



Better Together

The Impact of Advertising on Prosocial Behaviors

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WEDNESDAY NIGHT BIBLE STUDY



외로운 사마리아 여인

요한복음 4:9-10

Social Exclusion



“Being rejected, isolated, or ostracized”

**Does social exclusion
increase or decrease
prosocial behavior?**

Self vs. Other-Benefit Appeals in Prosocial Ad

Prosocial Ad Campaigns to promote charitable donation behavior

(Batson, 1987; 1991)

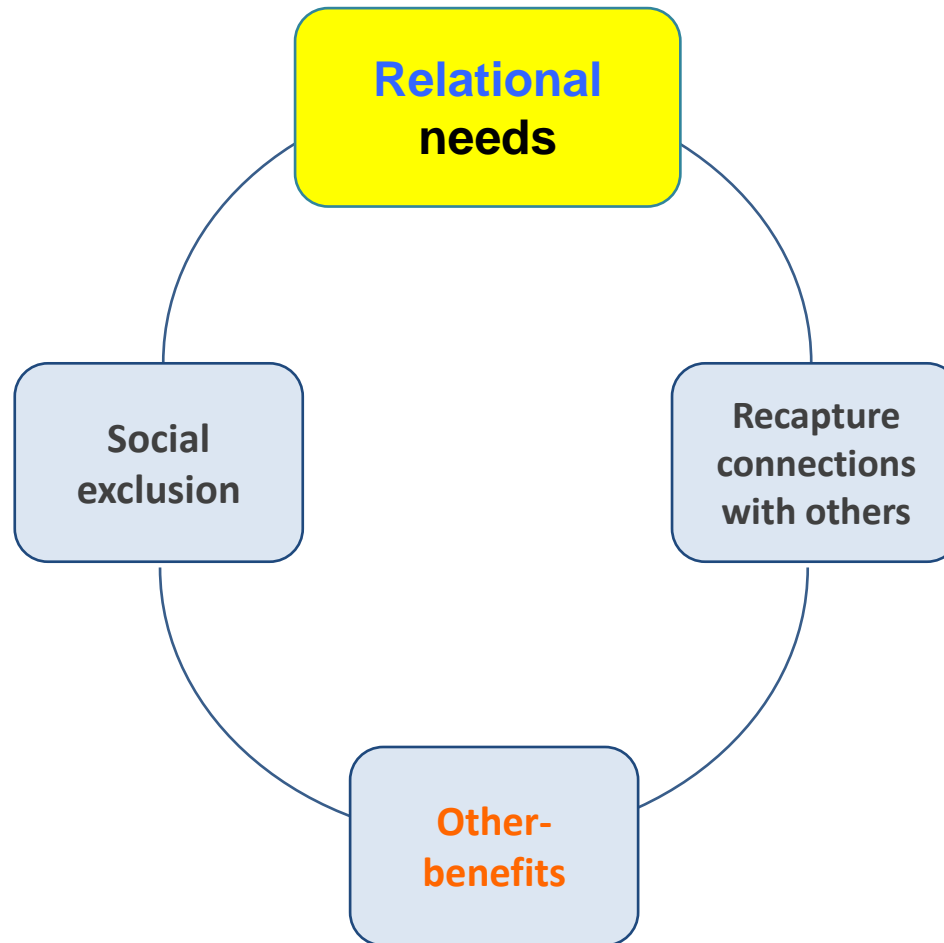
Self-benefit appeal

1. Egoistic motives
2. Tax breaks, public recognition, or psychological well-being
3. “Bring more fulfilment to your life.”

Other-benefit appeals

1. Altruistic motives
2. Empathy, relationship closeness, or shared group identity
3. “Save the lives of children suffering from hunger.”





H1a: For socially excluded individuals, other-benefit appeals will be more persuasive than self-benefit appeals.

H1b: For socially included individuals, lesser effect of other-benefit appeals will be observed.

Study 1: Child Poverty Relief

	Social Exclusion	Social Inclusion
Self-Benefit	1	2
Other-Benefit	3	4

- Controlled lab setting
- 140 undergraduate students (50.7% men; 49.3% women; 19.3 years)
- Message Persuasiveness (7-point scale; Dillard & Ye, 2008).
“not effective/effective, not convincing/convincing, and not compelling/compelling”

Social Exclusion Manipulation

Cyberball (Williams & Jarvis, 2006)



Self-benefit appeal



IMAGINE HOW
YOUR DONATION WILL
**BRING MORE FULFILLMENT
TO YOUR LIFE**

Your donation will make you feel good. Not only will you feed starving children, you will make a difference in the world.
Make a simple donation of \$10 by texting 'CARE' to 77077.



Other-benefit appeal



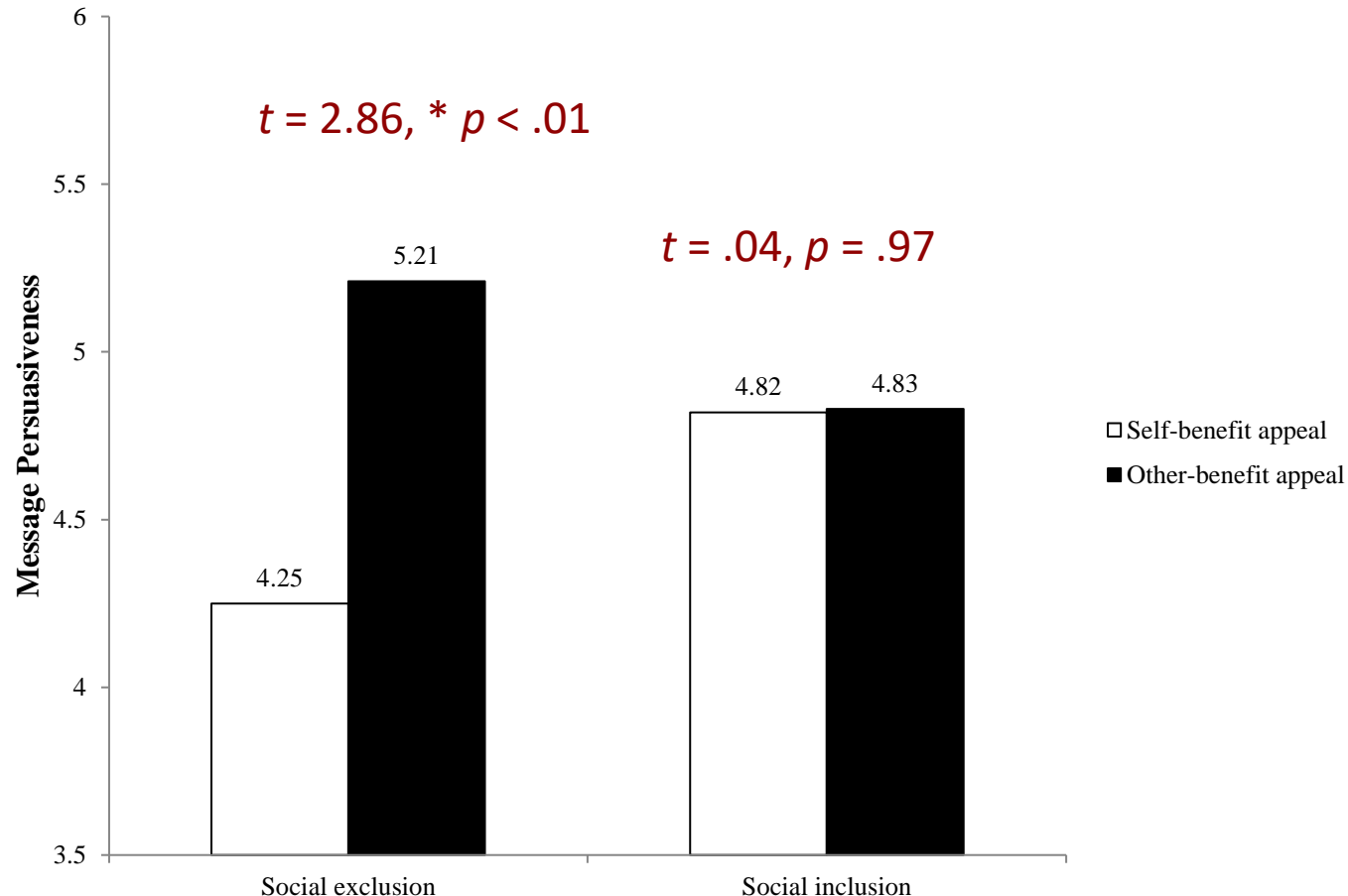
IMAGINE HOW
YOUR DONATION WILL
**ENHANCE THE LIVES OF THOSE
SUFFERING FROM HUNGER**

Your donation saves lives. More 600 million children live on less than a dollar a day. But there is hope.
Make a simple donation of \$10 by texting 'CARE' to 77077.



Charitable Message Persuasiveness

Two way interaction effect emerged: $F(1,136) = 3.83, p < .05$



Study 2: Cancer Research Institute

	Social Exclusion	Social Inclusion
Self-Benefit	1	2
Other-Benefit	3	4

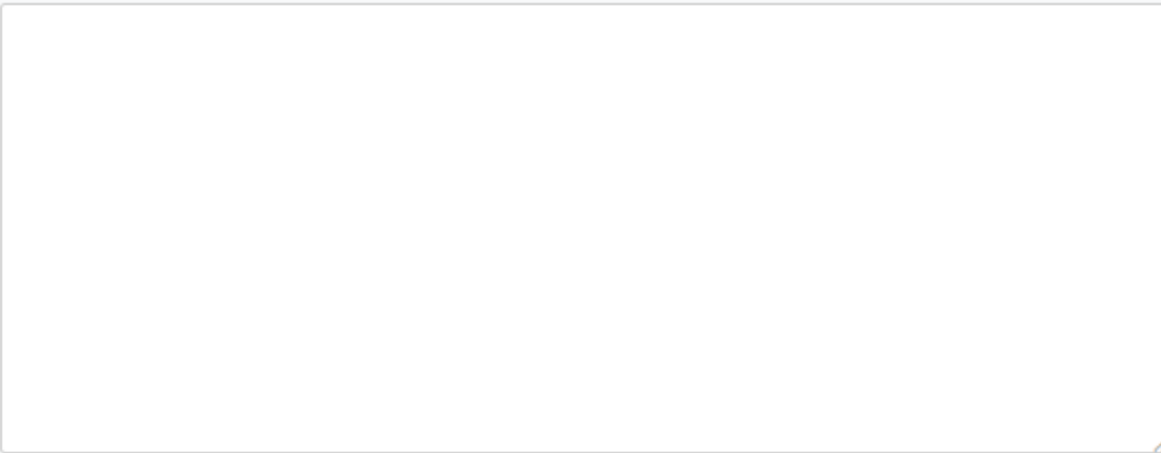
- Controlled lab setting
- 284 undergraduate students (53.2% men; 49.8% women; 19.5 years)
- Message Persuasiveness (7-point scale; Dillard & Ye, 2008).
“not effective/effective, not convincing/convincing, and not compelling/compelling”
- Charitable donation behavior (Winterich & Zhang, 2014)
“Imagine you have 100 dollars, how much would you donate to cancer research institute?”

Social Exclusion Manipulation

Essay-writing task (Baek & Yoon, 2017)

Please recall a social experience that left you feeling **EXCLUDED**.

In the space below, please provide a detailed description of your experience that made you feel **SOCIALLY EXCLUDED**.

A large, empty rectangular box with a thin black border, intended for the participant to write their detailed description of a socially excluded experience. The box is positioned below the instructions and occupies the lower half of the slide.

Self-benefit appeal



SAVE YOUR LIFE

YOUR CONTRIBUTION WILL HELP RESEARCHERS FIND CURES
FOR CANCER AND PROTECT YOUR FUTURE.



