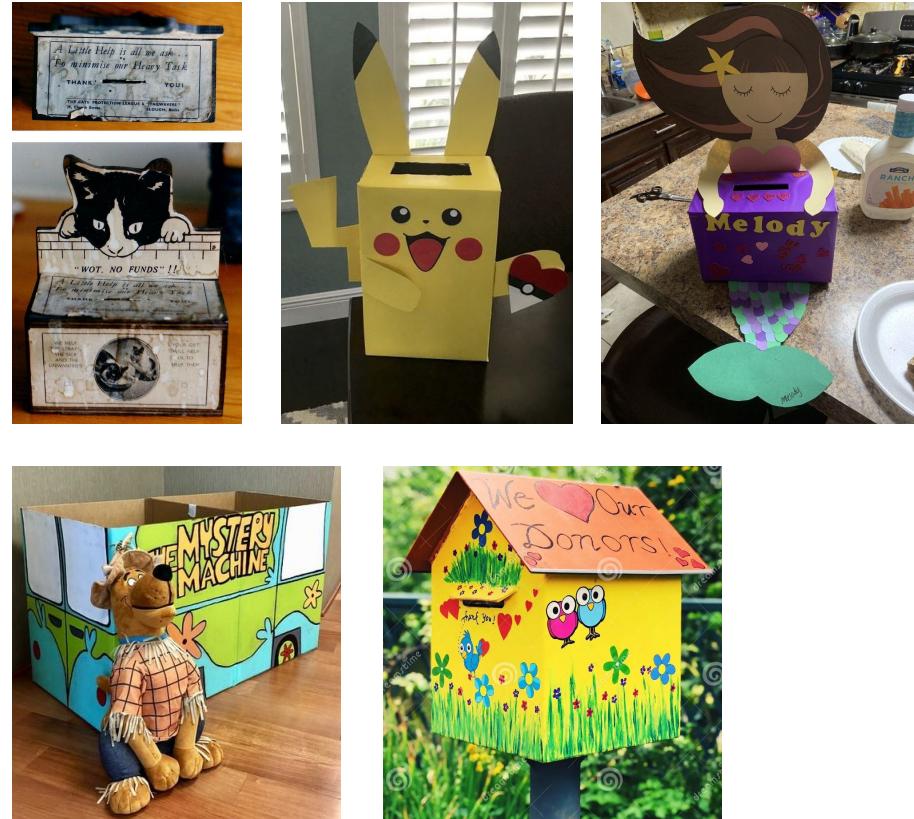


Fig. 15 Top 5 ranked donation box designs



Fig. 16 Bottom 5 ranked donation box designs

3.4 Cuteness in QR code designs

After analyzing the family resemblances within and between the categories, we managed to identify 4 major design-related dimensions that might contribute to creating the perception of cuteness within the QR designs by Indian youth.

Graphics

The graphical aspect of the design can be further

divided into foreground and background elements. Foreground with animal graphics and graphics consisting elements of nature such as flowers, trees, leaves were categorized as “very cute” and “cute”. For background, presence of a solid colored background or the extension of the foreground art was categorized higher. Graphics that appeared like qr with no background design were categorized as “neutral”, “a little less cute”, “not cute” and “not cute at all”.

Design implementation

The implementation of design within the qr codes were observably done in 3 different ways: inside the qr, around the qr or design being the qr itself. When the design was the qr itself and when the design was around the qr, participants categorized them as “very cute”, “cute”, “a little cute” and neutral. Most of the qr codes with design inside them were categorized as “neutral” and below.

Design resemblance

Here, we investigate how the categorization occurred in relation to the over-all resemblance of the qr design to an actual qr code. For this dimension, we considered 4 factors: number and size of the squares, amount of visible white-space in between, 2d form of the code and the how integrated the design within the qr code.

Lack of squares within the design was categorized as “very cute” followed by the replacement with squares of smaller sized and spheres instead. Designs with little to no white-space in between was categorized as “very cute”, “cute” and “a little cute”. The form or shape of the qr did not make any observable difference when it came to the categorization. No preference for a rigid quad or abstract shape was found in relation to cuteness. Finally, the more blended the design was the qr code, to the point of no longer appearing as a qr was categorized as “very cute”, “cute” and “a little cute”. The overall understanding suggests that the further the appearance of the qr code is away from the traditional design, the more it managed to create the perception of cuteness amongst the participants.

Source of creation

Here, we tried to observe whether the categorization favored professionally design qr codes or AI generated qr codes. When each individual’s categorization was considered, no concrete inclination was found. But when the average of all categories was taken the AI generated codes were more often categorized as “very cute”, “cute” and “a little cute”, sometimes placed in “neutral” as well. It is important to know that the participants were not given any information regarding the source of creation of these artifacts, hence any inclination towards AI codes is not intentional here.



Fig. 17 Top ranked qr designs

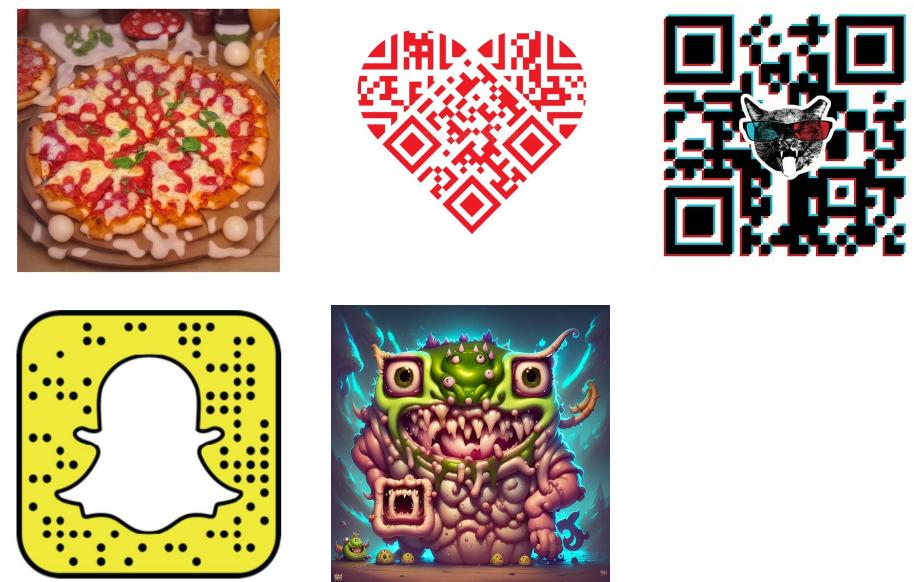


Fig. 18 Bottom ranked qr designs

3.5 Themes extracted from the findings

The donation box related findings reveal an overall inclination to 3 major themes: animal and character-specific graphics, imagery that induces nostalgia and appreciation towards visible manual labor. For example, the Pikachu donation box [fig.15] is an amalgamation of both animal graphics following the Kindchenschema theory and is also one of the most popular animated character from the 90's which adds to the nostalgic emotion for the selected participant group. It has been categorized as "very cute" by 3, "cute" and "a little less cute" by the other 2 participants. Observably, the box also appears to have been handcrafted using paper and cardboard cutouts.

From the top 5 "cutely" categorized donation boxes, all of them had elements of animal graphics (presence of animal, animal-like characters or related-illustration), 3 of them are nostalgic of one's childhood (popular kids cartoon from the 90's such as Scooby Doo, Pikachu and the bird house which is reminiscent of children's doll-houses) and all of them appear to be handcrafted with a significant amount of visible labor.

When we focus on the findings from the qr categorization, we find certain overlapping themes from the donation box design findings. Such as,

preference towards animal graphics. Moreover, this theme extends to other elements from the wilderness such as trees, flowers, birds and such. But rather than visual aspects of the design, the implementation of the design within qr has more influence on the categorization, rather than the content of the design.

4. Design explorations

Once we collected the visual traits that might be contributing to the perception of cuteness, we begin our ideation of “cute” donation boxes by integrating these traits within the design. 6 design idea were explored based on the typicality scale findings to create “cute” and “non-cute” donation boxes.

The concept of the boxes are contextual to the nature of the contribution and the benefactors of the cause. A nationally recognized rescue foundation was contacted to give away the collected contributions from the research. The foundation helps in providing education and shelter for girls and women rescued from forced prostitution and was in need of stationary supplies, hence the donation box design and the research protocol was tailored around helping young girls by collecting stationary supplies.

4.1 “Puppy House Coin Bank” inspired donation box design

In this design, we tried to include both the nostalgia-inducing imagery and animal likability. As observed through the typicality scale, textual information in big and bold, brighter and variation of color palette and

play on form of the donation box were all considered. For this idea, Puppy House Coin Bank, a popular kid’s toy from the late 90’s and the early 2000’s was considered as the inspiration. The design consisted all the elements of cuteness, from the miniaturization of houses, inclusion of animals and the possibility of an attachment to one’s childhood memories. This design was also selected for its association with act of “depositing” money.



