



Communication behaviors related to recycling: Survey results from New York State residents

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Survey I



Introduction

- Providing proper **information** on how to perform a behavior is vital to communication campaigns (Rice & Atkin, 2012).
- One big barrier for recycling is a lack of proper information
 - The role of information: increase self-efficacy and reduce uncertainty;
 - The relationship between recycling intention and behavior is stronger among people who seek more information about recycling (Rosenthal, 2018)



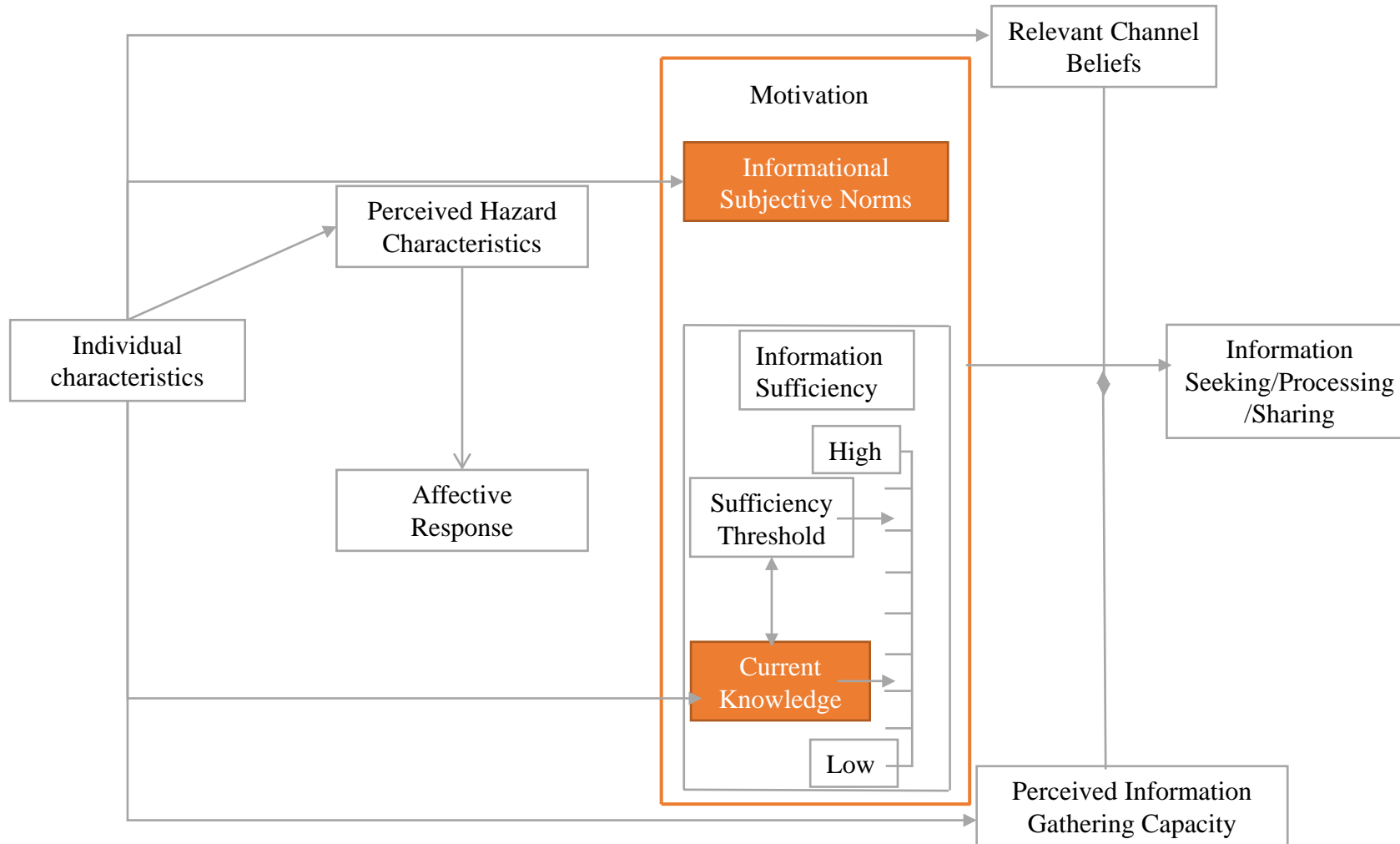


Theoretical Framework: RISP and R-RISP Model

- Risk information seeking and processing model (RISP; Griffin et al., 1999)
 - Proposes a number of antecedents to communication behaviors
- Reduced-RISP model (R-RISP; Yang et al., 2014)
 - Highlights two motivational factors: current knowledge and information subjective norms