Other-benefit appeal



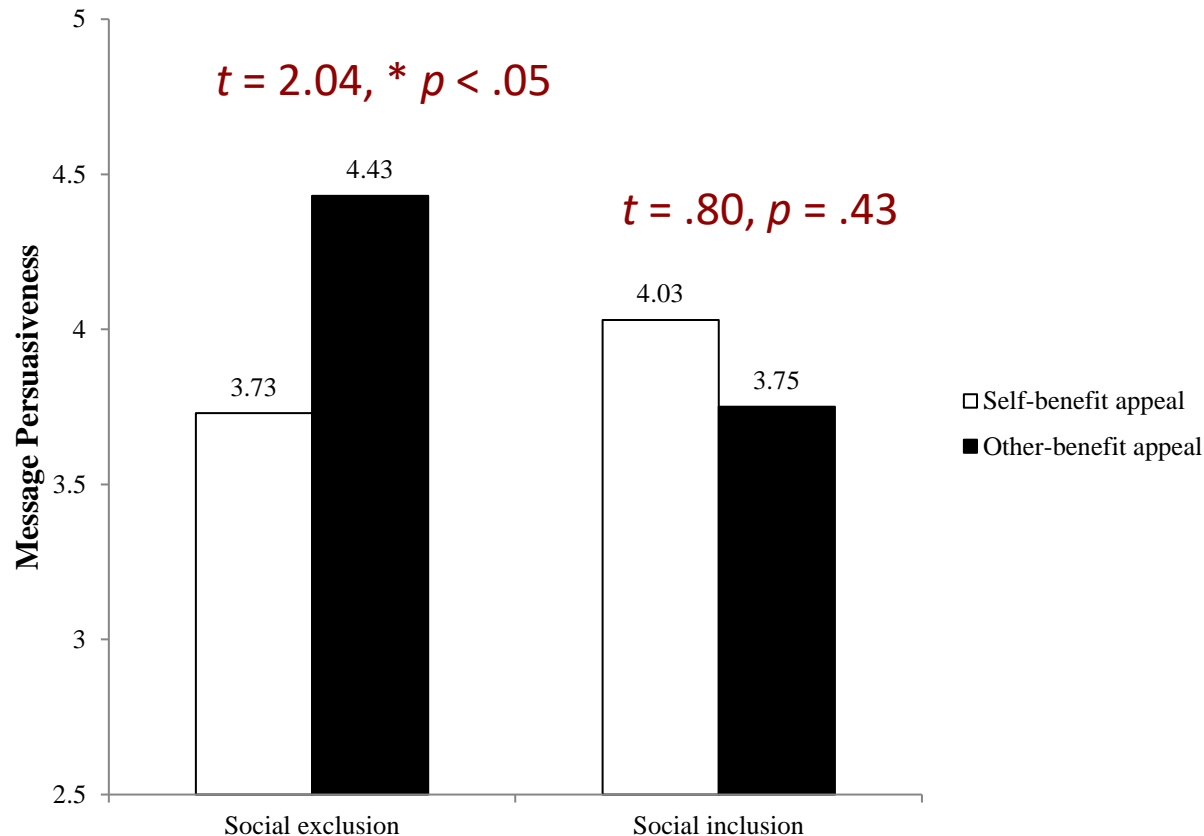
SAVE PEOPLE'S LIVES

YOUR CONTRIBUTION WILL HELP RESEARCHERS FIND CURES
FOR CANCER AND PROTECT THE WELL-BEING OF OTHERS.



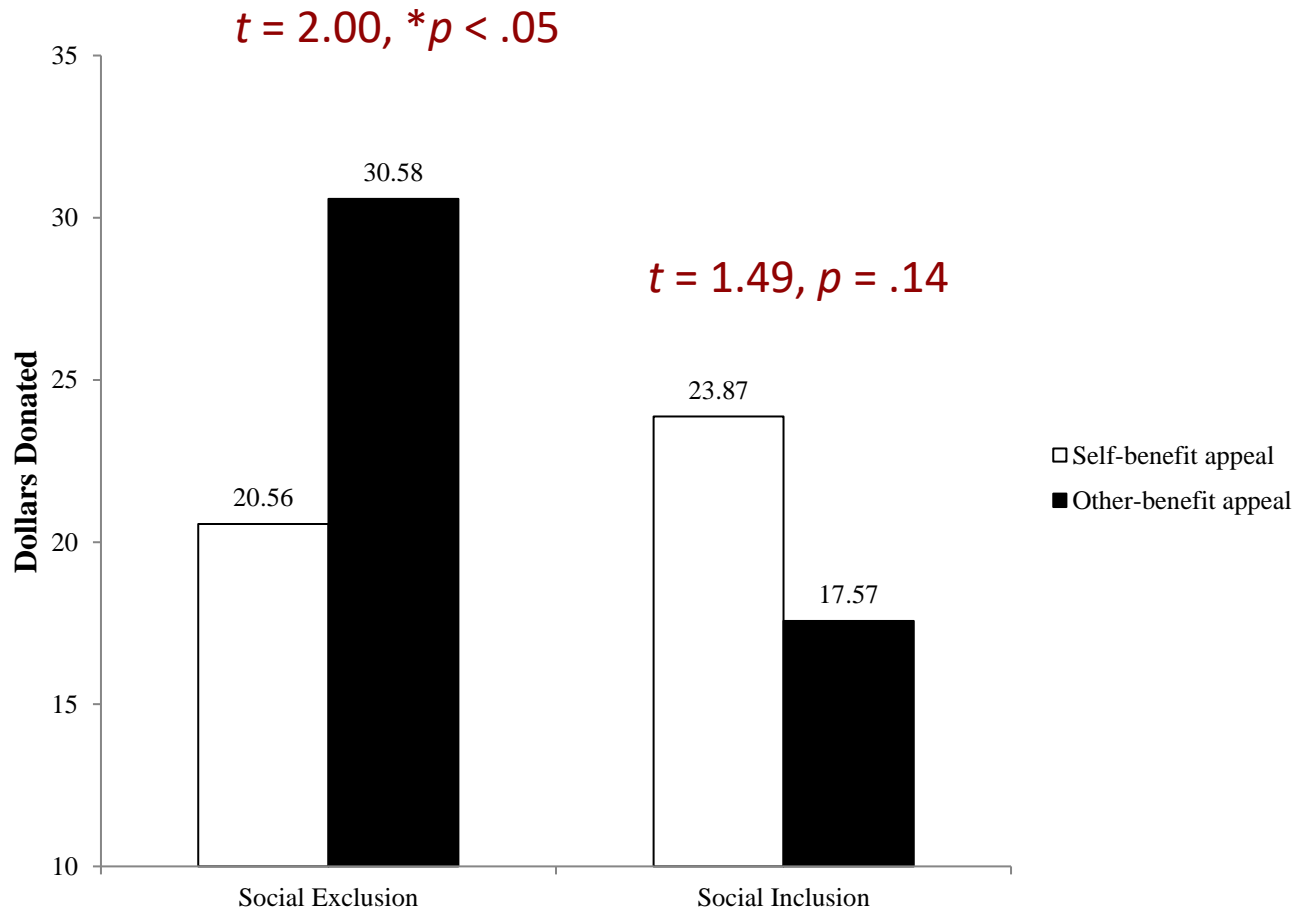
Charitable Message Persuasiveness

Two way interaction effect emerged: $F(1,280) = 4.00, p < .05$



Charitable Giving (Dollars Donated)

Two way interaction effect emerged: $F(1,280) = 6.18, p < .05$



Study 3: Clean Water

	Social Exclusion	Social Inclusion	Control (non-relational)
Self-Benefit	1	2	3
Other-Benefit	4	5	6

- Controlled lab setting
- 131 undergraduate students (39.7% men; 20.8 years)
- Donation intentions (Baek & Yoon, 2017)
“Participants’ likelihood of donating: unlikely/likely, impossible/possible, improbable/probable”

Self-benefit appeal

BRING CLEAN WATER TO PEOPLE IN NEED
BY DONATING!



IF YOU JOIN US TO INVEST IN CLEAN WATER,
YOU WILL IMPROVE THE QUALITY OF THEIR LIVES
AND MAKE THEM HAPPIER.

With clean water nearby, children in developing countries can attend school and get an education. Communities are able to raise up strong leaders, making it possible to break the cycle of poverty and allowing future generations to improve their quality of life.



Other-benefit appeal

MAKE YOURSELF FEEL GOOD
BY DONATING!



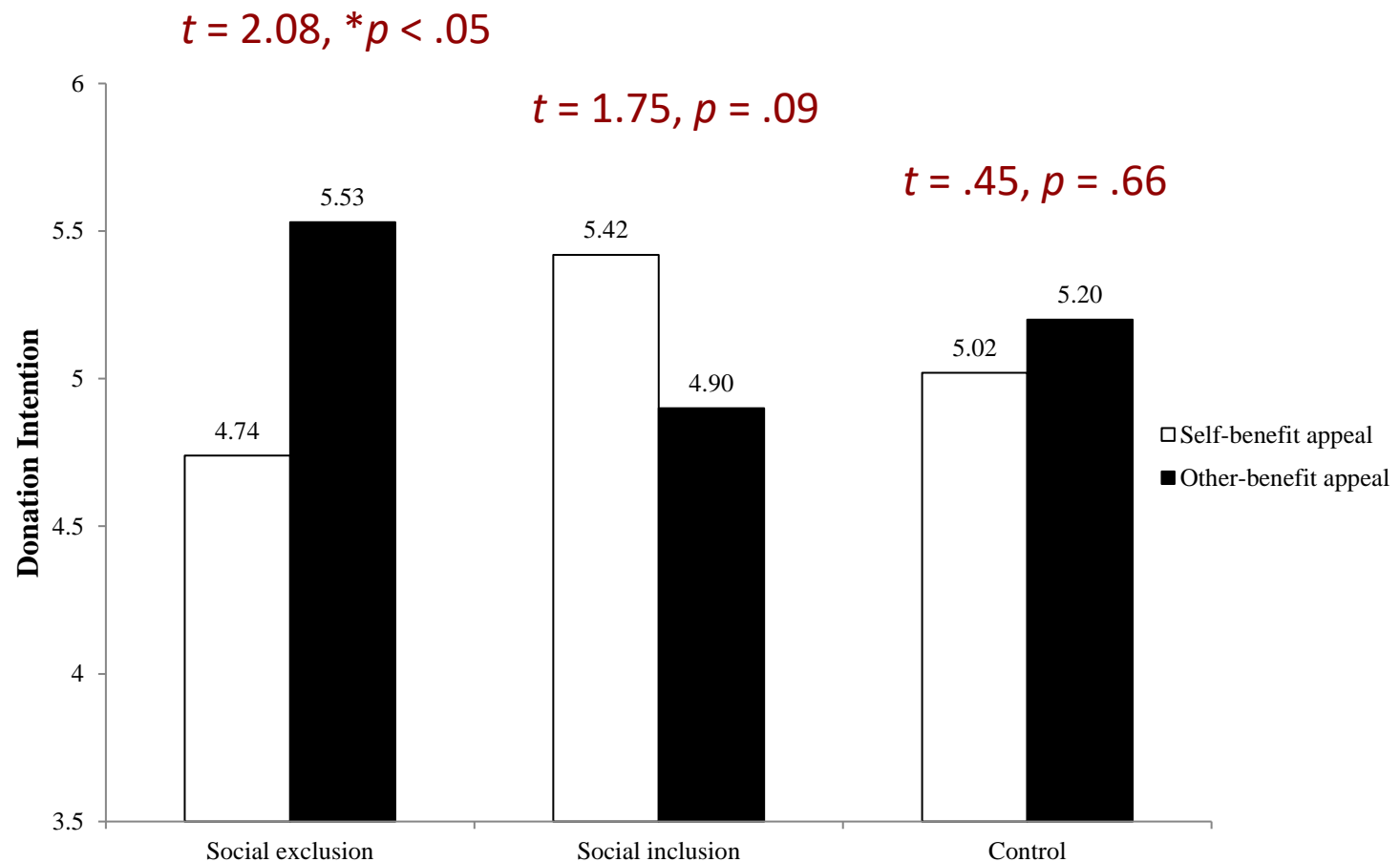
IF YOU JOIN US TO INVEST IN CLEAN WATER,
YOU WILL MAKE YOUR LIFE MORE
MEANINGFUL AND MAKE YOURSELF HAPPIER.

With clean water nearby, children in developing countries can attend school and get an education. Communities are able to raise up strong leaders, making it possible to break the cycle of poverty and allowing future generations to improve their quality of life.