Fig. 19 Puppy House Coin Bank, a toy famous back in the 90's

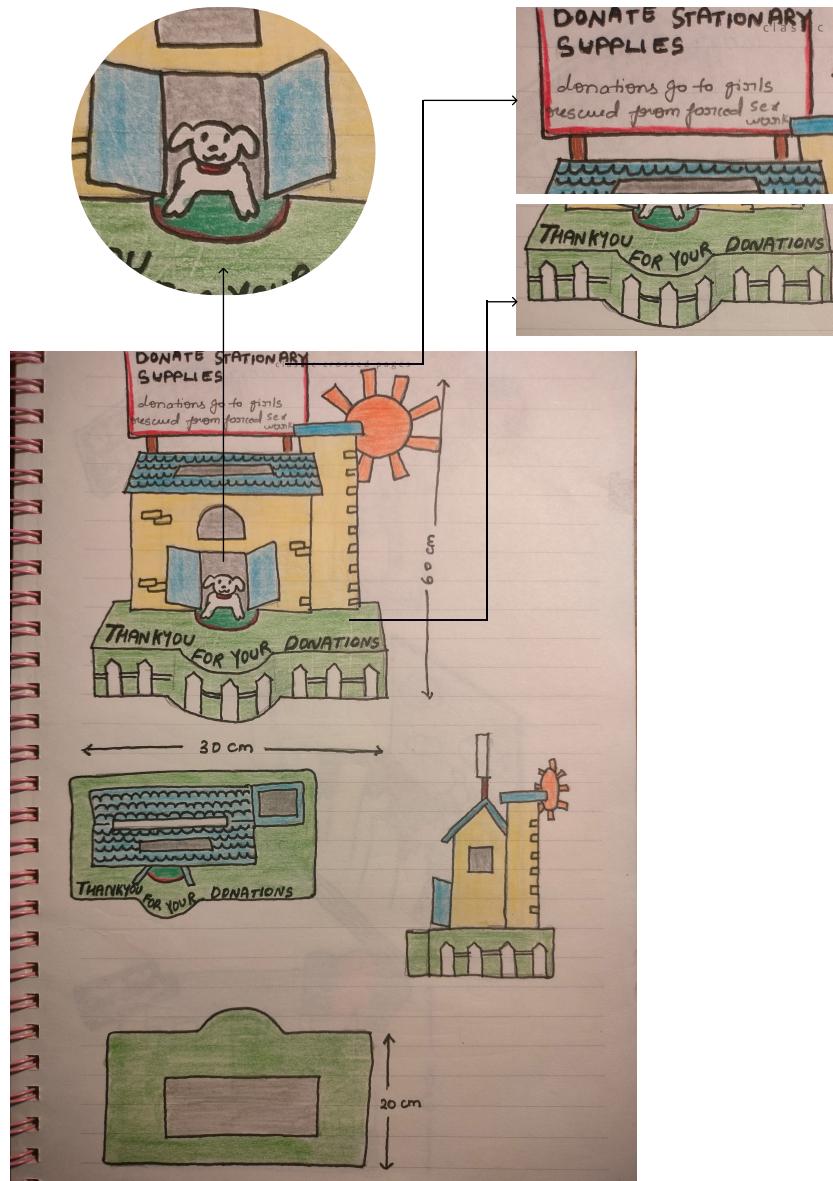


Fig. 20 Ideation-1

4.2 Powerpuff Girls inspired donation box design

Kid's cartoon often utilize Kindchenschema while designing their characters. The famous cartoon show "The Powerpuff Girls" is no exception when it comes to its design principles. The bright colors, the roundedness and disproportionate bodies with child-like voices all emulate the "aww" factor. Since this donation drive was about donating supplies which benefitted school-going girls all while being deployed at an all-girls hostel, the selection of this all-girls superhero cartoon seemed contextual to the cause and also to both the potential donors and the benefactors in question



Fig. 21 Bubbles, Blossom and Buttercup (Left to Right) from the show "The Powerpuff Girls"

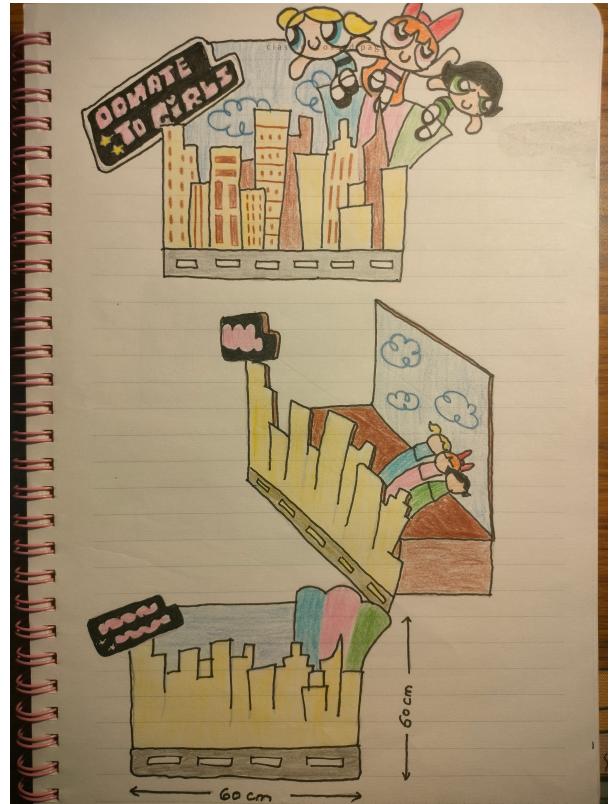


Fig. 22 Ideation-2

4.3 Doraemon inspired donation box design

Inspired by another famous cartoon show from back in the early 2000's, Doraemon soon became an Indian household name. Not only does the character "Doraemon" has characteristics of a cat, it is also designed using the Kindchenschema theory.



Fig. 23 Doraemon from the cartoon show "Doraemon"

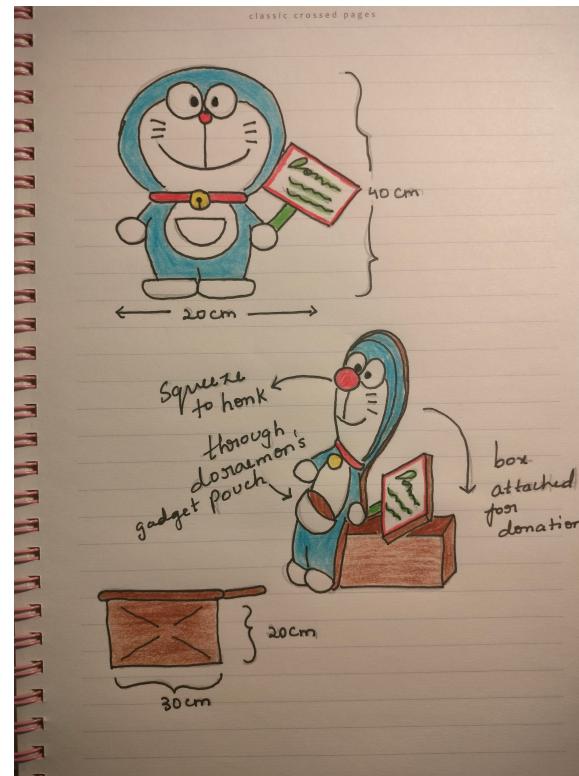


Fig. 24 Ideation-3

The selling point for this character was its ability to pull out “technologically advance” gadgets from the pouch on its belly that helps the main character in finishing their schoolwork. So playing on this trait, here we designed it so that donors can donate their items through placing it inside the pouch on the belly which connects to a box behind it. In a way, implying that these items will play the role of the gadgets for the benefactors and help them do their schoolwork.

4.4 The Cute-Cat donation box design

Keeping the likability towards animal graphics at the center of the ideation, this design was made using Kindchenschema theory and a cat's adorableness. Through the typicality scale, we came to the conclusion that there exists a strong inclination and a dominant preference amongst most Indian university students that cats are considered extremely cute. This is not just true in India, but is also believed across the globe. The international success of brands such as West's Pusheen and East's Hello Kitty is entirely built on the cuteness of a cat.

Since the items being collected here is stationary supplies, the cat is depicted as a school going creature carrying a bag which will provide the space for placing the donated items.



Fig. 25 The character “Pusheen” and “Hello Kitty”

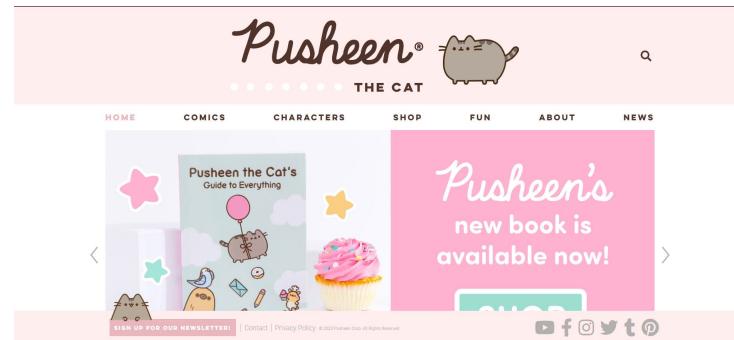


Fig. 26 The online store for Pusheen merchandise

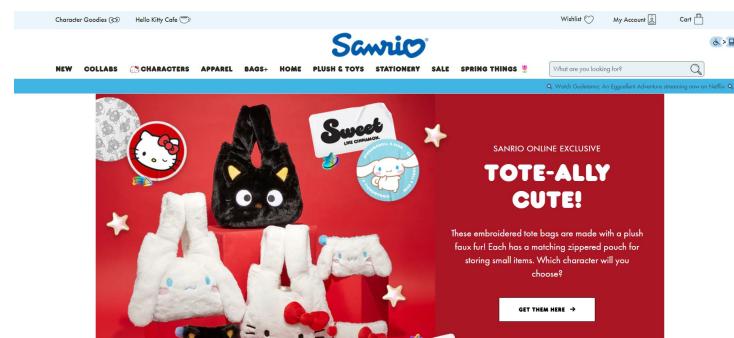


Fig. 27 The online store for Sanrio merchandise



Fig. 29 These two beloved characters collaborated

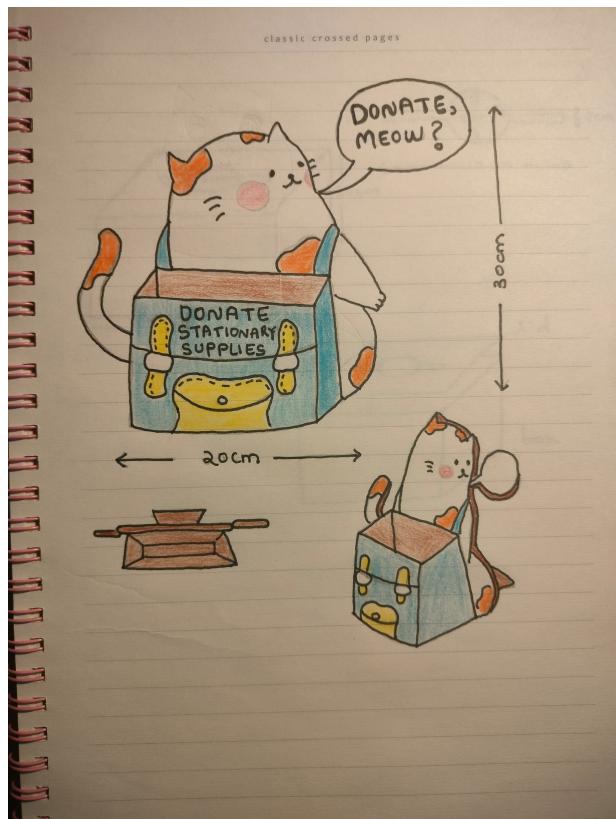


Fig. 30 Ideation-4

4.5 Schoolbag inspired donation box design

Since the items being collected are for helping the school-going girls, the “school” theme was also explored during the ideation phase. This design was inspired from the traditional school bags used by many Indian students across the country. This idea was all about emulating the experience of “School” all while implementing the visual traits for “cuteness” perception derived from the typicality school.