Theoretical Framework: RISP and R-RISP Model





Theoretical Framework: Key Predictors

- **Information insufficiency:** The gap between individuals' **current knowledge** and **sufficiency threshold**.
 - **Current knowledge:** The amount of information that individuals perceive they currently have
 - **Sufficiency threshold:** The amount of information individuals feel they need to deal with a risk properly

H1: Information insufficiency will be positively related to information seeking (**H1a**) and information sharing (**H1b**).



Theoretical Framework: Key Predictors

- **Information subjective norms:** Individual's willingness to engage in communication behaviors because of expectations from others.

H2: Social norms will be positively related to information seeking (**H2a**) and information sharing (**H2b**).



Theoretical Framework: Key Predictors

- **Benefit perception:** Recycling benefits society and the natural environment.
- **Positive emotions:** Positive emotions involve approaching action tendency.

H3: Benefit perception about recycling will be positively related to information seeking (**H3a**) and information sharing (**H3b**).

H4: Positive emotions will be positively related to information seeking (**H4a**) and information sharing (**H4b**).



Theoretical Framework: Key Predictors

- According to **appraisal theories** (Smith & Ellsworth, 1985), emotions can mediate the impact of cognitive appraisals on decision-making.

H5: Positive emotions will mediate the relationship between benefit perception and information seeking (**H5a**) and information sharing (**H5b**).

H6: Social norms will mediate the relationship between benefit perception and information seeking (**H6a**) and information sharing (**H6b**).



Method: Sample



Ipsos; Online survey

Representative sample of
New York State Residents

May & June, 2020

$N = 1010$
Age ($M = 48.74, SD = 17.43$)
Female (52.8%)
White (58.9%)
Bachelor's degree (37.1%)
Median income: \$75,000 to \$84,999
Ideology ($M = 3.92, SD = 1.52$)





Method: Measurements

All items were measured on a 5-point scale (1 = strongly disagree, 5 = strongly agree)

Information insufficiency

(Griffin et al., 2008)

0 – 100 scale

Current knowledge

($M = 59.79$, $SD = 27.30$);

*Information sufficiency
threshold*

($M = 64.58$, $SD = 27.98$);

Social norms

7 items (Onel & Mukherjee,
2017)

($M = 3.73$, $SD = 0.80$, $\alpha = .89$);

E.g., "Most people who are
important to me think I
should recycle."

Benefit perception

7 items (Onel & Mukherjee,
2017)

($M = 3.95$, $SD = 0.64$, $\alpha = .81$);

E.g., "Recycling helps
conserve natural
resources."



Method: Measurements

Positive emotions

($M = 2.84$, $SD = 1.19$, $\alpha = .94$);

- Satisfaction
- Happiness
 - Hope
- Inspiration
 - Pride

Information seeking

5 items (Griffin et al., 2008)
($M = 3.65$, $SD = 0.68$, $\alpha = .72$);

E.g., "When it comes to recycling, I'm likely to go out of my way to get more information."