Charitable Giving (Dollars Donated)

Two way interaction effect emerged: $F(2,125) = 3.59, p < .05$



Practical Implications



- Find the appropriate media vehicles that may trigger social exclusion with elimination catchphrases.
 - “You’re fired” (Apprentice)
 - “Please give me your jacket and leave hell’s Kitchen” (Hell’s Kitchen)
 - “I’m sorry. You’ve both been eliminated from the race” (The Amazing Race)

Practical Implications

- Consider social media audience targeting options.
 - Facebook custom audience; Twitter follower targeting
 - When social media users have few followers, receive only a few “likes”; someone unfriend them on Facebook.



Caity Dalton

spent all day shopping
Thomas ;)

April 17 at 10:47pm · L



0 People like this.



**Who unfriended me
on
Facebook**

Cute Baby Animals in Wildlife Conservation Ad campaigns





Wildlife poachers kill a
rhino every **7 hours**.

More than 100,000
African elephants
were killed for their
ivory.

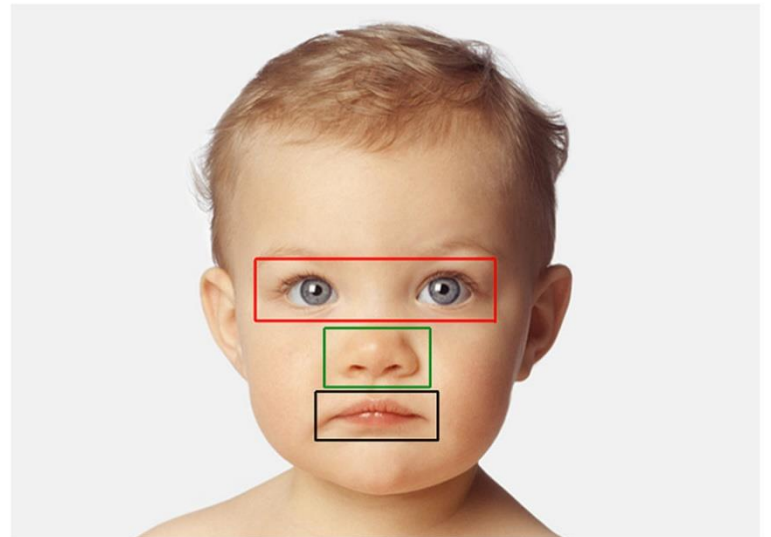




Baby lions alongside the hashtag #WorldLionDay
on Twitter and Pinterest

Baby Schema (유아도해)

- A collection of infantile physical traits, such as a large head, round face, tiny nose, big eyes, and rounder cheeks, that are perceived as cute (Lorenz, 1943)
- 본능적으로 거부할 수 없는 귀여움 '베이비 스키마' → 보호본능



honest, warm, naïve, kind...

high task performance, indulgent
consumption, feelings of healing,
purchase intentions...

empathy...

“an other-oriented emotional response congruent with the perceived welfare of someone in need” (Batson, 2010, p.8)

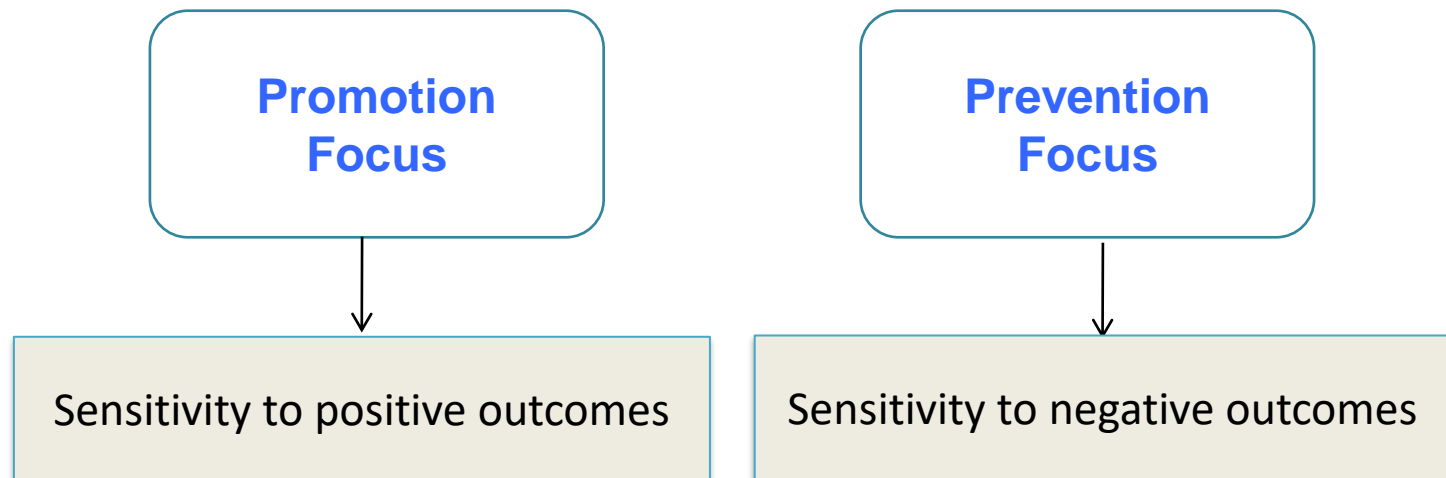


Empathy-altruism hypothesis

Inspiring donors' empathy motivates people to make charitable donations (Fisher et al., 2008)

Regulatory Focus Theory

Human motivation is rooted in the approach of pleasure and the avoidance of pain (Higgins, 1997)



The Moderating Role of Regulatory Focus

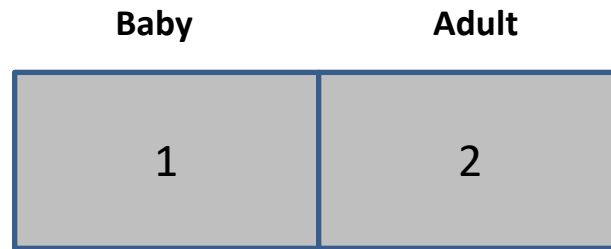
Promotion
Focus

Prevention
Focus

- Exposure to baby animals may induce mental recognition of cuteness, infantility, and pleasantness. (Yoshikawa & Masaki, 2021)
- Baby schema in infant animals is not necessarily related to potential threat (Glocker et al., 2009).
- Promotion- (prevention) focused people would govern approach (avoidance) motivations and are more prone to cheerful emotions (Higgins et al., 1997).

Study 1: Tiger

One factor (baby vs. adult animal) between-subjects design



- 142 undergraduate students (62.0% men; 19.4 years) in a lab setting
- Empathy (sympathy, compassion, and softheartedness; 1 – not at all, 7 – very much)
- Wildlife conservation intention (7-point scale; $\alpha = .87$)
 - *I am a committed advocate in support of rangers and others on the front lines of conservation.*
 - *I am strongly committed to sharing my passion about stopping wildlife crime with my friends and family.*
 - *I would never buy any illegal wildlife products, as I know that demand drives poaching.*
 - *I am willing to urge the U.S government to continue championing efforts to stop wildlife crime at home and abroad.*



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wwf_tigers Tigers need large and connected spaces to live. As human populations grow, finding ways to conserve tigers and enable local communities to thrive has become a challenge.

The solution? People Centered Tiger Conservation. Swipe to find out what this means for tigers and people 🏠

#TX2

3d



michaeljulian.tayler 🌟❤️👍💎🔥😄😁



1h Reply



220 likes

3 DAYS AGO



Add a comment...

Post



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wwf_tigers Tigers need large and connected spaces to live. As human populations grow, finding ways to conserve tigers and enable local communities to thrive has become a challenge.

The solution? People Centered Tiger Conservation. Swipe to find out what this means for tigers and people 🐾

#TX2

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michaeljulia.taylor 🌟❤️👍📱💡🌱🐾



1h Reply



220 likes

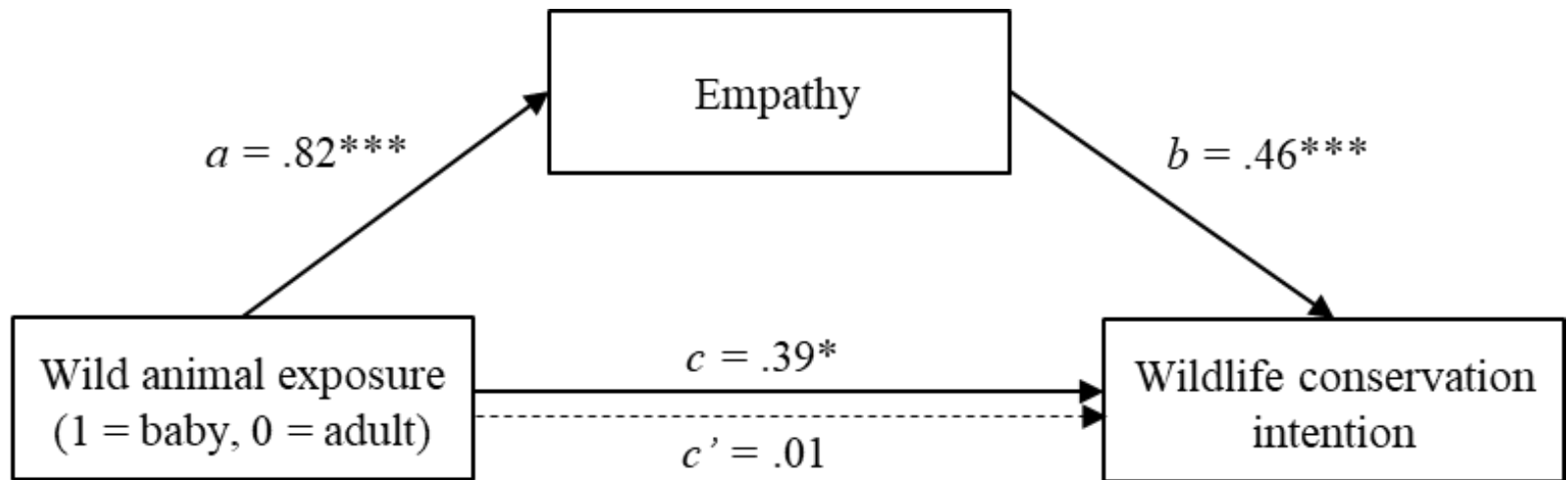
3 DAYS AGO



Add a comment...

[Post](#)

Participants who viewed the infant tiger had stronger wildlife conservation intention than those who viewed the adult tiger (M baby = 4.77 vs. M adult = 4.25; $t = 2.38, p < .05$)



Note: Bootstrapped 95% confidence interval for indirect effect = [.23 to .84]; Path coefficients are standardized betas; Path c represents the total effect of animal image on wildlife conservation intention; Path c' represents the direct effect of animal image on wildlife conservation intention after controlling for empathy; $*p < .05$, $**p < .01$, $***p < .001$

Study 2: Elephant

2 (appeal type: baby vs. adult) x 2 (self-regulatory focus: promotion focus vs. prevention focus) between-subjects design

	Cute	Adult
Promotion focus	1	2
Prevention focus	3	4

- 198 adults from Amazon Mturk (38.4% men; 41.4 years)
- Writing essay task has been used for the regulatory focus priming manipulation.

Study 2

Regulatory focus priming:

“Reflect on personal goals to compose a brief essay about three of your hopes, aspirations, and dreams (vs. duties, obligations, and responsibilities)”

After then, participants randomly viewed one of two fictitious Twitter postings



World Wildlife Day 🌐 @WildlifeDay · Mar 3
Stop #Wildlife Crime.

...



SIGN THE PLEDGE TO STOP WILDLIFE CRIME

DESPITE INCREASED EFFORTS TO TACKLE THE SURGE IN POACHING, NEARLY 110,000 ELEPHANTS
HAVE BEEN KILLED IN THE LAST 10 YEARS—HIGHLIGHTING THE NEED FOR URGENT
INTERNATIONAL ACTION TO ADDRESS THE CRISIS.