Fig. 31 Snapshot of an Indian school bag

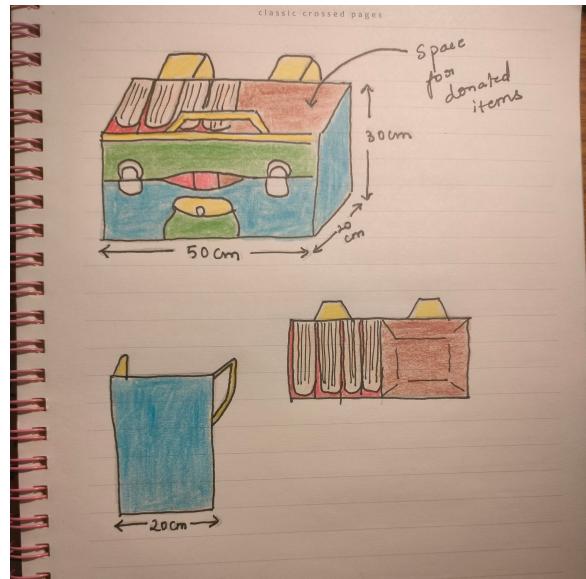


Fig. 32 Ideation-5

4.6 The non-cute donation box design

This specific ideation was more about creating a box that represented the “normal” or “traditional” donation box, which is commonly used across the country, for comparison purposes. Special care was taken to not include any visual traits found in the typicality scale which were categorized as “cute” of varying intensity. The box was designed to have no “cute” visual aspects and was mostly inspired by the boxes which are mass produced and are available online for anyone to buy and utilize.



Fig. 33 Donation box available for purchase on Amazon.in

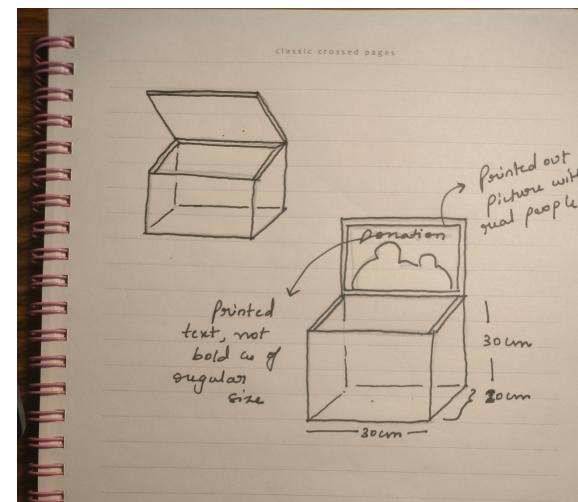


Fig. 34 Ideation-6

5. The donation boxes

Out of all the design explorations done during the ideation phase, 3 were chose for the development and the deployment phase out of which 2 were “cute” but of different themes and 1 was “non-cute” donation box.

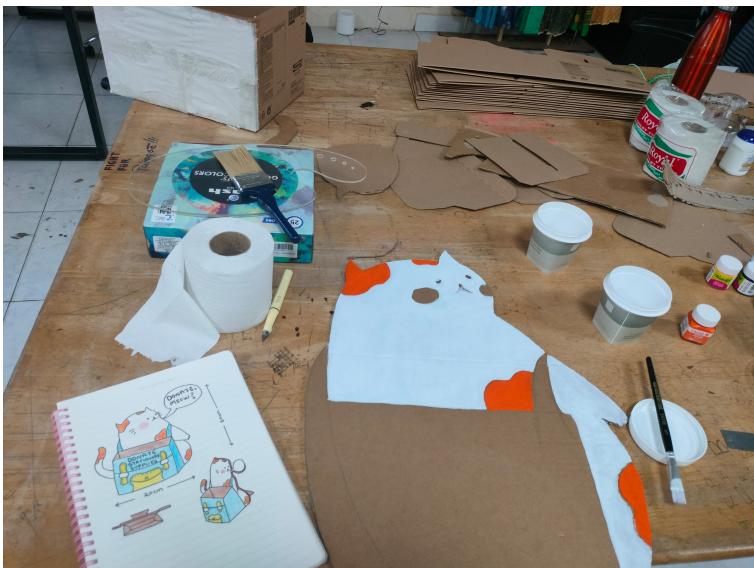


Fig. 35 The building phase

Of the 5 “cute” box ideations, the cute cat box and the Powerpuff Girls inspired donation box were selected for further development. The selection was done in order to explore the potential of 2 distinct themes, likability for animal imagery and inclination towards nostalgia-inducing imagery. While the other ideations

had elements of more than one theme, for comparison purposes these 2 designs which no overlapping elements were finalized.

Keeping in mind the material and design execution preferences, the “cute” donation box was hand-crafted using cardboard, paper and acrylic paints. While the “non-cute” donation box was built using CNC-machine and acrylic sheets with little to no visible manual labor evident in the final prototype.



Fig. 36 The Cute-Cat donation box



Fig. 37 Powerpuff Girls inspired donation box design

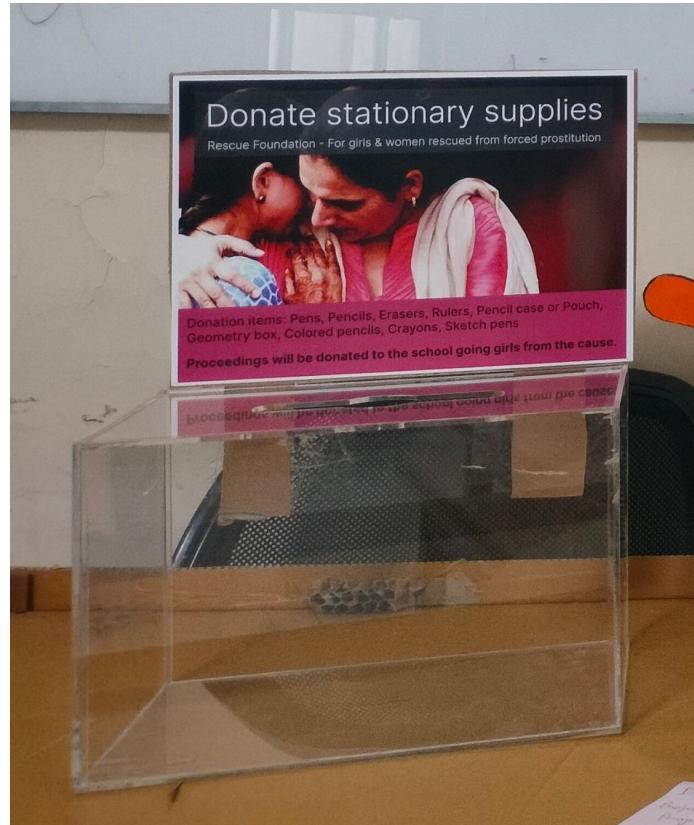


Fig. 38 The non-cute donation box



Fig. 39 All the donation boxes before deployment

6. Research protocol

6.1 Quantitative research protocol

Objective

The objective of this part of the study is to collect comparative data from the 3 deployed boxes to see whether cuteness in design has any impact on the over-all performance of the donation box within the selected participant group.

Claims

We claim that -

- Cuteness in design will succeed in capturing more people's attention when compared to the non-cute design.
- There will be a significant difference between the donations collected by the cute and the non-cute donation box designs.
- Cuteness in design does have influence on one's tendency to exhibit prosocial behavior.
- Cuteness's influence on one's tendency to exhibit prosocial behavior is a result of its ability to garner sympathy by conveying helplessness, rather than its ability to evoke empathy and compassion.
- Cuteness has the ability to convince others of its own weakness, making others illude into creating

false power dynamic where they place "cute" below them by assuming it subservient and helpless.

Scope

In this study, we are specifically focusing on exploring the interaction between cuteness in design and selected participant group, female University students. While the students come from different cultural and socio-economic backgrounds, the study itself is highly localized to a specific gender and age group. The study does not claim to understand or explore any neurological or physiological implications through its findings. Any theories we provide are contingent to the limits within which the study exists.

Research questions

1. Whether the visual traits acquired from the typicality scale play a role in creating the perception of cuteness in the deployed artifacts in the selected group of participants?
2. To what extent does presence of "cuteness" in design contribute towards its success as a donation box in collecting contributions?
3. If cuteness in design influences the success of the donation box, what role does it play in its success? and how far does it influences span in the decision-making of the selected participant group?
4. Is the influence of cuteness in design consistent

within the same participant group, or is unpredictable and subjected to variations?

Sampling strategy

We considered young female university dwelling students for this research. For the most part, the positive reception towards this cultural shift from East Asian media is more prevalent in teen girls and young adult women, hence we focus on exploring their understanding and responses towards cuteness in design. Therefore,

Participant group: female university students

Age range: 20-25 (young adult bracket)

Location: Student residential area (Hostel-15 A, B and C wing)

Sampling strategy: Convenient and Area sampling (for feasibility and managing confounding variables)

Duration for the drive: 6 days in total (3-day drive with a month's gap in between)

Independent variables

Donation box design

- Cuteness in design
- Lack of cuteness in design

Dependent variables

- Quantity of supplies
- Price of the supplies

Control variables

- Gender
- Cause
- Duration of the drive
- Donation item

Confounding variables

- Availability of the items
- Subjective opinion around the cause
- Duration between drives
- Location of the box
- Awareness regarding the drive

Data collection tools

The drive consisted of two 3-day cycle with a month of gap in between to understand the novelty effect of the design. At the end of each day number, type and prices of the contributions were recorded through:

- Excel sheet
- Pictures

Data analysis

The data was divided to collection based on quantity and collection based on prices, and ANOVA analysis was performed to measure any significant difference between the 3 donation box collections. We also performed Partial Eta Square to measure the effect size of the design on the collections.

6.2 Qualitative research protocol

Objective

The objective of this part of the study is to understand the interaction which has occurred between the artifacts and the selected participant group. To explore in-depth the role cuteness might have played during this interaction.

Research approach

We incorporated elements from both phenomenological research approach and grounded theory research approach. Here, we begin with understanding the subjective perspectives and the experiences participants had with the donation boxes through the in-depth interviews and then look for possible themes and connections within the data to develop our own theoretical explanations.

Sampling strategy

We restricted this part of the study only for the select group of participants who actively engaged and/or donated to the deployed artifacts. To connect the interview data with empirical evidence obtained for further analysis, we used Area and Judgement sampling. We used 2 artifacts here to sample participants for interviews: Posters (physical artifact) and WhatsApp message (digital artifact).