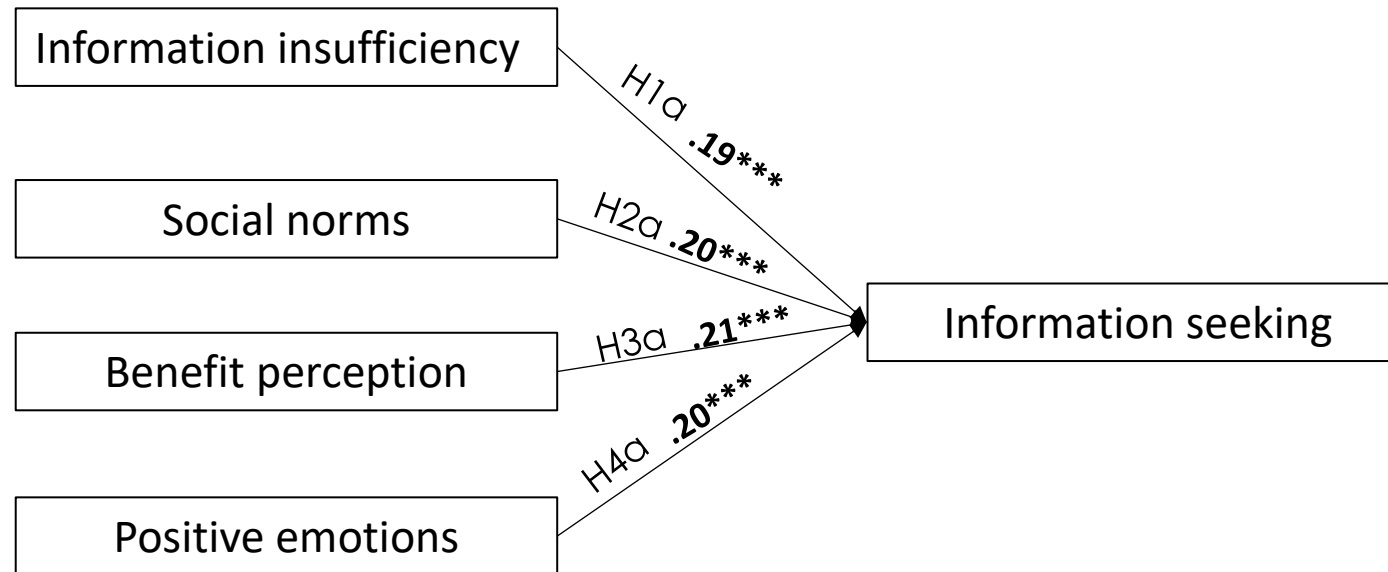
Information sharing

2 items (Yang, Kahlor, et al., 2014)

($M = 2.63$, $SD = 1.01$, $\alpha = .71$);
E.g., "I share recycling information with others."