World Wildlife Day 🌐 @WildlifeDay · Mar 3
Stop #Wildlife Crime.

...



SIGN THE PLEDGE TO STOP WILDLIFE CRIME

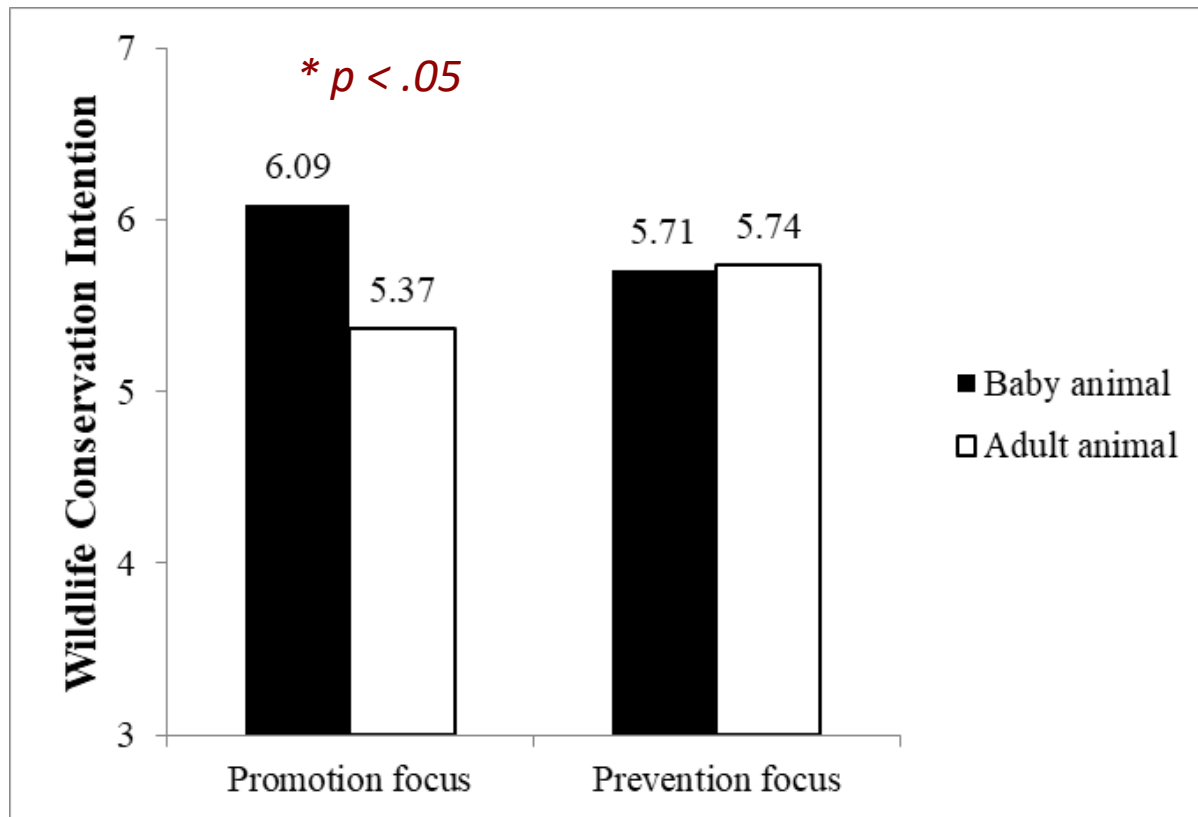
DESPITE INCREASED EFFORTS TO TACKLE THE SURGE IN POACHING, NEARLY 110,000 ELEPHANTS
HAVE BEEN KILLED IN THE LAST 10 YEARS—HIGHLIGHTING THE NEED FOR URGENT
INTERNATIONAL ACTION TO ADDRESS THE CRISIS.



- Confound checks
 - I ruled out wildlife crime issue involvement ($t = 71$, $p = .48$) and mood state ($t = 1.68$, $p = .09$) as potential confounds.

Wildlife Conservation Intention

Significant two-way interaction effect emerged: $F(1, 194) = 4.77, p < .05$



Study 3: Rhino

2 (appeal type: baby vs. adult) x 2 (regulatory focus messaging: promotion focus vs. prevention focus) between-subjects design

	Cute	Adult
Promotion focus	1	2
Prevention focus	3	4

- 251 adults from Amazon Mturk (72.5% men; 33.8 years)
- **Pet ownership as a covariate**

Baby animal image with prevention-focused messages

 World Wildlife Fund  2d ·  ... 

Protect endangered wildlife from illegal trafficking. #WorldWildlifeDay





 WORLD WILDLIFE DAY

PROTECT ENDANGERED WILDLIFE FROM ILLEGAL TRAFFICKING.


[Learn more](#)

 Like  Comment  Share

Baby animal image with promotion-focused messages




 World Wildlife Fund  2d ·  ... 

Promote vulnerable wildlife on our planet. #WorldWildlifeDay

 WORLD WILDLIFE DAY

PROMOTE VULNERABLE WILDLIFE ON OUR PLANET.

[Learn more](#)

 Like  Comment  Share

Adult animal image with prevention-focused messages



World Wildlife Fund 

2d · 

... 

Protect endangered wildlife from illegal trafficking. #WorldWildlifeDay



PROTECT ENDANGERED WILDLIFE FROM ILLEGAL TRAFFICKING.

[Learn more](#)

 Like  Comment  Share

Adult animal image with promotion-focused messages



World Wildlife Fund 

2d · 

... 

Promote vulnerable wildlife on our planet. #WorldWildlifeDay



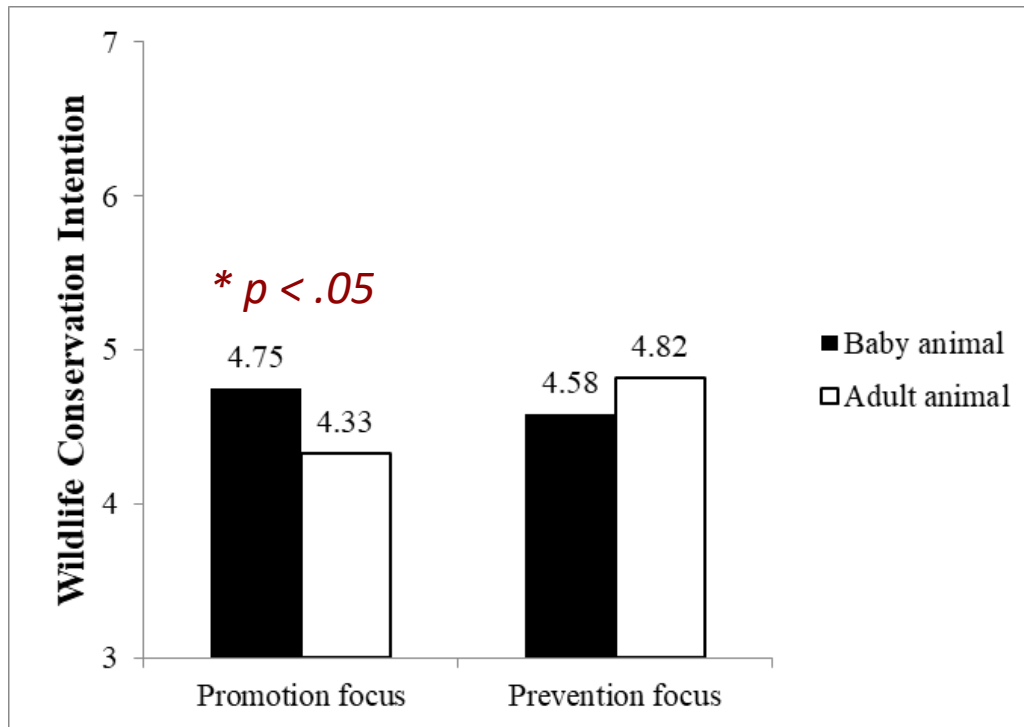
PROMOTE VULNERABLE WILDLIFE ON OUR PLANET.

[Learn more](#)

 Like  Comment  Share

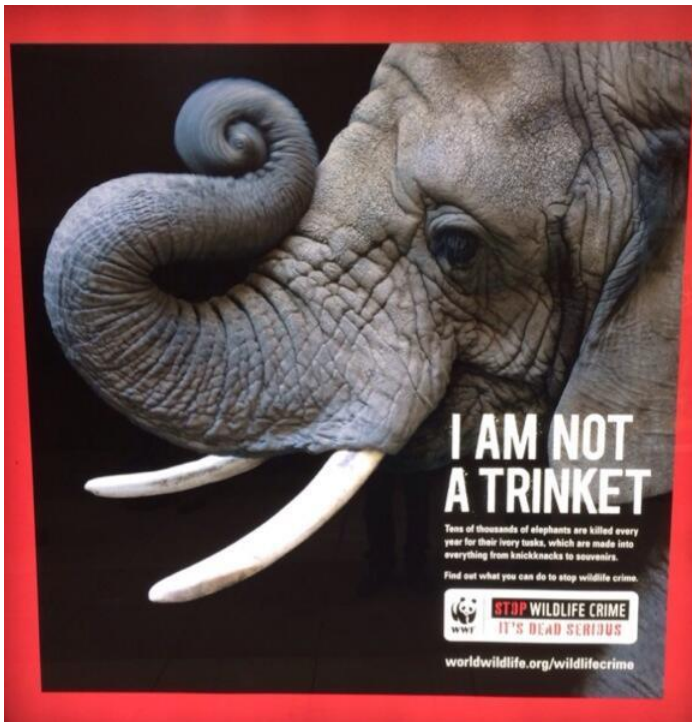
Wildlife Conservation Intention

Significant two-way interaction effect emerged: $F(1, 246) = 9.246, p < .01$



Practical Implications

- Social marketers could strategically use **cute baby images** to enhance the effect of ad campaign to stop wildlife crime for **promotion-focused** audiences.



#EndangeredEmoji

17 emoji animals are endangered. Help them by donating €0.10 / £0.10 for every one you tweet. [Retweet to sign up and start.](#)



A row of 17 endangered animal emojis: elephant, panda, turtle, fish, tiger, cat, penguin, frog, camel, leopard, snake, tiger, crocodile, dolphin, whale, whale, monkey, monkey, monkey, monkey.

Smiling AI Agents: How Anthropomorphism and Broad Smiles Increase Charitable Giving

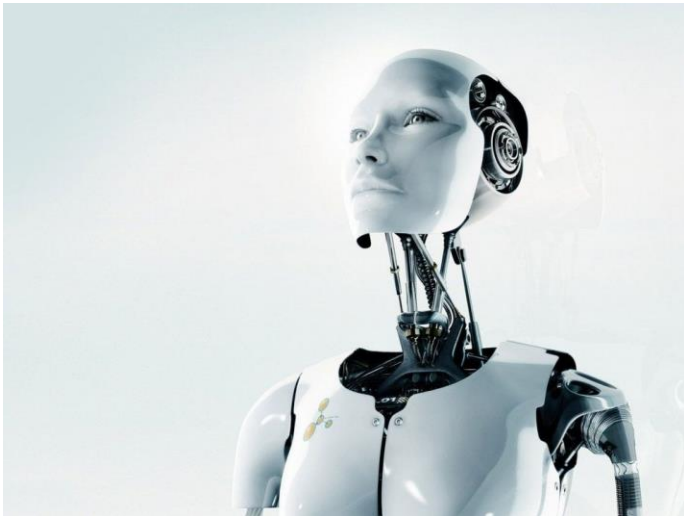


Artificial Intelligence (AI) Technology for Good

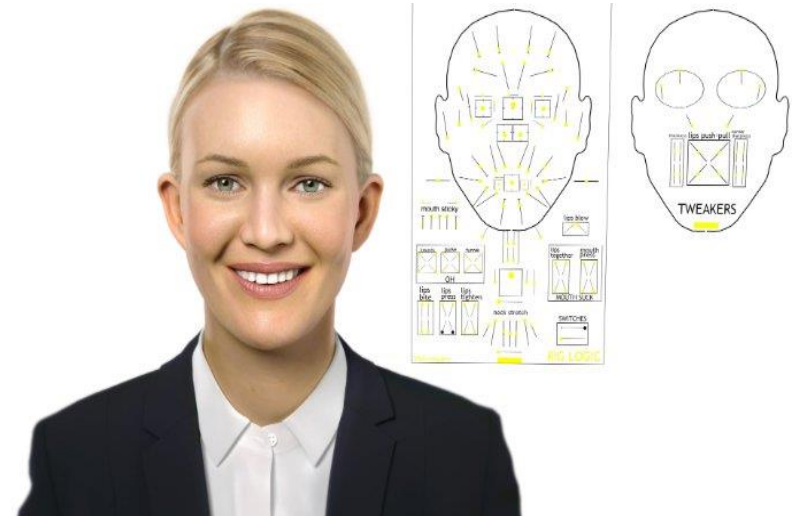
Anthropomorphism of Artificial Intelligence

Anthropomorphism is the act of attributing human characteristics and features to nonhuman entities.