Fig. 40 Poster for calling out Cute-cat donation box donors

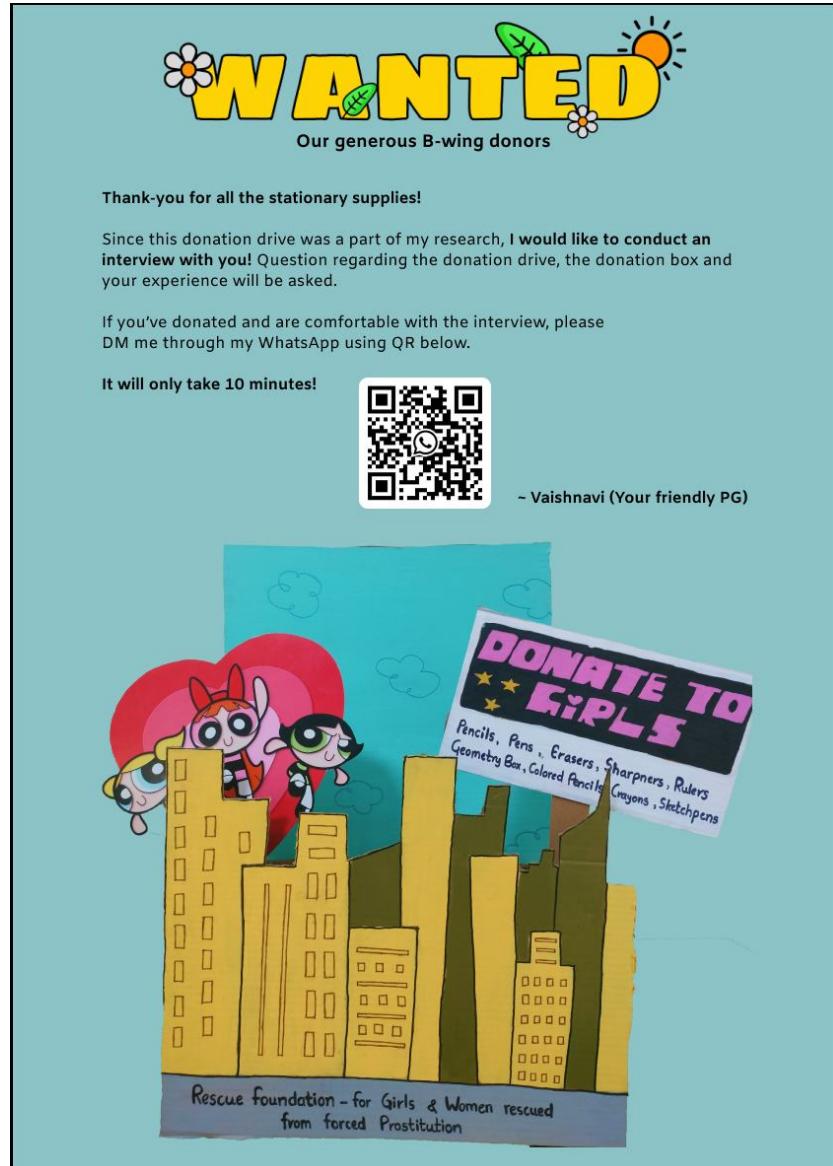


Fig. 41 Poster calling out Cartoon-cute donation box donors

Data collection methods

A semi-structure questionnaire with 10 questions was prepared before we began collecting the qualitative data. The questions inquired the participant about their history with donation drives, their motivations regarding donating to this specific drive, what all factors contributed towards their decision and such. Phone recorder was used to capture the audio of the interview for further analysis and printed questionnaire was used for the interview.

Sample questions from the questionnaire:

1. How were you made aware of this specific donation drive happening?
2. Was this your first time donation to a cause? (if yes) Why did you decide to donate to this specific cause? (If no) Do you partake in the donation drives that usually happen in the hostel premises?
3. Do you remember the donation box that you donated to? How would you describe it as? (if the word "cute" was used as a descriptor) Why do you think the donation box was "cute"?
4. So the supplies you donated to the cause, did you buy them for the cause or did you already owned them?
5. Did you speak about the drive or the box that you encountered with anyone? Did anyone mention the box or the drive to you?

Data analysis

We attempted thematic analysis on the interview data collected in hopes to identify any connections and overarching themes which can help us create a narrative with theoretical explanations. We began with developing transcripts of the audio files, proceeded to code the data multiple times and then tried abstraction of themes.

6.3 Ethics and informed consent

Proper authorities were informed beforehand regarding the procedure and the study goals. After obtaining the supervisor's permission, the hostel management and council's permission was taken to deploy the donation boxes. Information regarding the cause, the donation supplies and the foundation involved were all conveyed through emails for confirmations. A third party witness was present during the collection of the supplies and during the handover to the rescue foundation.

The participants were made aware of the interview purposes without disclosing the objective of the study. The interviews were recorded only after receiving the exclusive consent from the participants. Personal details of any kind other than participant's gender and age are not disclosed on any of official documentation,

such as the presentation slides, transcripts or the report submitted. The participants were given the choice to opt out of answering any question or the interview at any given time. The participants were not coerced into participating through any form of incentives.

7. Quantitative research

7.1 Quantitative data obtained

The drive last for 3 days in total. Prior to the drive, a WhatsApp message was forwarded informing the residents of the hostel about the drive, the cause and the items being accepted. Each box was placed in the same location at each of the 3 wings (A, B, C). That is, near the entrance and beside the elevator doors.

Anyone entering or exiting the elevator or the wing could easily spot the box. The box itself consisted of details about the cause and the items being accepted. The drive started at Sunday midnight (10-03-2024) and ended at Wednesday midnight (13-03-2024).

Regular check-ups were conducted to ensure the maintenance of the boxes and the contributions. At the end of each 24-hour cycle, pictures of the contributions were taken and a record of daily count was kept.

The student strength of each wing are not largely different. A wing = 322 students, B wing = 335 students and C wing = 289 students.

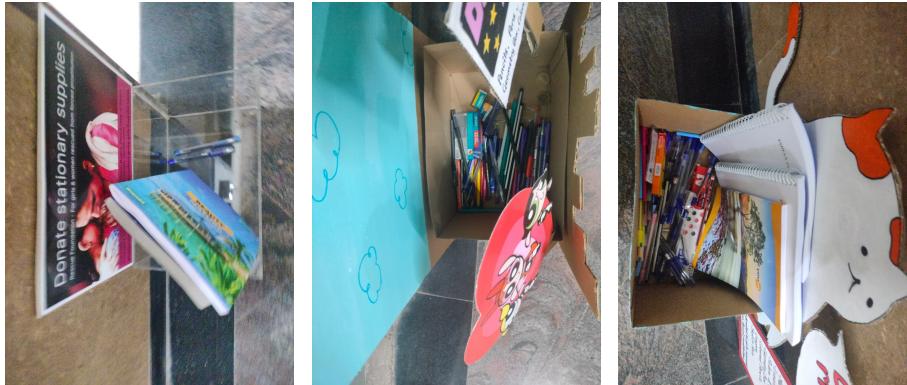


Fig. 40 Images from drive-1

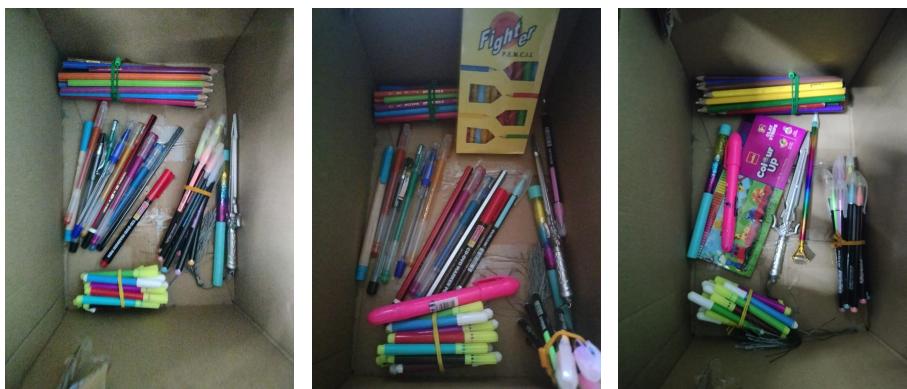


Fig. 41 Images from drive-2

Day	Cute-Cat	Cartoon-Cute	Non-cute
Day - 1	16	30	00
Day - 2	23	10	04
Day - 3	51	29	(4-1)
Total	90	69	03

Table. 01 Every day collection from drive-1

Non-cute donation box	
Item	Quantity
Pen	01
Note book	02

Table. 02 Item-Amount for non-cute donation box from drive-1

Cartoon-cute donation box	
Item	Quantity
Pen	30
Money	02
Regular pencil	24
Mechanical pencil	06

Pencil box/pouch	02
Eraser	01
Sharpener	01
Art supply	02
Geometry supply	01

Table. 03 Item-Amount for cartoon-cute donation box from drive-1

Non-cute donation box	
Item	Quantity
Pen	45
Regular pencil	17
Mechanical pencil	02
Note book	14
Sharpner	02
Eraser	06
Geometry supply	02
Lid box	01
Calculator	01

Table. 04 Item-Amount for cute-cat donation box from drive-1

Day	Cute-Cat	Cartoon-Cute	Non-cute
Day - 1	00	43	00
Day - 2	05	11	01
Day - 3	06	03	01
Total	11	56	02

Table. 05 Every day collection from drive-2

Cartoon-cute donation box	
Item	Quantity
Pen	15
Regular pencil	02
Markers	02
Sketch pens	11
Color pencils	20
Glitter pens	05
Pencil box	01
Total	56

Table. 06 Item-Amount for cartoon-cute donation box from drive-2

Non-cute donation box	
Item	Quantity
Pen	02
Total	02

Table. 07 Item-Amount for Non-cute donation box from drive-2

Cat-cute donation box	
Item	Quantity
Pen	04
Regular pencil	05
Note books	02
Total	11

Table. 08 Item-Amount for Cat-cute donation box from drive-2

7.2 Data analysis

ANOVA-single factor is performed on the overall data obtained from both the drives, to observe the significant difference obtained through cuteness in design.

SUMMARY				
Groups	Count	Sum	Average	Variance
Cat	6	111	18.5	298.7
Cartoon	6	126	21	234.8
Non-cute	6	8	1.333333	0.666667

Table. 09 summary table

An ANOVA ($F = 3.862402$, $p = 0.044354$) has been obtained while looking at the two 3-day donation drive data. Since the p value obtained is lesser than the significance level considered here, that is $0.04 < 0.05$, we reject the null hypothesis. Here,

Null hypothesis (H0): There will be no significant difference in the number of donations collected by the deployed donation boxes.