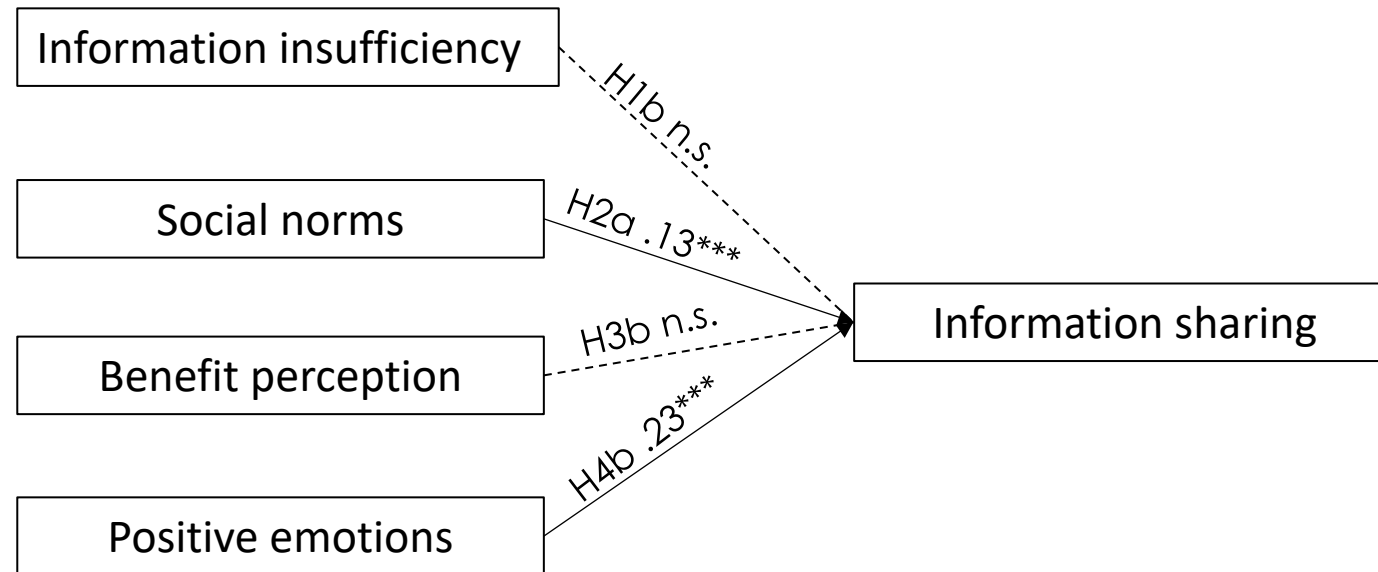


Results





Results





Results

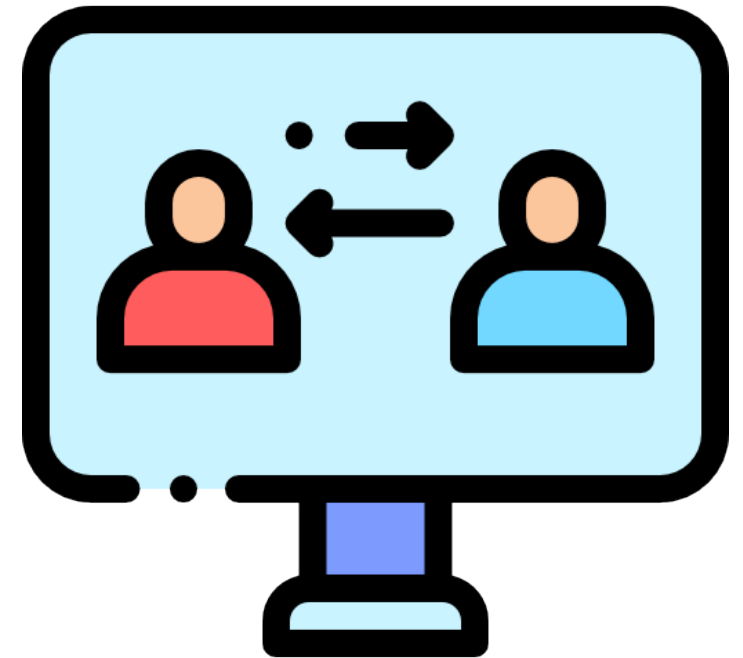
H5: Positive emotions mediated the relationship between benefit perception and information seeking ($B = 0.23$, $SE = .02$, 95%CI: [0.19, 0.28]) as well as information sharing ($B = 0.32$, $SE = .03$, 95%CI: [0.26, 0.39]). ✓

H6: Social norms mediated the relationship between benefit perception and information seeking ($B = 0.19$, $SE = .03$, 95%CI: [0.14, 0.25]) as well as information sharing ($B = 0.20$, $SE = .04$, 95%CI: [0.13, 0.27]) . ✓



Discussion: Information insufficiency

- Information insufficiency is positively related to information seeking.
- Although recycling is a familiar topic, people probably don't possess sufficiency knowledge about recycling.
- People with more perceived recycling knowledge are more likely to share information.

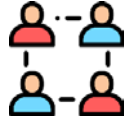




Discussion: Social Norms



People who are aware of the benefits of recycling are more likely to seek and share information when they sense a greater social pressure to recycle.



Only three in ten Americans think that their community's social norms strongly encourage recycling (Pew, 2016).



Environmental campaigns should use social norms and positive emotions appeals to motivate people to seek and share information.



Survey II: An experiment



Video

[Video Link](#)





Results



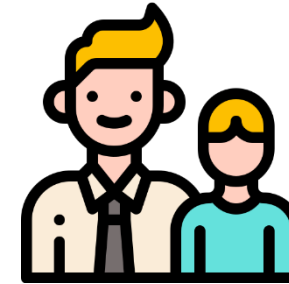
Video Group

More positive *attitude* toward recycling

($M = 4.19$, $SD = 0.67$);

Stronger recycling *intention*

($M = 3.80$, $SD = 0.90$).



Control Group

Less positive *attitude* toward recycling

($M = 4.06$, $SD = 0.74$);

Weaker recycling *intention*

($M = 3.48$, $SD = 0.92$).