(Epley et al. 2007; Phillips, Sedgewick, and Slobodzian 2019)



Machinelike AI Agent

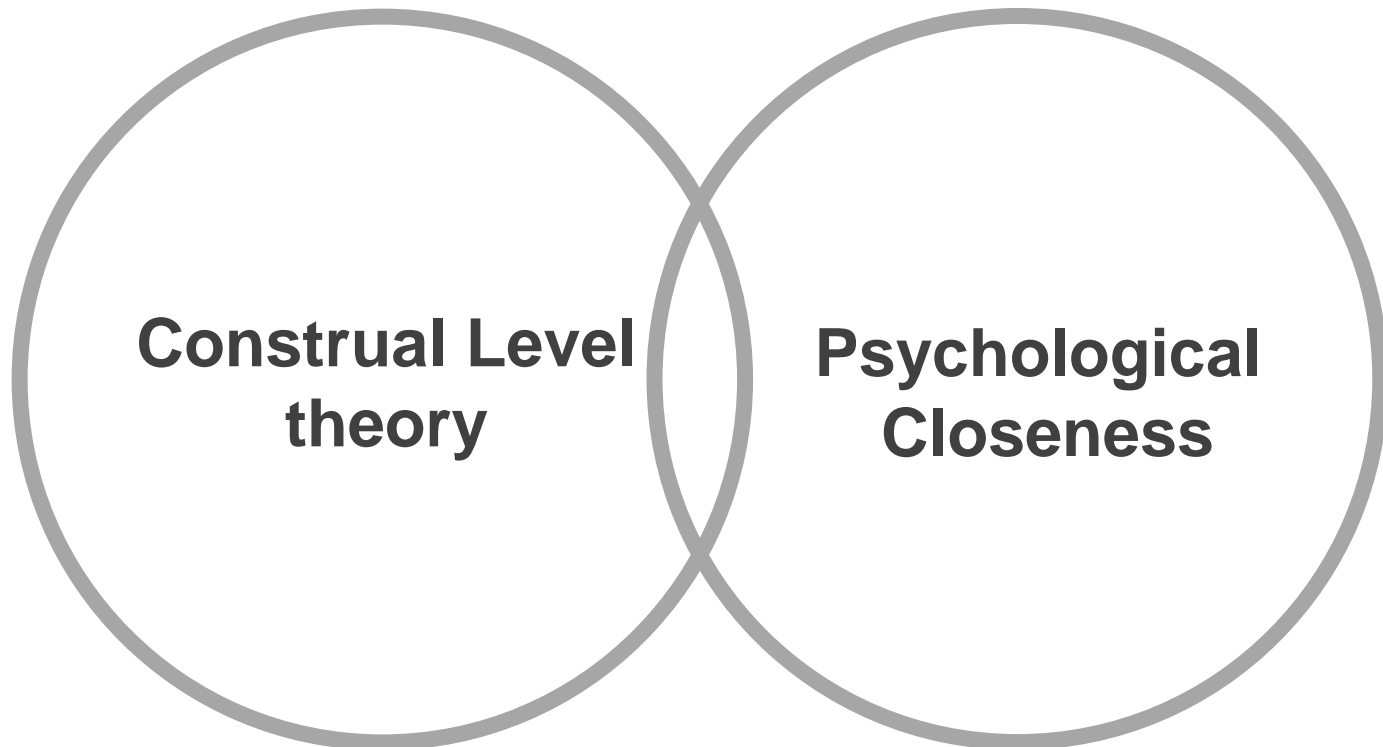


Humanlike AI Agent

Theoretical Framework

Psychological closeness is defined as feelings of attachment and Perceived connection toward another person or people.

(Gino and Galinsky 2012))



Moderating Role of Smiling

Smiling is an expression of genuine, positive affect, a powerful social force that enhances interpersonal judgments (Wang, Mao, Li, and Liu 2017)

The ads that depict smiling models appear to evoke more positive brand attitudes and purchase intentions

(Trivedi and Teichert 2019).

Genuine smiles were intricately linked to psychological closeness .

(Bogodistove and Dost 2017)



Study 1: Fundraising App

2 (AI agent type: humanlike vs machinelike) x 2 (smile presence: smile vs no smile)
between-subjects design

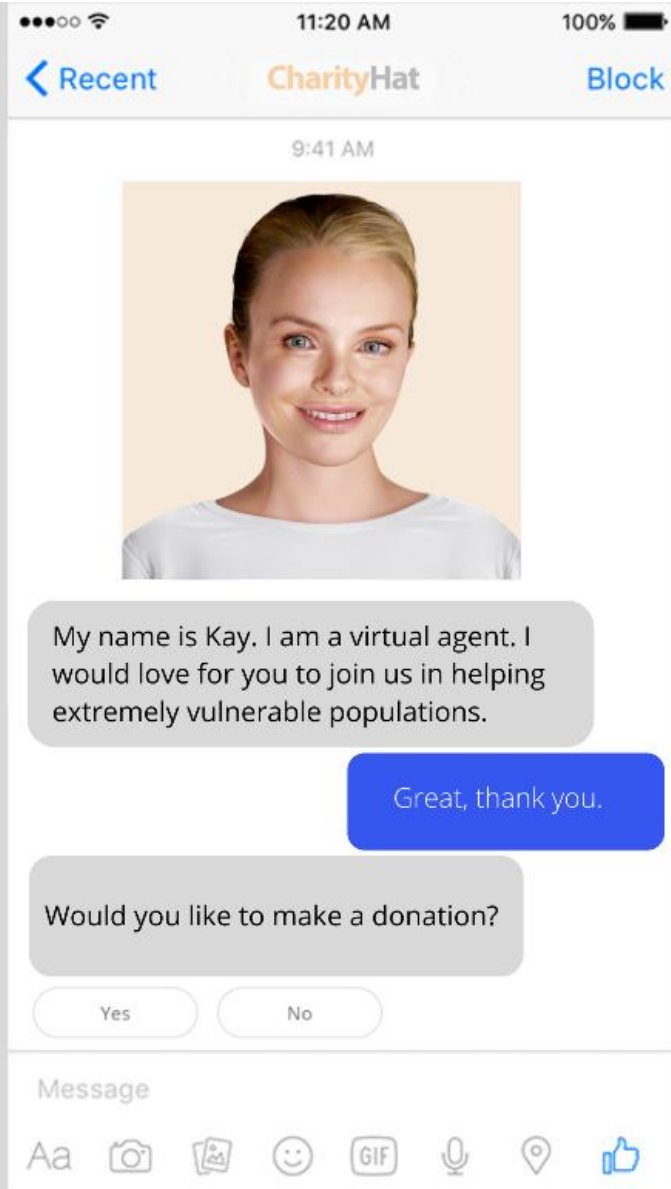
	Smile	No smile
Humanlike AI	1	2
Machinelike AI	3	4

(N = 240; 51.7% male; Amazon Mturk sample)

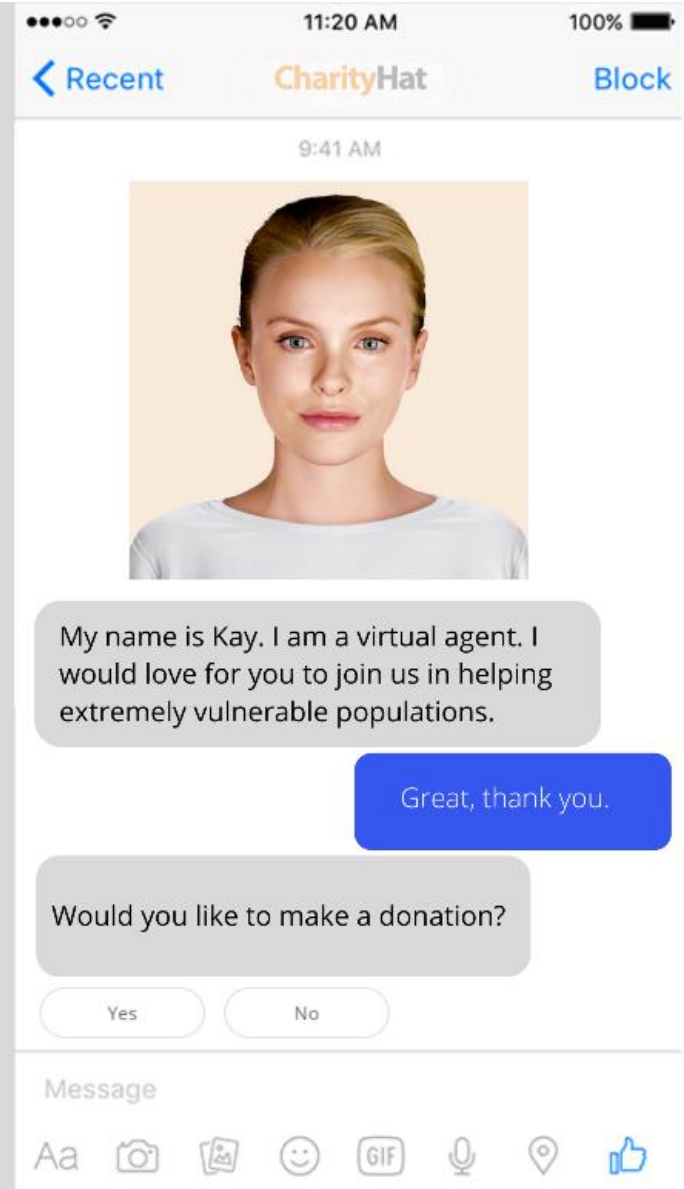
Psychological closeness (7-point scale; Argo, Dahl, and Manchanda 2005)
("dissimilar to me/similar to me, socially far/socially close, and like an out-group/like an in-group")

Donation intention (7-point scale; Baek and Yoon 2017)
("unlikely/likely, impossible/possible, and improbable/probable ")