Alternate hypothesis (H1): Cuteness in design will significantly impact the over-all donations collected by the deployed donation boxes.

ANOVA						
Source of Variance	SS	df	MS	F	P-value	F crit
Between Groups	1375.444	2	687.7222	3.862402	0.044354	3.68232
Within Groups	2670.833	15	178.0556			
Total	4046.278	17				

Table. 10 ANOVA analysis table

Retrospectively, we also performed Partial Eta Squared test and the Omega Squared method to measure how large the effect of the independent variable (design of the donation box) was on the dependent variables (collections).

For the first deployment, the effect size measured was:
 Partial Eta Squared = 0.592
 Omega Squared = 0.681

For the second deployment, the effect size measured was:
 Partial Eta Squared = 0.165
 Omega Squared = 0.386

The decrease in the effect size can be due to the decrease in the overall novelty effect of “cuteness” in design.

8. Qualitative research

8.1 Qualitative data obtained

5 donors in total reached out and agreed to participate in the interview process where 2 reached out through the poster and 3 reached out through the WhatsApp message which was circulated in the hostel group chats. The interview was scheduled on the dates, times and locations which were comfortable for the participants. 4 out of 5 of these participants actively donated to the cause, while 1 did not but was still interviewed to get their perspective as well.

Once the transcript of each interview was written, we proceeded with the coding part. During the first cycle of coding, we tried to engage with the data at a more "particular" level. We highlighted and outlined every word, phrase and sentence that related to the participant's feeling, emotion, opinion or action towards the donation drive, the cause, the donated item, the design of the box and the act of donating. We then proceeded to group these to create further categories with related codes in them, to develop more abstract concepts around them.

Categories and related codes:

1. Category (Factors for sharing)

- Convenience (readily available)
- Possession of "spare" resources
- Affordability
- Skepticism (around money donations)

2. Category (relationship with donating)

- Involuntary donation (through parents)
- Voluntary donation (through college)
- Established relationship (not a first-time donor)
- Developing relationship (first time donor)

3. Category (Awareness around the drive)

- Through the box (visuals, colors, size)
- Design-environment contrast ("stands out", "eye catching")
- Novelty effect ("not a normal box")
- Digital intervention (WhatsApp message)

4. Category (Beliefs about cause)

- Gendered association ("as a woman . . .")
- Preconceived beliefs ("relevant", "not given importance")

5. Category (Feelings on donation drives)

- Reliability ("one of us")
- Lack of trust ("not very honest")

6. Category (environment)

- Oversaturation of mediums ("too many posters", "nobody reads them")
- Design-environment contrast ("stands out")

7. Category (Role of technological aid)

- Technology as a failed town crier ("did not see", "not active", "was not aware")
- Grabbing attention ("saw it getting circulated")

8. Category (generating discourse)

- Did not mention the box, only mentioned the cause
- Cause was provoking

9. Category (Perceptions around the design)

- Gendered beliefs ("girls like cats", "girls find pets attractive", "because its a girl's hostel")
- Helplessness ("small child", "please will you donate to me", "politely asking you")
- Feelings of importance ("makes you feel like your donation matters")
- Design-environment contrast ("stands out", "blends in")
- Memorability (animal graphics, character specific graphics, bright colors, size of the box, form of the design elements)

10. Category (about cuteness)

- Gendered notions ("because its a girls hostel")
- "as long as you color things properly"
- "because its a cat and cats are cute, pets are cute"
- "people will take a photo and share it with others"
- "resembles a small child carrying a school bag"

11. Category (presence of cuteness)

- Design-environment contrast
- Awareness of the drive

- approach motivation ("because the box was cute", "I liked the box")
- Novelty effect
- Oversaturation of mediums

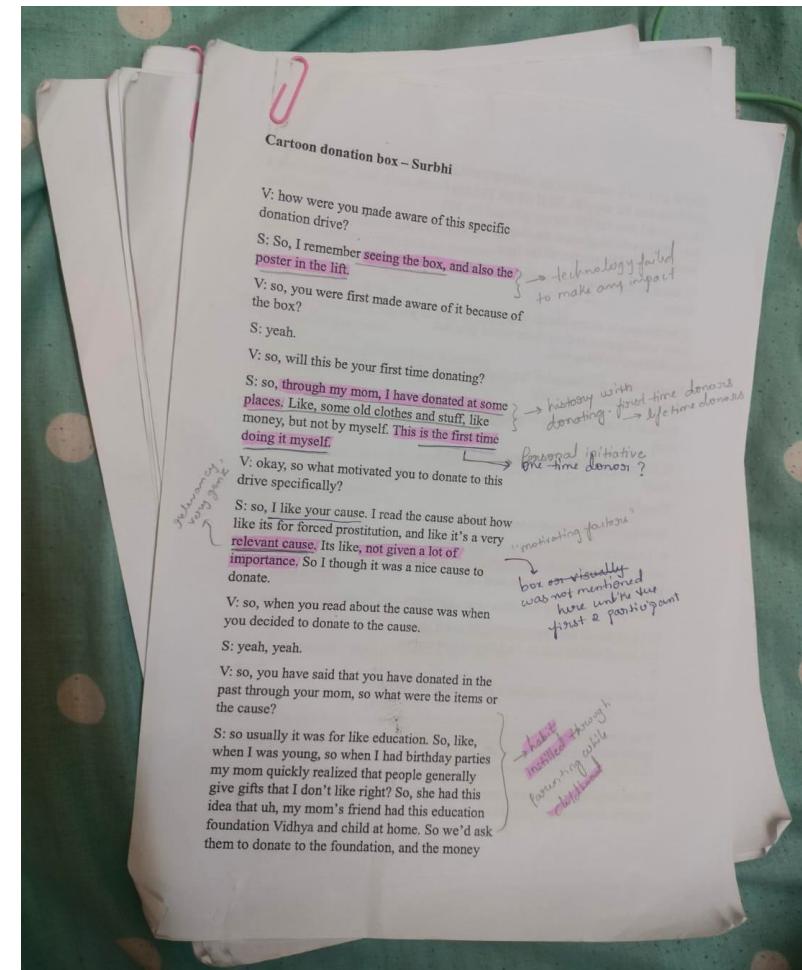
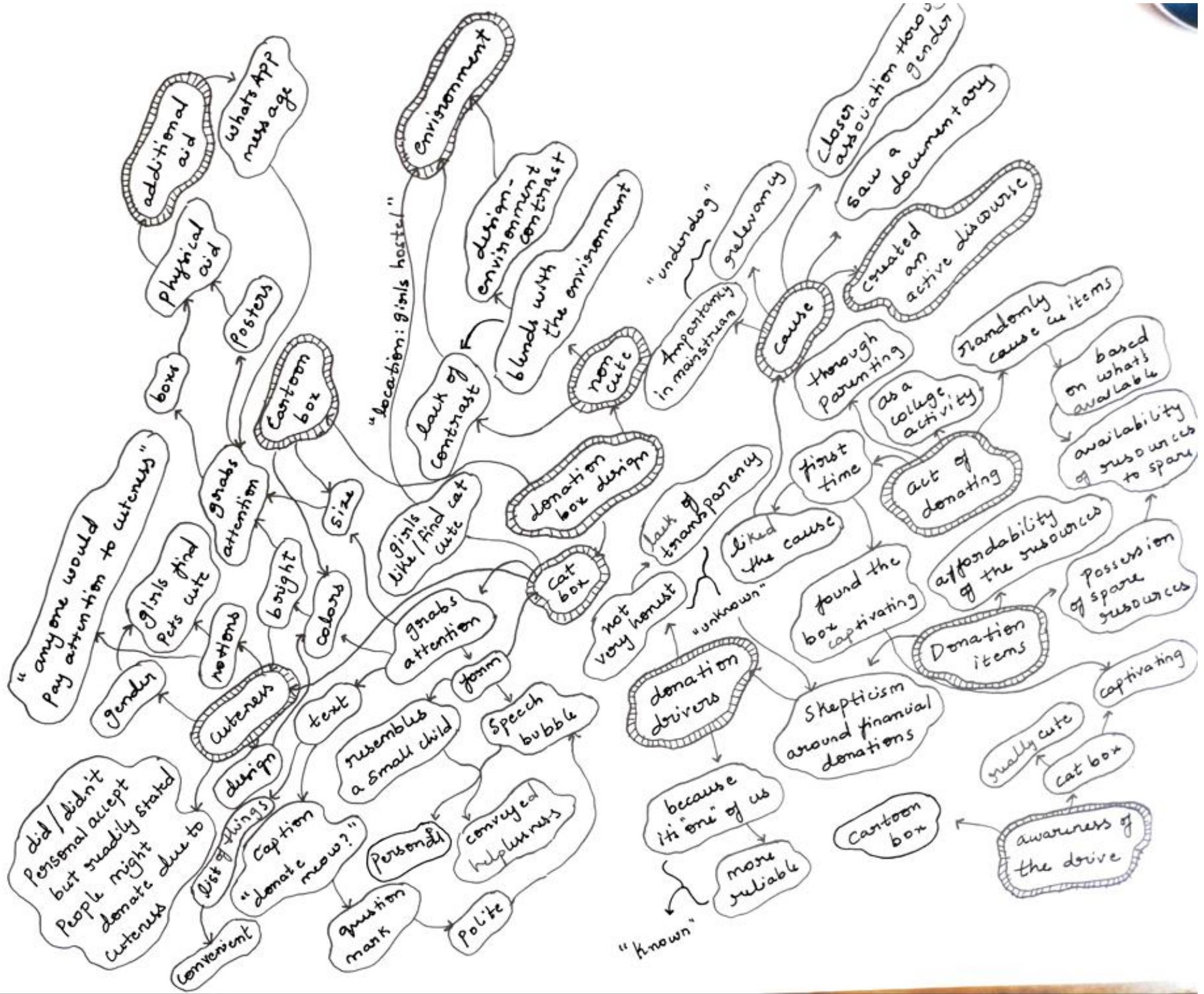


Fig. 42 Images of transcripts

Once we categorized each of the codes, we attempted to map out all the categories and codes to see how they were connected and which codes acted as the “connecting links”. This was done as a way to make sense of the coded data and to conceptualize a narrative.