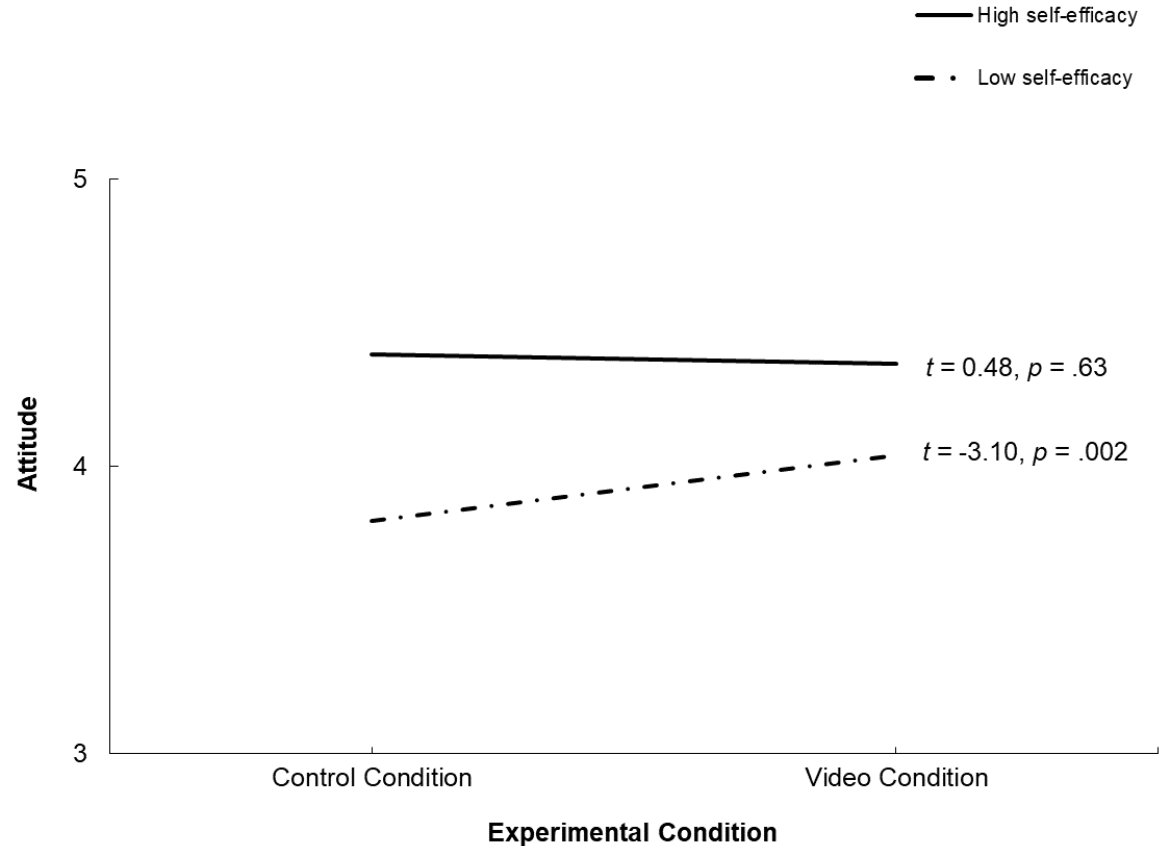
There is no significant between-condition differences in *social norms*.



Results

Self-efficacy **moderated** the relationship between video exposure and attitude ($b = 0.09, p = .01$).

- Respondents in the video condition reported more favorable attitude toward recycling than those in the control condition, but this relationship was only significant among individuals with low self-efficacy.



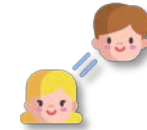


Conclusion & Discussion



The video was effective in affecting **attitude** and **intention**, but did not influence **social norms**.

When **more than one** factors are addressed in persuasive messages → cause confusion?



The moderating role of self-efficacy:

People with high self-efficacy already hold **crystalized** beliefs about recycling, so it is hard to influence them.

Perceived self-efficacy may serve as **a segmentation strategy** for recycling campaigns.

THANK YOU!

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