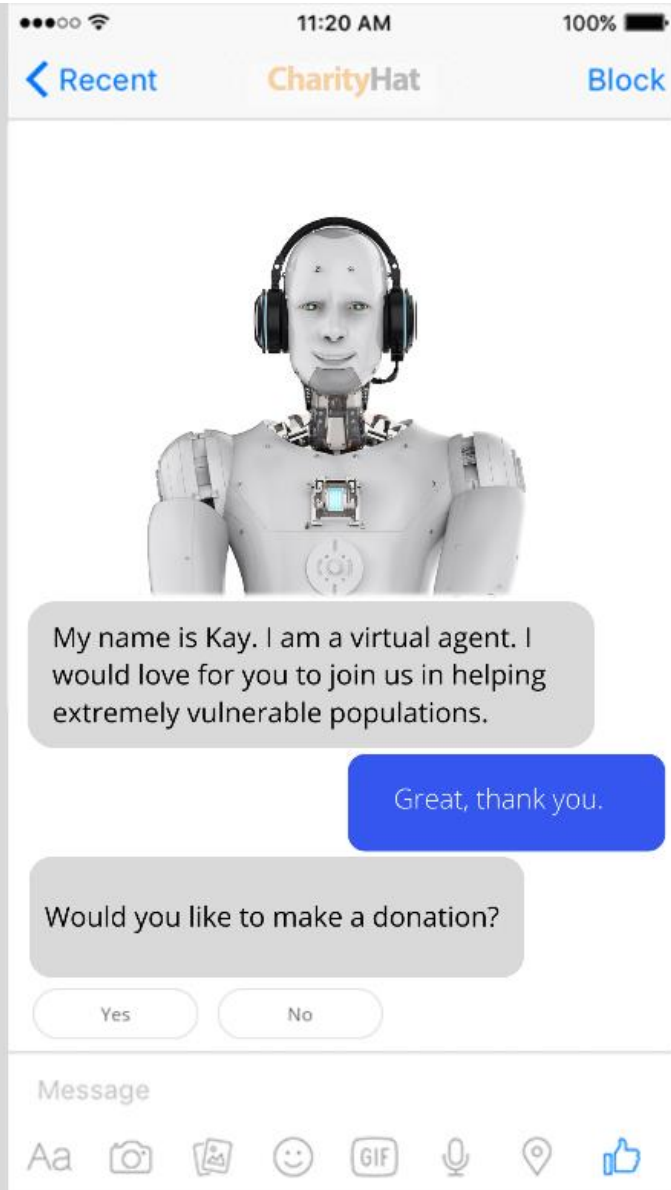
Humanlike AI agent with smile



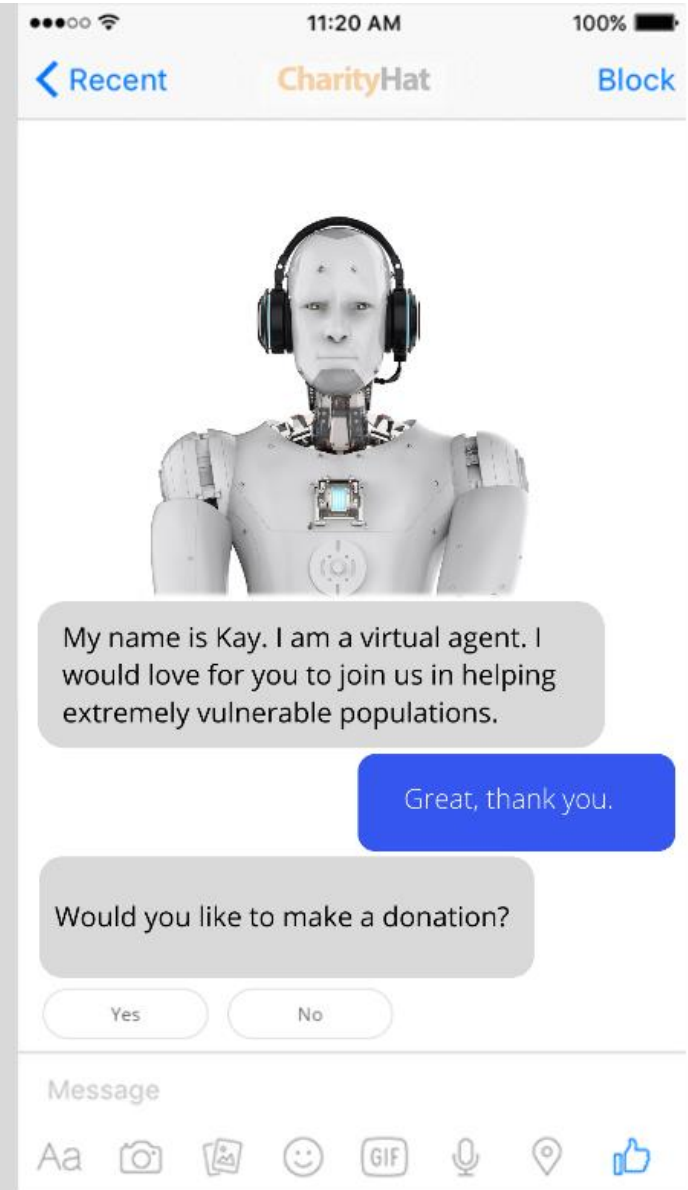
Humanlike AI agent without smile



Machinelike AI agent with smile

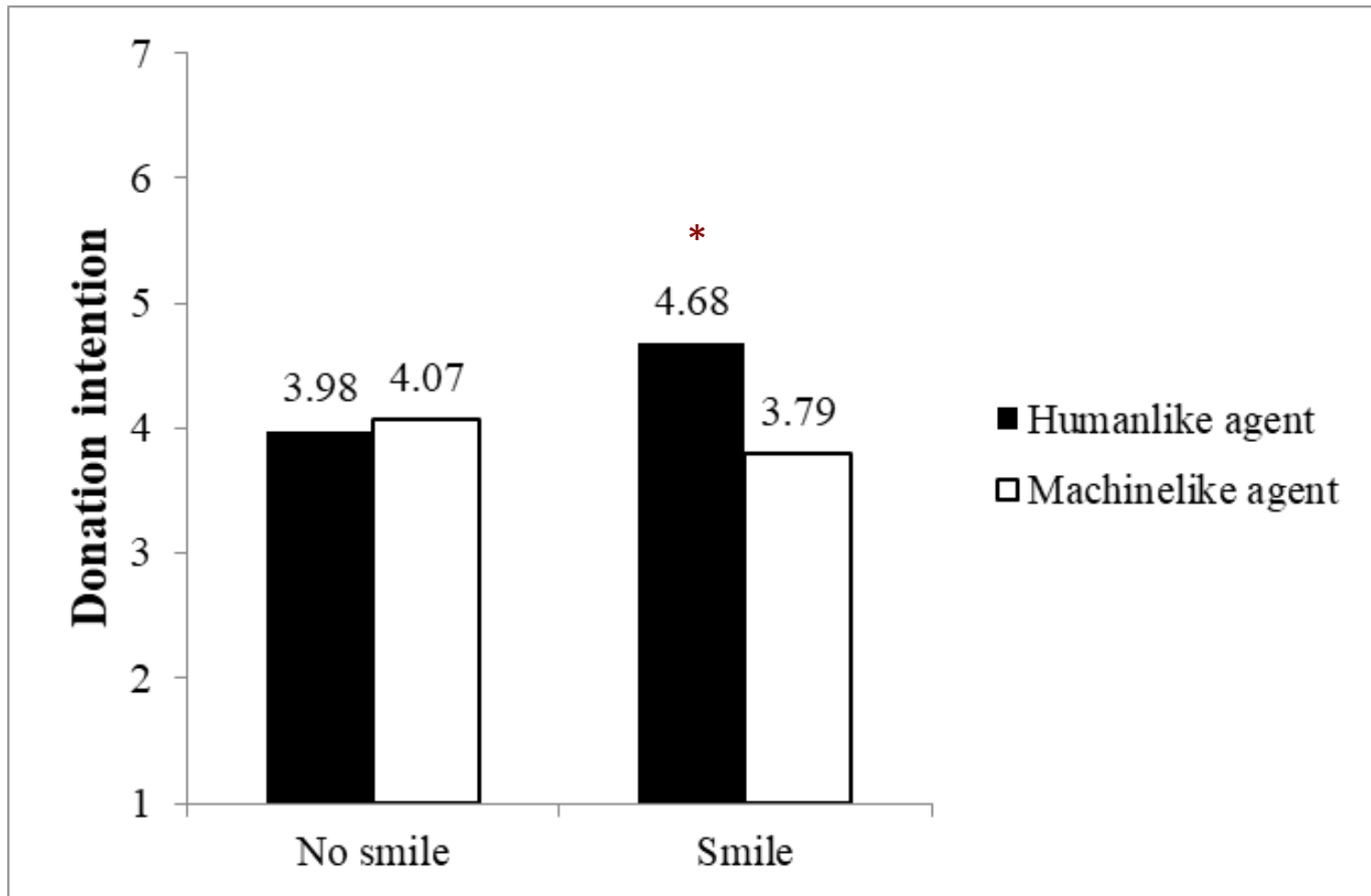


Machinelike AI agent without smile



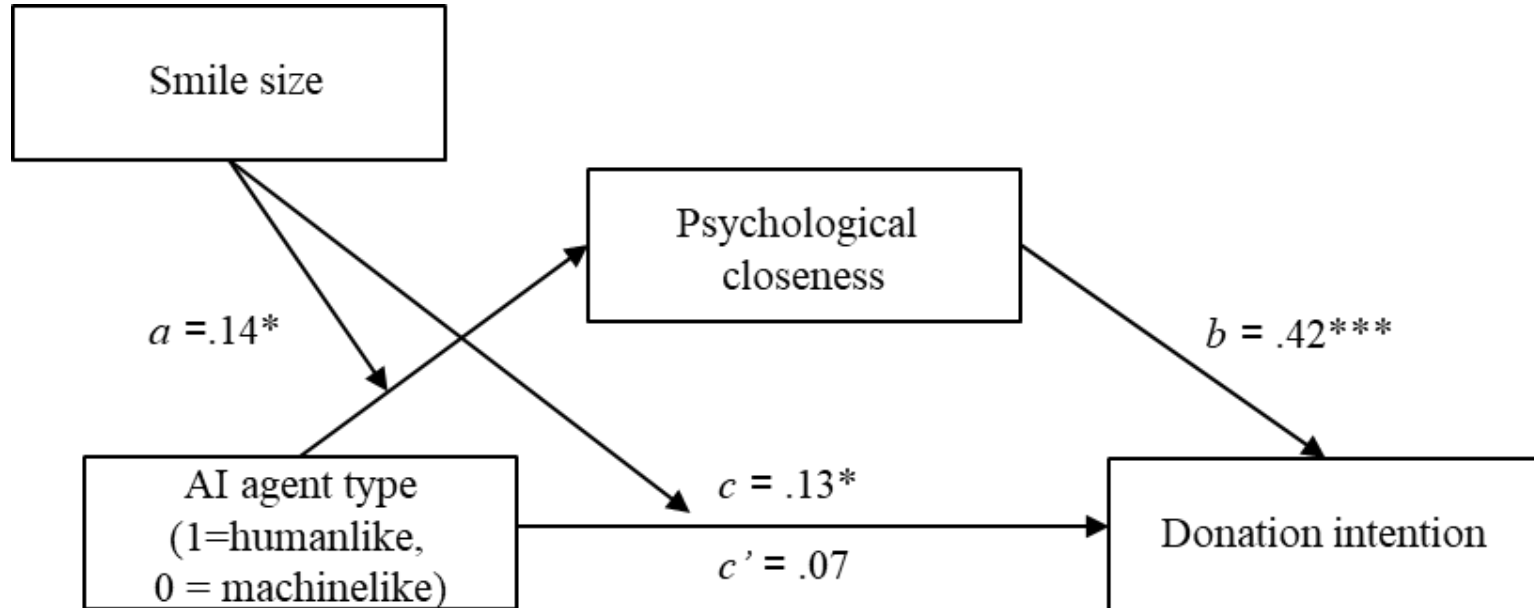
Donation Intention

Two way interaction effect emerged: $F(1, 236) = 3.84, p < .05$



** $p < .05$*

Mediation Model



Notes: All coefficients are standardized; Path c represents the total effect; Path c' represents the direct effect; **Moderated mediation index = .47, 95% CI [.07 to .94];** Big-smile condition = 95% CI [.57 to 1.30]; no-smile condition = 95% CI [-.13 to .74]; $*p < .05$, $***p < .001$

Study 2: CharityRoad App

2 (AI agent type: humanlike vs machinelike) x 3 (smile size: no smile vs small smile vs big smile) between-subjects design