[Below image]

Fig. 43 Mapping of codes and categories



Codes to theory model from qualitative inquiry:

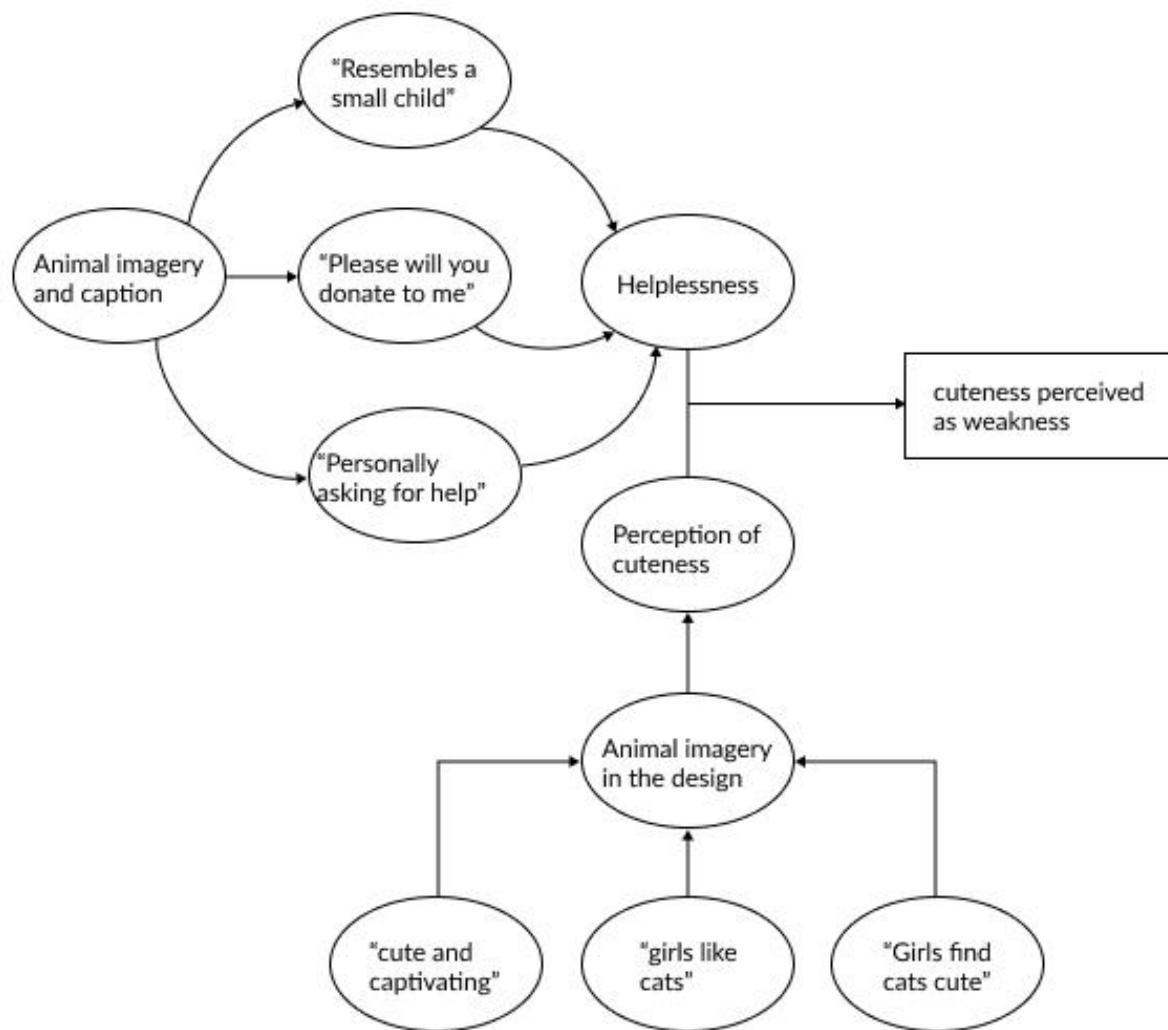


Fig. 44 Codes-category-theory diagram-1

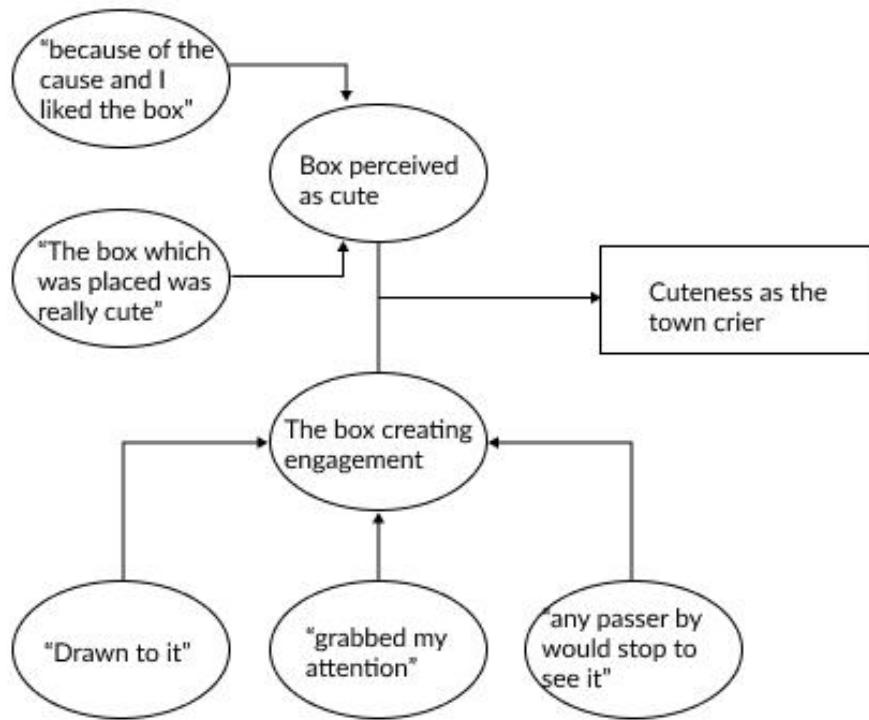


Fig. 45 Codes-category-theory diagram-2

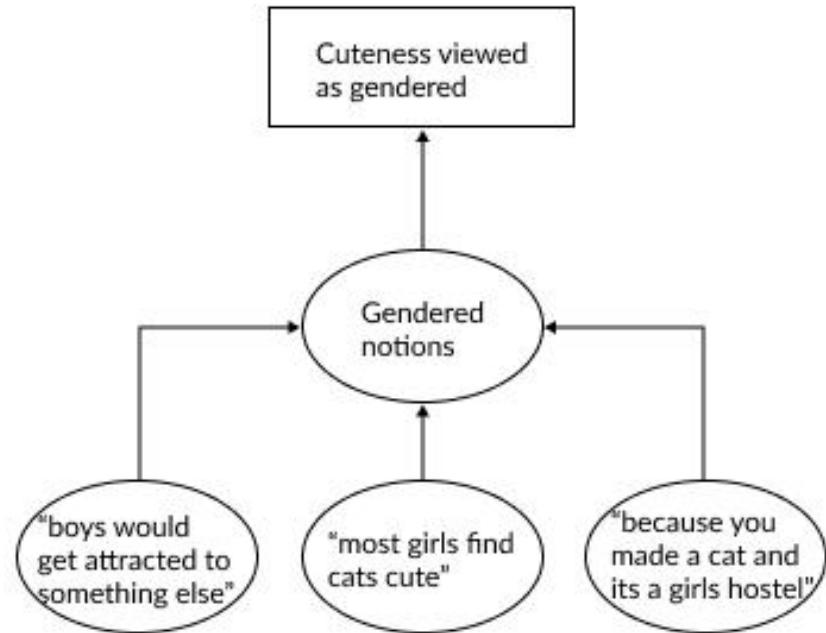


Fig. 46 Codes-category-theory diagram-3

8.2 Qualitative data findings

Cuteness as the Siren's call (power to grab attention):

"So basically, the box which was placed in A-wing was really cute, okay. I get attracted to these cute things, so basically that grabbed my attention quite quick."

"The box itself was very captivating, so I stopped by and read the whole thing."

Hiroshi Nittono in his paper "The Power of Kawaii: Viewing Cute Images Promotes a Careful Behavior and Narrows Attentional Focus (2012)" proposes a theory that talks about how cuteness facilitates narrowed attention which results in a higher desire to approach and engage with the "cute" object over the desire to care and nurture for them. This study provides evidence that this phenomenon holds truth not only across cultures but also across contexts. Most of the participants while talking about their experience with the drive specified how the design of the box was responsible for motivating them to approach and engage with the box, which led to them becoming aware of the cause, the drive, and the required supplies. The "cuteness" within the design bridged the gap between potential donors and the box.

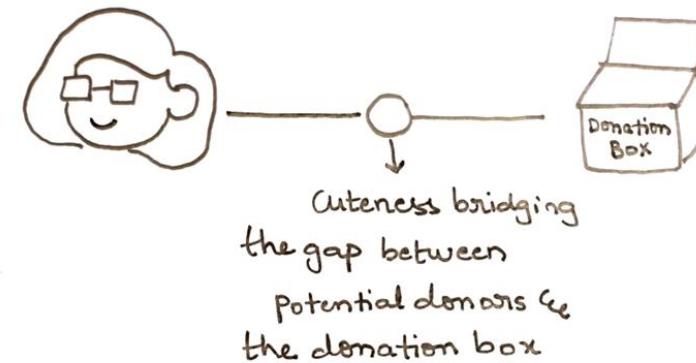


Fig. 47 Role of cuteness

It grabbed their attention, motivated them to approach the box, and made them aware of its existence, purpose, and importance. While its ability to capture attention is irrefutable, this ability can be explained through different theories. One of the more plausible theories is around its novelty effect.

Cute in a non-cute world (novelty effect, oversaturation and environmental factors):

"I remember the Power-puff girls sign on it and how that made it stand out because it was not like a normal box."

"If you look around, you see a lot of posters everywhere. It (non-cute donation box) looks similar to the posters, so it (non-cute donation box) will probably blend in"

While understanding the capabilities of cuteness in design, it is important that we don't overestimate its influences. The very real possibility of why the participants were attracted to the box could be explained through its novel existence. While cuteness has created space for itself in other cultures, experiencing it here in India on a daily basis is not a usual occurrence. The newness of its existence in a donation box design and the current rising interest towards it might have more to do with the obtained outcome, rather than it being the innate quality of cuteness itself. Another point mentioned was how "cuteness" stood out in its environment. The placement of the donation box lacks the presence of cuteness, which might have amplified its overall appeal and existence. The question we should ask here is, if the cute boxes were placed in a environment which is already oversaturated with cuteness, will it still manage to grab attention and provide motivation for people to approach it? What about cultural effects? In a culture like Japan where cuteness has entrenched most of the consumer products and public spaces, will people still be motivated to engage with these boxes? For us to further investigate its novel effect, longitudinal studies across within different set of environments is required, across different cultures in order to compare the outcomes.

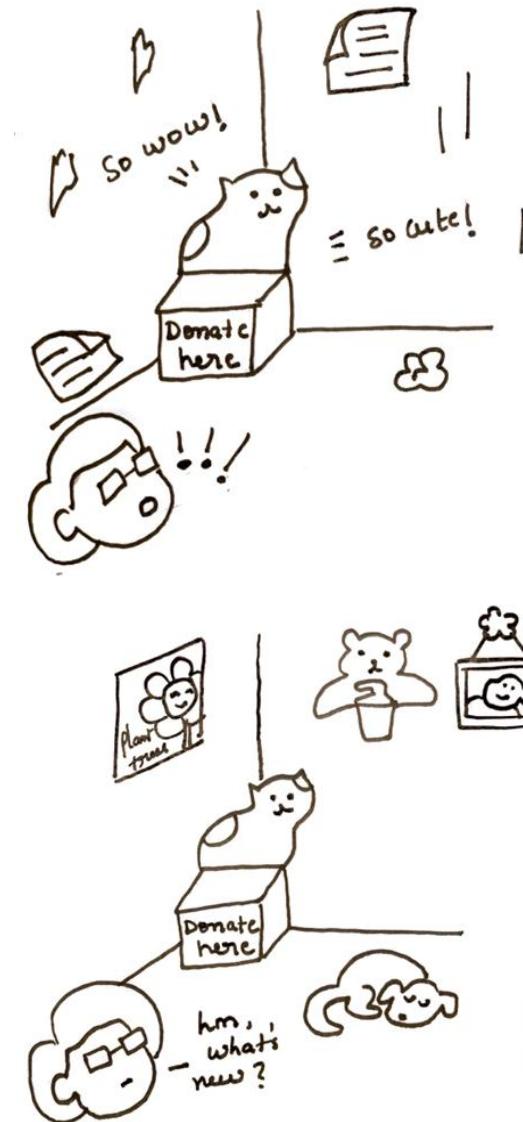


Fig. 48 Cuteness in non-cute vs cute environment

Apart from the novelty in design, cuteness's ability to motivate people into approaching and engaging with it might have something to do with ones unintentional association of cuteness with weakness.

Don't be fooled by the cute (Cuteness being perceived as weakness):

"The cat box resembles a small child carrying a bag . . . asking you to help-out."

"With the question mark and the cat, its like a very polite way of asking 'please will you help me?'"

Ever since Lorenz's Kindchenschema theory came out, cuteness's association with infantile features and temperament has been cemented into literature. This association further led to more theories around how cuteness as a quality invokes a sense of empathy, compassion and parental care-giving. But when one turn this implication around, this association can also be understood as us subconsciously interpreting the being in possession of the "cute" quality as in need of empathy and compassion. That this being needs us to care for it because we unintentionally assume that it is incapable of caring for itself. The desire to "care for" does not arise without us assuming that their is a need for it. While relating the quality of cuteness with

infantilization, the association does not just stop at the physical appearance and the childish temperament. It is impossible for us to separate the lack of their ability to over-power us, lack of their ability to induce violence on us. Same goes for when people associate animals with cuteness. Although animals are capable of inducing violence, the violence is always superficial and never on a verbal or mental level. This lack of violence or power not only evokes emotions of care and compassion, but also provides us with a sense of safety. That its safe for us to approach and engage because it lacks the power to induce harm on us. But it does not necessarily mean that the being in possession of this "cute" quality is incapable of inducing violence on us.



Fig. 49 A cute cat can still scratch

The cat box was designed to emulate “cuteness”, to make people observe and go “aww”. The box was not designed with the intention to convey “helplessness” or “weakness”. Yet, the participants interpreted the design as a small child in need of help. Although the “cute” cat required no help or was in need of nothing, participants desire to “help it out” implies that they viewed it as such.

The lady, the cat and the crazy (Gendered notions around cuteness and cats):

“For A-wing you made a cat and because this is a girl’s hostel most people will find this cute, and so they were drawn to it.”

“There is a perception that when you put a cat or a pet they’ll be more attracted. So If you put something up in a boy’s hostel something like Naruto they’ll focus more on that rather than something like this.”

Most of the participants shared their beliefs about how “girls like cats” or “girls find cats cute”. Resting the adorableness of a feline aside, the association of a “girl” liking a “cat” is not only a generalization but is also heavily gender specific, commercially constructed and promoted, and has negative connotations attached to it. The association between a woman and a cat has

a long running history behind it. From witches and their “satanic” cats to the propagation of the “crazy cat lady” archetype in media, to now the narrative suggesting how childless and career oriented women are opting to raise cats as a means to experience “love”, this association is sexist and degrading towards a woman, her expression of freedom and choice [add reference]. The sentiment “girls like cats” in itself is innocent enough, but when one looks at the reason behind this widespread belief, it is problematic on multiple levels.

Cuteness has often been reduced to femininity due to its close relation to parental care-giving and infantilization, a stereotype that reinforces the belief that women are the “care-givers” and “nurturers” [add reference]. When one implies that “boys” are not “attracted” to cuteness or cats, it only provides further evidence regarding out prevalent these misconceptions around cuteness and gender are.

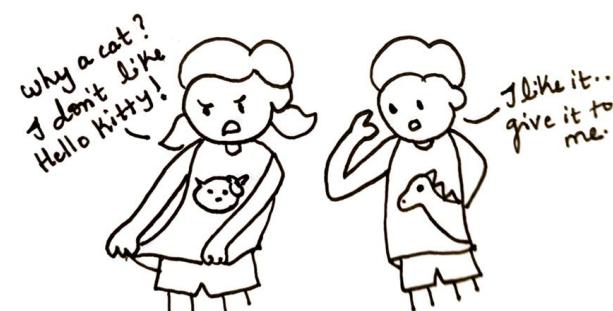


Fig. 50 Gendered notions around cats and women

Regardless of what the associations and conceptions are, corporates did make a market out of these beliefs. Most of the “cute cat” merchandise targets female consumers by imposing the cat and feline imagery on feminine products. For example, although the brand “Pusheen” has men and unisex clothing available in its store, it only advertises its women apparel on its home page and through paid ads.



Fig. 51 Screenshot from the “Pusheen” shop’s home page

“Aww” but not “Ooh” (cuteness and discourse):

While cuteness as a “quality” in design can grab attention and bridge the gap between the observer and itself, the data suggests that it lacks the capability to generate discourse through and around its existence. When asked whether the participants mentioned the box and the cause to anyone, everyone but one, who only mentioned the cause, answered no. One participant even expressed their belief regarding how cuteness has the capability to generate discourse.

“People will talk to each other about it or maybe even take a photo and share it with others if its a cute cat. It will help in creating publicity.”

While the expectation exists, in reality people only managed to engage with the existing discourse through the box but did not generate discourse around it themselves. Cuteness evoking emotion of warmth, nostalgia and vulnerability [7] might have to do with how cuteness emotional stimulates people, but does not push them to engage with it mentally. Because of cuteness deep rooted association with human biology and psychology, its easier to feel it as an emotional reaction within one’s body rather than pause to think about its existence with intellectual curiosity. In simpler terms, cuteness has an

emotional pacifying effect rather than thought provoking effect on the observer which might be hindering its exploration and understanding within the general public.

I had spare supplies so I could spare some supplies (the result of bulk/panic buying):

"I had spare calculators. I had 3, I was using one and the other 2 were just idle."

"Because the resources you were asking for, I already had them."

"I did have some spare supplies, if not then I would've just bought some and donated."

Apart from cuteness being the motivating factor to approach and engage, what was actually factored in while the decision-making was the availability of "spare" supplies. The supplies in this context was stationary items such as pens, markers, books, etc. The usage of term "spare" implies that the participants had enough supplies that they could "spare" some. When asked what motivated them to donate to the cause, even though the cause itself was mentioned as the motivating factor, the convenience of having supplies to "spare" was also mentioned. Most stationary

supplies are sold in bulk, although can be bought loosely, the idea behind could be how these supplies are a constant need for most students, hence owning extra can come in handy for future emergencies. The existence of this need further creates and makes us act on our desire to bulk buy or panic purchase while we shop. The option to bulk-buy supplies, if seen from a commercialistic perspective, can be more about profit-making. Demand of more supplies leads to creation of more supplies, feeding the economic healthy of the manufacturing brand. While the existence of "spare" resources in one's life can be tied to commercial motives and a result of living in a profit-centric society, it also lead to the act of giving them away to the less fortunate. One can interpret it as, having enough to give some away, although in this case we tend to own more than enough resources. Since the spare we own holds no current value to our lives, it might be also why it is easier for us to part ways with them.



Fig. 52 Students owning "spare" supplies which they then can spare

Once a donor, always a donor (Conversion through cuteness):

"Through my mother I have donated at some places . . . but not myself. This is the first time doing it myself."

"No, I have participated basically in bachelor's"

"Because I liked the cause. The box itself was captivating, so I stopped by to read the whole thing."

The data we gathered suggested that 3 out of 4 of our donors had some history with the act of donating, 2 of which were donating for the first time here. Either through observing their parents donate, or by actively engaging in spaces through institutes that facilitated these processes, existing relationship with donation might have been the reason why the participants were more willing to engage with this specific drive. Since the space was known to them, they were more comfortable and confident with entering it.

Out of the 4 participants who donated, only 1 did not have any established relationship or history with donating. When asked what motivated them to partake in this specific drive, they mentioned the cause and the box as the motivating factors. Therefore, here cuteness not only provided motivation to approach the box, it

also motivated the participant to enter into a new space. A guide of sorts that might have made them feel safe and comfortable through its association with emotions of nostalgia [4].

While its hard to pinpoint the intentions behind one's decision to donate, considering other factors at play we can at least theorize around what role cuteness in design might have played as the only novel addition to a mostly regular scenario.



Fig. 53 Cuteness guiding through new experiences

9. Discussion

Cuteness as a quality has value beyond its capabilities for creating brand identities and marketing goods. Its existence can be understood outside of the commercial domain, and this study attempts to achieve just that. Keeping its association to emotions such as empathy, compassion and care-giving at center, we inquired into its ability at evoking altruistic tendencies and prosocial behavior upon interaction.