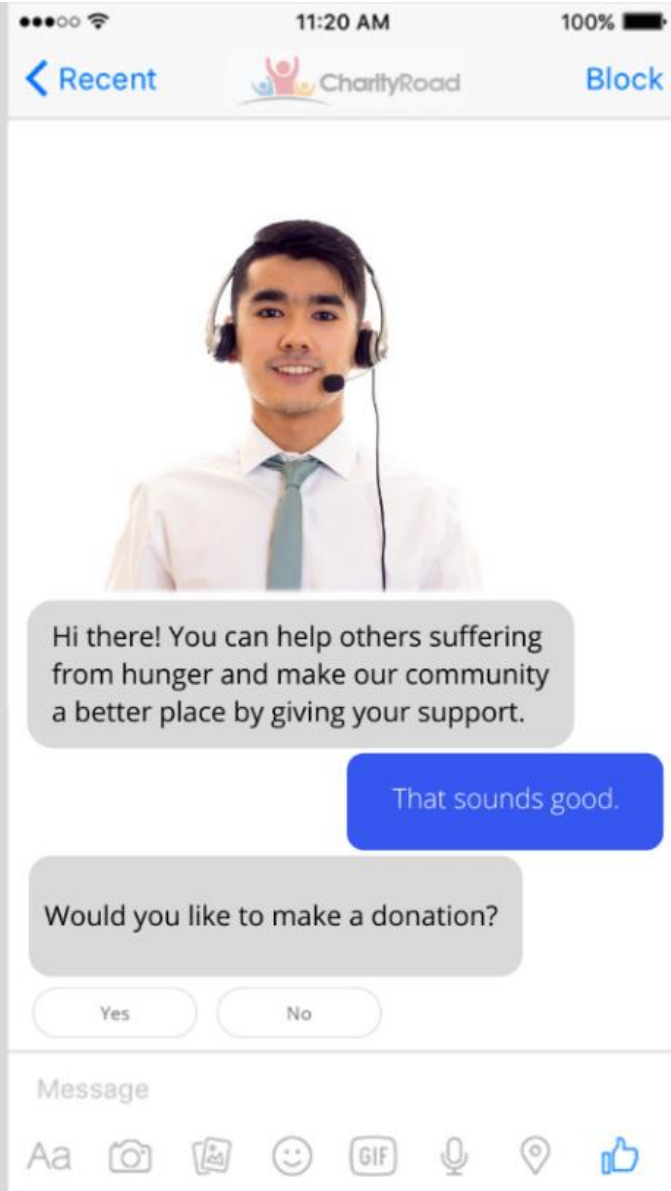
	Big smile	Small smile	No smile
Humanlike AI	1	2	3
Machinelike AI	4	5	6

(N = 127; 59.1% male; controlled lab setting)

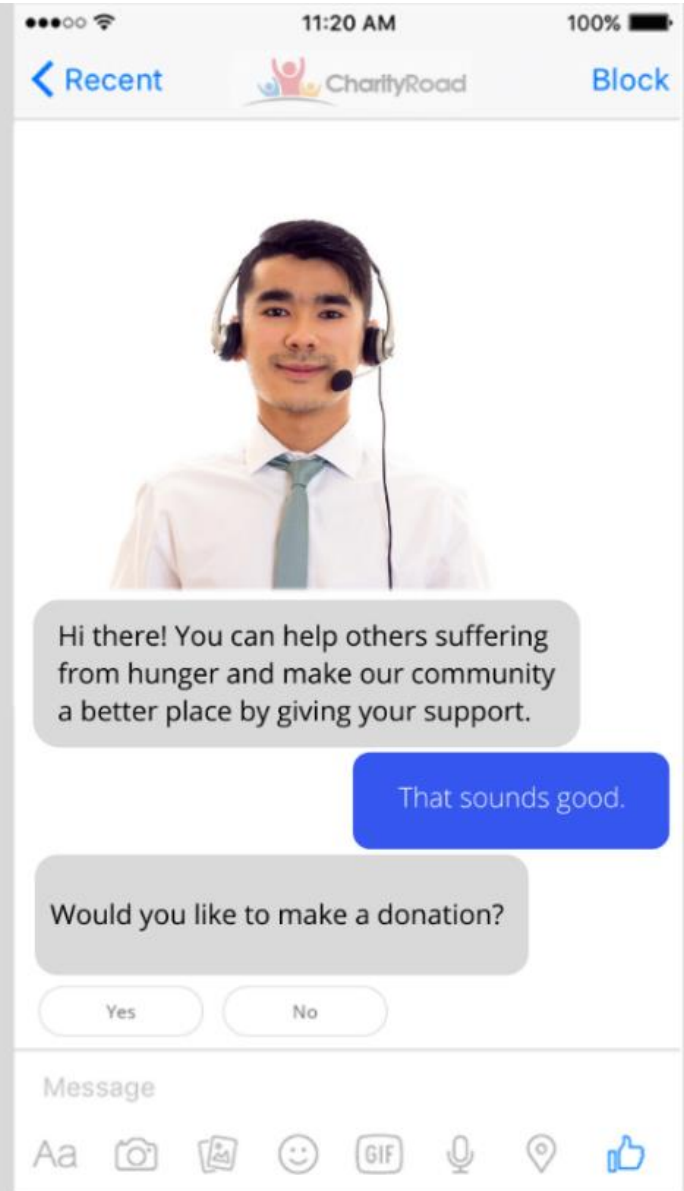
Donation amount (Baek et al. 2019)

(Participants were asked to imagine having \$100 to donate and to rate how much they would donate, from \$0 to \$100.)