While no collected data suggested any possible impact of cuteness on the participant's desire to donate, through the empirical evidence we can conclude that cuteness played role in the actions which resulted in benefitting another. This proves that cuteness in design might have the power to induce prosocial behavior emphasizing on consequences. Apart from enticing consumers into buying cute goods, it can also entice potential donors into engaging with charitable causes. While this study and this finding is highly contingent, it still opens up possibilities of how cuteness can be valued for its communal aspects over its commercial aspects.

But it is important to understand that its effects might not be long-lasting. When we consider the decline in

the effect size during the second drive, it shows that repetitive exposure to cuteness in design can numb its appeal. So, banking the success of a philanthropic purpose on cuteness for long-run might not provide the desired outcome. This part of the study provides perspective on the different ways in which one might engage with cuteness and cuteness can benefit us. But just because cuteness is beneficial, its existence should not be reduced solely to its utility. Cuteness as a concept is complex, with deep rooted relations to our biology, psychology and anthropology. Cuteness can aid us to better understand ourselves through our relationship with it.

The data suggested that most of the donors were not first-time donors, meaning that there was a high possibility that regardless of cute aesthetics, they still would've partaken in the donation drive. But one participant expressed that this was their first time experiencing the drive, and credited the cause and the box as the motivating factors. While cuteness managed to capture attention in all of the cases, it motivated one of them enough to enter into an unknown space. This adds a different dimension to the "approach motivation". Not only does cuteness create motivation one to approach it, it also provides motivation to approach and engage with the context in which it exists. Implications of this finding can have

positive and negative repercussion . Through cuteness, motivation can be provided to enter spaces that are usually stigmatized and misunderstood but in reality are beneficial. Or, cuteness can be utilized to provide motivation to enter spaces that are destructive and can lead to negative consequences. Cuteness as a concept merely exists, only when we decide to associate it or utilize it in conjecture to a context its influence and existence is perceived as “positive” or “negative”.

When participants interpreted its existence with “helplessness”, it transformed cuteness into weakness. Although cuteness has been closely associated with infantilization and stereotypical femininity, this interpretation furthers these association and adds a dangerous angle to it. One must understand that, if cuteness is understood as weakness then is cutification of entities a good idea? If it creates a dynamic where the cute entity comes of as “helpless” and in turn makes us feel “powerful” in comparison, it will not only result in us undermining the entity in question, but also end up overestimating ourselves. So its important for us to think about how cutification as a process is damaging and whether it is necessary or not.

10. Conclusion

This study exploring cuteness and its potential in evoking altruistic tendencies and/or prosocial behavior is highly localized to a specific group of participants, culture and context. Hence the findings obtained might not translate well under different circumstances. What we do suggest from our findings is, cuteness as a concept merely exists. Regardless of its ability to benefit us or the entity it possesses it, its existence is neutral. Only when we confine it with a context, does its existence get further associated with positive or negative affects. So more than the cuteness, it is important for us to understand how and why it is essential for us to add its presence to a certain context. We already established through the data that the effect of cuteness is unpredictable and can decline after repetitive exposure in the long-run. Hence, cuteness as an aesthetic, although has the power to impact, might be momentary. Hence, cuteness's effect should not be overestimated based on its strong emotional and physical responses, but also should not be undermined because cutification of an entity might lead it to being interpreted as "helpless" or "harmless", as one of the findings suggest.

11. References

[1]. Joshua Paul Dale, "Cute Studies: An emerging field," special edition editorial, Vol. 2, Issue 1, April, 2016
Available: https://www.researchgate.net/publication/301329008_Cute_studies_An_emerging_field

[2]. Dong Dong Yang, Laura Labato, Sharde M. Davis, Yuren Qin, "Cuteness in Mobile Messaging: An exploration of virtual "cute" sticker use in China and the United States," International Journal of Communication 17, pp. 819-840, 2023, (month), (year)
Available: <https://ijoc.org/index.php/ijoc/article/view/19253>

[3]. Cheih-Ying Chen, Kun-Huang Huarng, Vanessa Izquierdo Gonzalez, "How creative cute characters affect purchase intention," Journal of Business Research 142, pp. 211-220, 2022
Available: <https://www.sciencedirect.com/science/article/pii/S0148296321009735>

[4]. Shiri Lieber-Milo, "Pink Purchasing: Interrogating the Soft Power of Japan's Kawaii Consumption," Journal of Consumer Culture, May, 2021

Available: https://www.researchgate.net/publication/337690225_Pink_Purchasing_Interrogating_the_Soft_Power_of_Japan's_Kawaii_Consumption

[5]. Aaron Marcus, "The Cult of Cute: The Challenge of User Experience Design," in Human-Computer Interaction, 2004
Available: https://www.researchgate.net/publication/220382482_The_Cult_of_Cute_The_Challenge_of_User_Experience_Design

[6]. Stuart Medley, Bieke Zaman, Paul Haimes, "The Role of Cuteness Aesthetics in Interactions," in R. Rousi, J. Leikas and P. Saarilouma (Eds.), Emotions in Technology Design: From Experience to Ethics, pp. 125-138, 2020
Available: [https://link.springer.com/chapter/10.1007/978-3-030-53483-7_8#:~:text=An%20appreciation%20of%20cuteness%20clearly,an%20compassion%20\(Kringelbach%20et%20al.](https://link.springer.com/chapter/10.1007/978-3-030-53483-7_8#:~:text=An%20appreciation%20of%20cuteness%20clearly,an%20compassion%20(Kringelbach%20et%20al.)

[7]. Wenting Feng, Yuan Ping Xu, Hai Huang, Tao Wang, "Kawaii vs. Whimsical: The influence of cuteness types of luxury brands on consumers' preferences," Acta Psychologica Sinica, Vol. 54, Issue 3, July, 2022

Available: <https://journal.psych.ac.cn/acps/EN/article/downloadArticleFile.do?attachType=PDF&id=4979#:~:text=Double%20mediations%20analysis%3A%20According%20to,leading%20to%20different%20brand%20preferences>.

[8]. Crystal T. Lee, Sara H. Hsieh, "Engaging consumers in mobile instant messaging: The role of cute branded emoticons," *Journal of Product and Brand Management*, Vol. 28, Issue 7, pp. 849-863, June, 2019
Available: https://www.researchgate.net/publication/334475604_Engaging_consumers_in_mobile_instant_messaging_the_role_of_cute_branded_emoticons

[9]. Anirudh Kundu, Michiko Okhura, "Understanding Graphical User Interface (GUI) Trends Based on Kawaii (Cute)", *HCI International 2021- Late Breaking Papers* LNCS 13094, pp. 72-88, July, 2021

Available:
https://link.springer.com/chapter/10.1007/978-3-030-90238-4_7

Available: <https://journal.psych.ac.cn/acps/EN/article/downloadArticleFile.do?attachType=PDF&id=4979#:~:text=Double%20mediations%20analysis%3A%20According%20to,leading%20to%20different%20brand%20preferences>.

[8]. Crystal T. Lee, Sara H. Hsieh, "Engaging consumers in mobile instant messaging: The role of cute branded emoticons," *Journal of Product and Brand Management*, Vol. 28, Issue 7, pp. 849-863, June, 2019
Available: https://www.researchgate.net/publication/334475604_Engaging_consumers_in_mobile_instant_messaging_the_role_of_cute_branded_emoticons

[9]. Anirudh Kundu, Michiko Okhura, "Understanding Graphical User Interface (GUI) Trends Based on Kawaii (Cute)", *HCI International 2021- Late Breaking Papers* LNCS 13094, pp. 72-88, July, 2021

Available:
https://link.springer.com/chapter/10.1007/978-3-030-90238-4_7

[10]. M.L Kringelbach, E.A Stark, C. Alexander, M.H. Bornstein and A. Stein, "On cuteness: unlocking the parental brain and beyond", *Trends in Cognitive*, Vol.20 Issue 7, pp. 545-558, July, 2016

Available: https://www.sciencedirect.com/science/article/pii/S1364661316300420?via%3Dihub&__cf_chl_tk=XBZTZXCephsOiW8JW56WVWYKxokJrhI99tpl1qyl6nE-1716809133-0.0.1.1-1407

[11]. Hiroshi Nittono, Michiko Fukushima, Akihiro Yano, Hiroki Moriya, “The power of Kawaii: viewing cute images promotes a careful behavior and narrows attentional focus”, September, 2012

Available: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0046362>

[12]. M.L. Kringelbach, “How cute things hijack our brains and drive behavior”, University of Oxford, 2016

Available: [How cute things hijack our brains and drive behaviour | University of Oxford](https://www.ox.ac.uk/research/groups/kringelbach-lab/research/behavioural-neuroscience/cute-things-hijack-brains-drive-behaviour)

[13]. Rae Alexandar, “How the “crazy” cat lady became one of pop culture’s most enduring sexist tropes”, February, 2021

Available: [How the ‘Crazy’ Cat Lady Became One of Pop Culture’s Most Enduring Sexist Tropes | KQED](https://qz.com/1790337/how-the-crazy-cat-lady-became-one-of-pop-cultures-most-enduring-sexist-tropes/)

[14]. Stefan Pfattheicher, Yngwie Asbjorn Neilsen, and Isabel Theilmann, “Prosocial behavior and Altruism: A review of concepts and definitions”, Current Opinion

in Psychology, Vol. 44, pp. 124-129, April, 2022

Available: <https://www.sciencedirect.com/science/article/pii/S2352250X21001548>

[15]. Aljosa Puzar and Yewon Hong, “Korean Cuties: Understanding Performed Winsomeness (Aegyo) in South Korea”, The Asia Pacific Journal of Anthropology, Vol. 19, Issue 4, 2018

Available: <https://www.tandfonline.com/doi/full/10.1080/14442213.2018.1477826>

Available: https://www.sciencedirect.com/science/article/pii/S1364661316300420?via%3Dihub&__cf_chl_tk=XBZTZXCephsoiW8JW56WVWYKxokJrhl99tpl1qyl6nE-1716809133-0.0.1.1-1407

[11]. Hiroshi Nittono, Michiko Fukushima, Akihiro Yano, Hiroki Moriya, "The power of Kawaii: viewing cute images promotes a careful behavior and narrows attentional focus", September, 2012

Available: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0046362>

[12]. M.L. Kringelbach, "How cute things hijack our brains and drive behavior", University of Oxford, 2016

Available: [How cute things hijack our brains and drive behaviour](#) | University of Oxford

[13]. Rae Alexandar, “How the “crazy” cat lady became one of pop culture’s most enduring sexist tropes”, February, 2021

Available: [How the ‘Crazy’ Cat Lady Became One of Pop Culture’s Most Enduring Sexist Tropes](#) | KQED