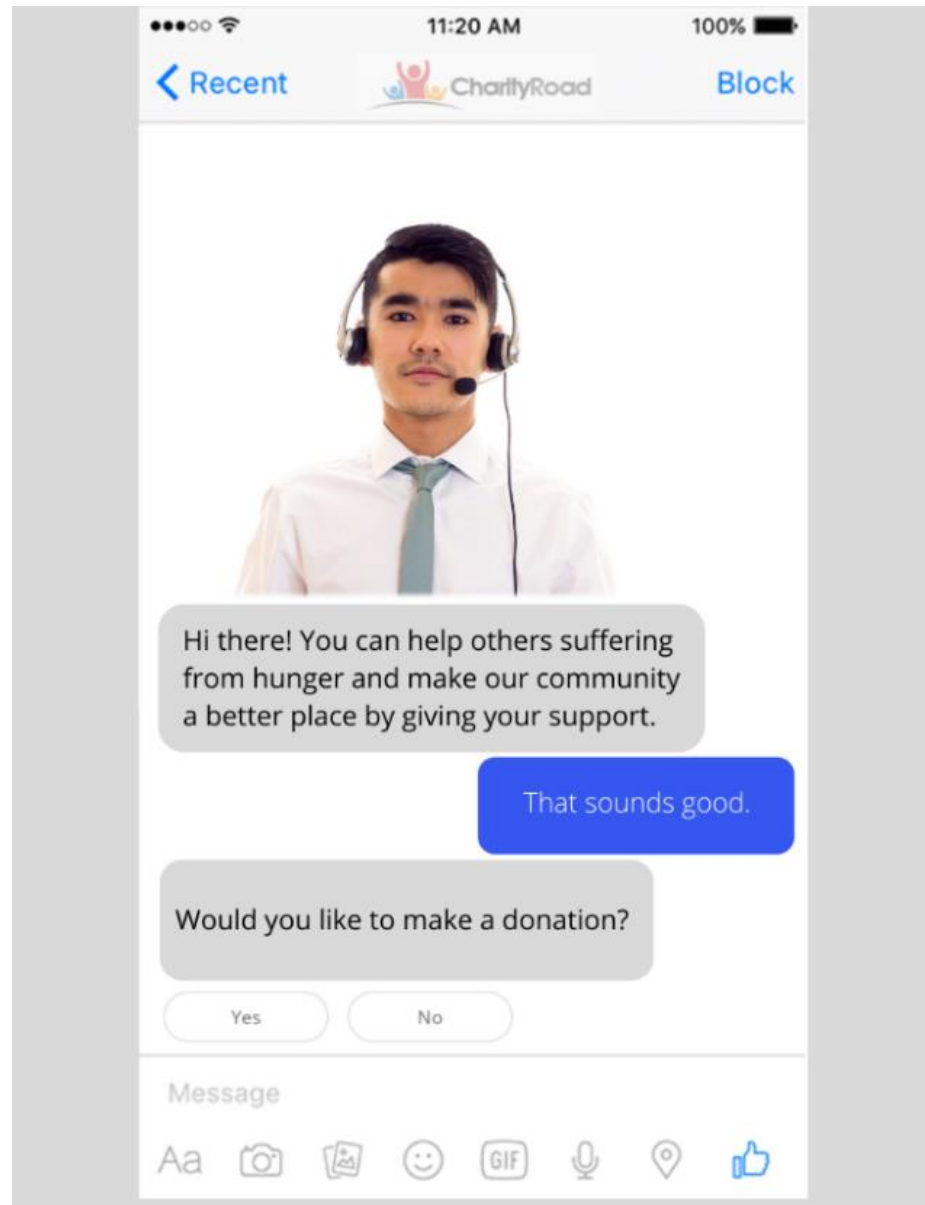
Humanlike AI agent with big smile



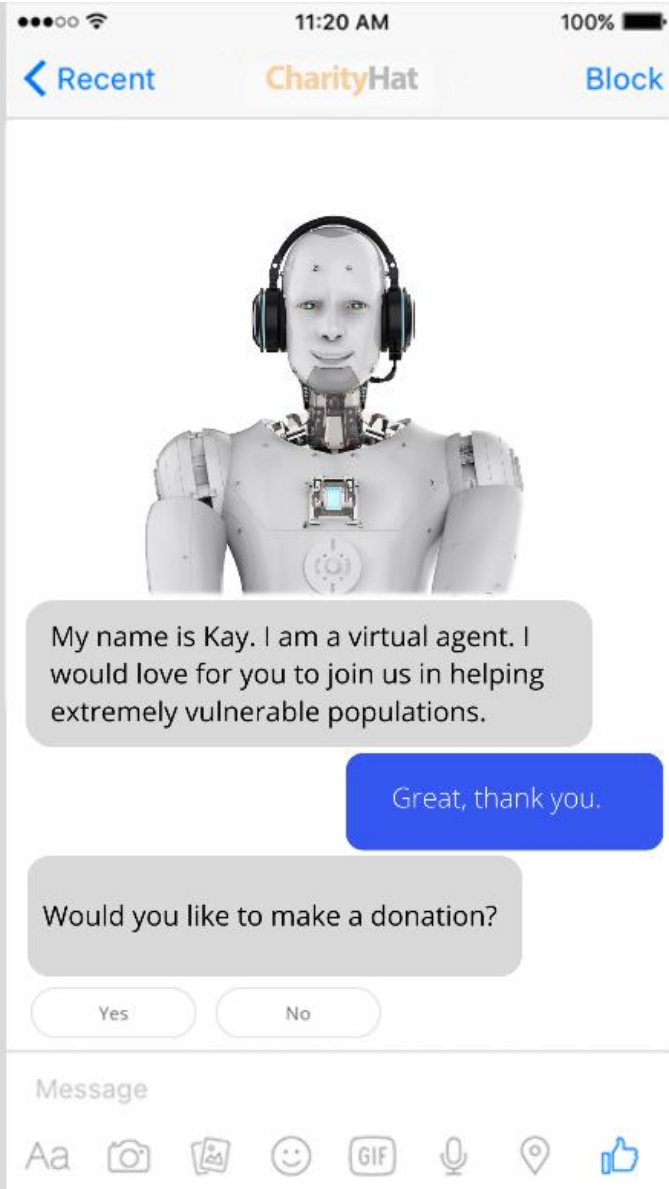
Humanlike AI agent with small smile



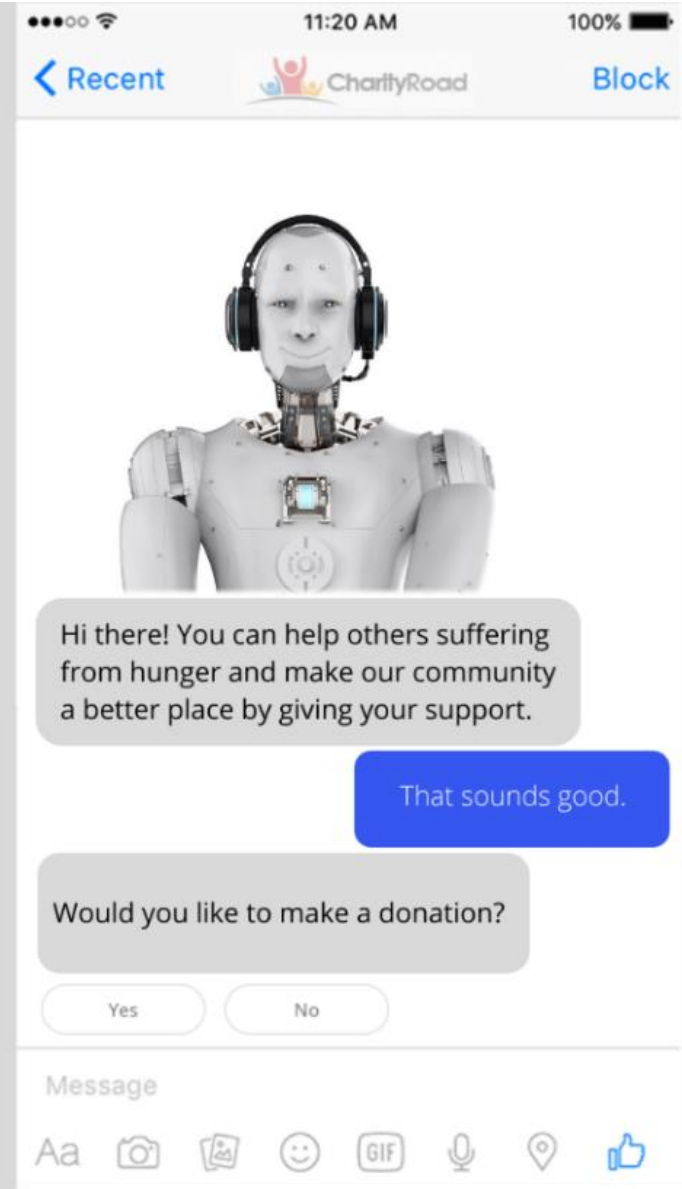
Humanlike AI agent without smile



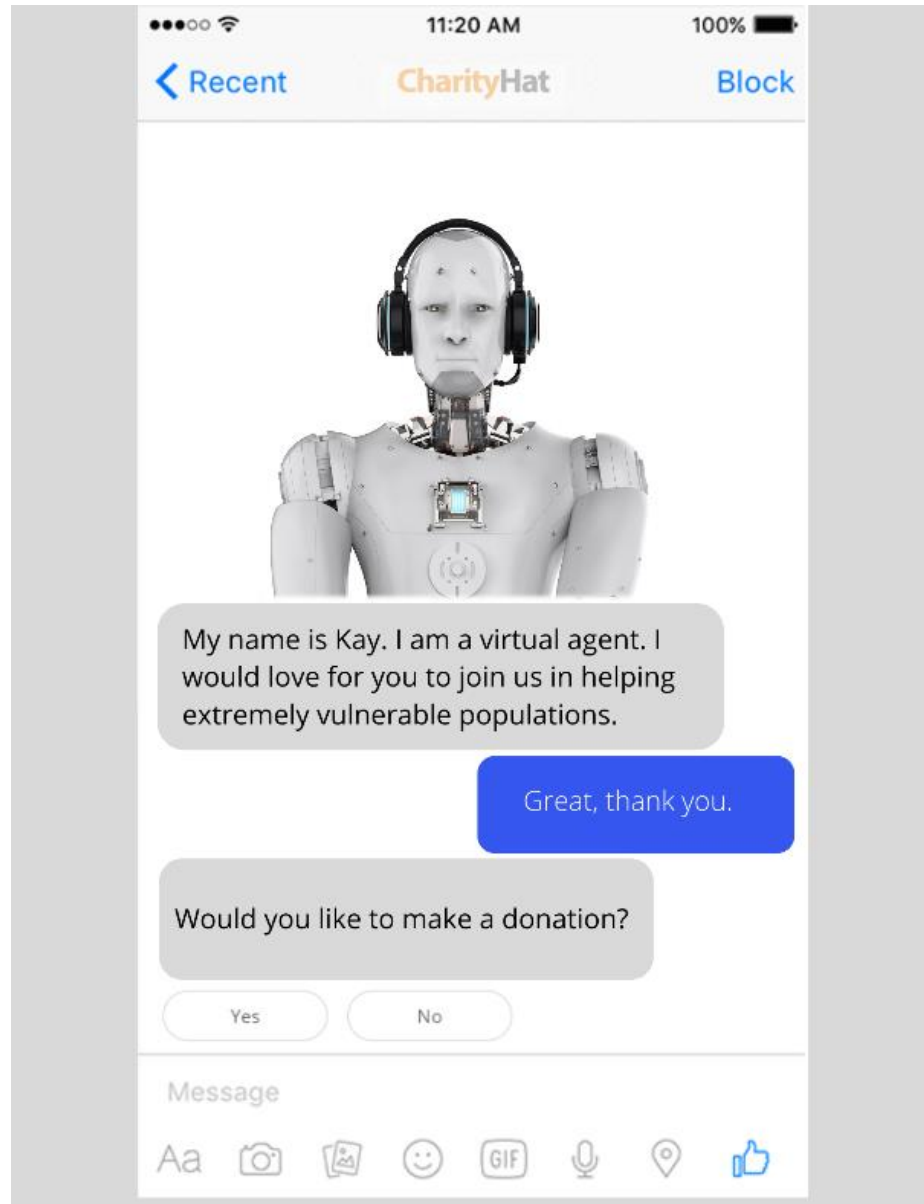
Machinelike AI agent with big smile



Machinelike AI agent with small smile

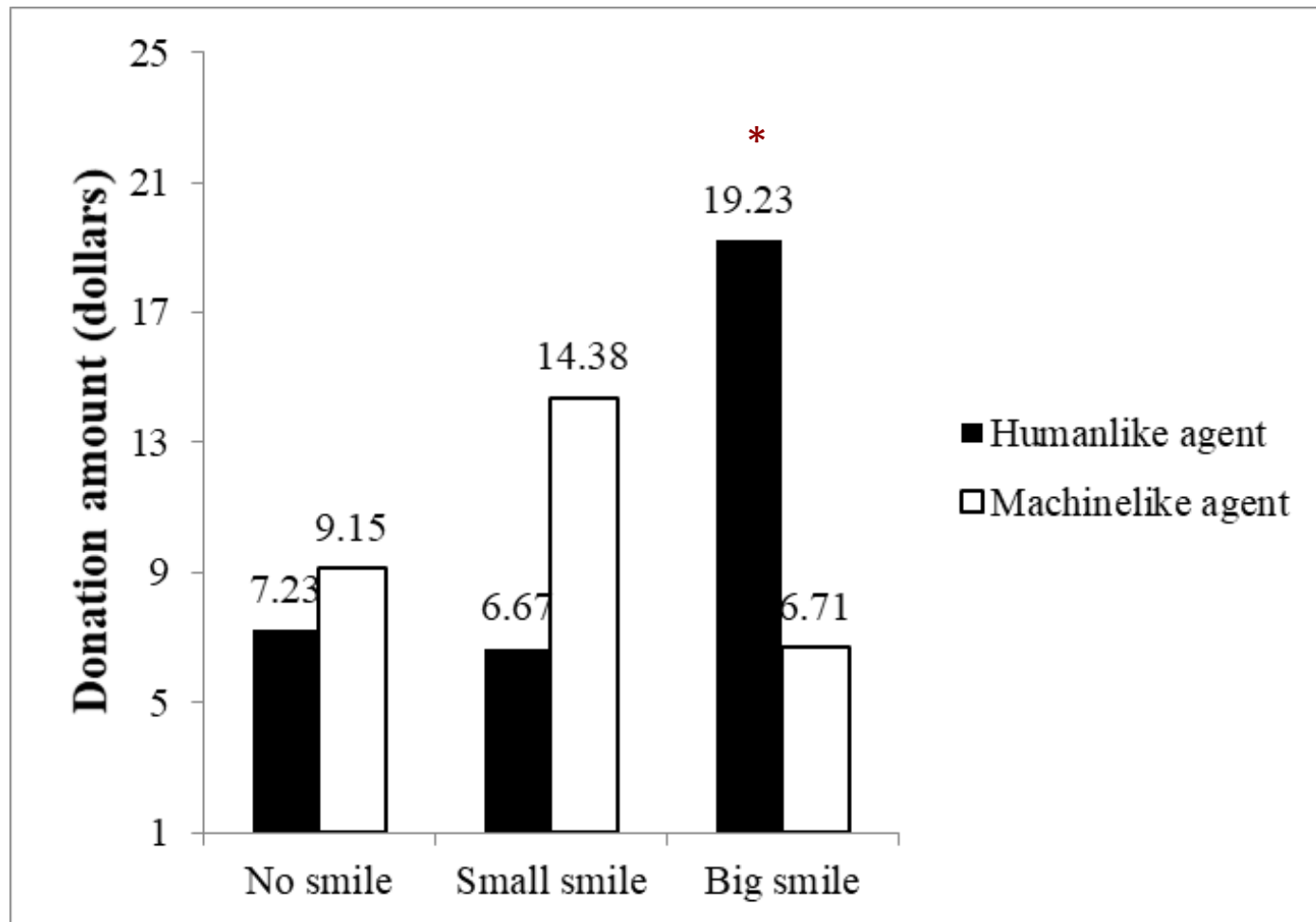


Machinelike AI agent without smile



Donation Amount

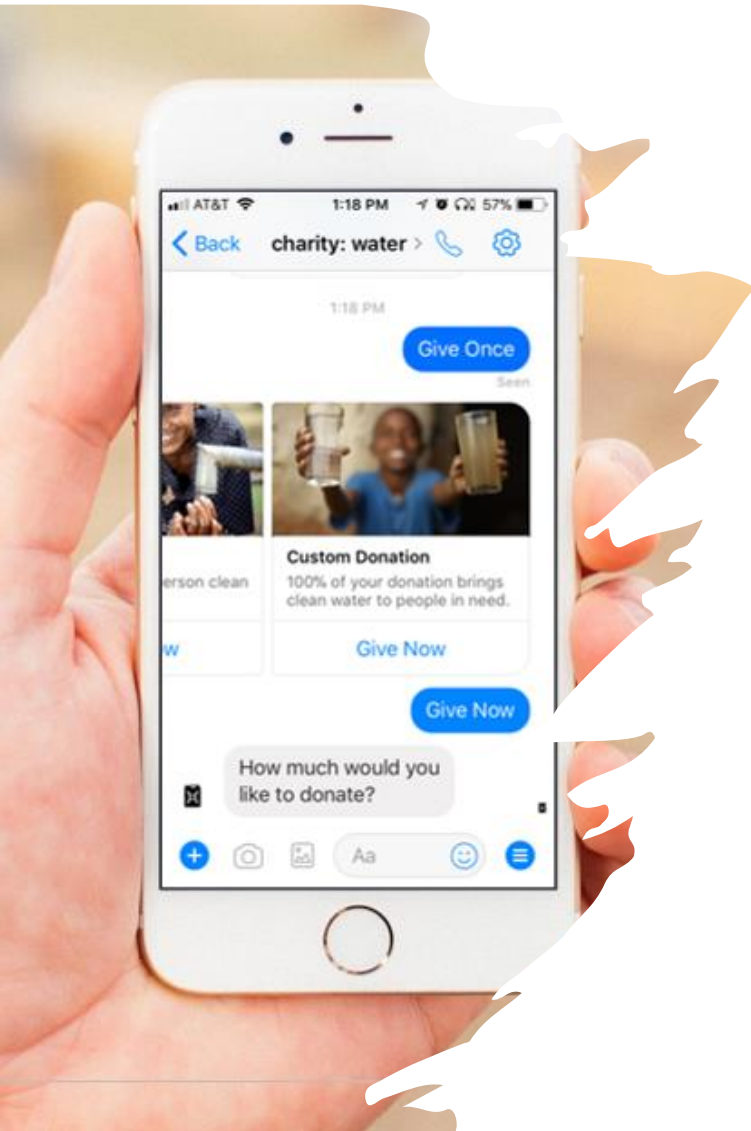
Two way interaction effect emerged: $F(2, 121) = 4.83, p < .01$



Discussion

- The findings contribute to the human-machine interaction literature by showing *how individuals interact with smiling anthropomorphic AI agents in charity campaigns*.
- This research expands current discussions about effects of “facial expressions” to the novel domain of AI humanization.

Discussion



- Practically, nonprofits can refine AI-powered fundraising campaigns by designing AI agents that exhibit the most appropriate smiles.

Thank You