



The Constructive, Destructive, and Reconstructive Power of Social Norms

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California State University
San Marcos

Presented at the 2008 Behavior, Energy, and Climate Change
(BECC) conference. Sacramento, CA.



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Acknowledgements: Jennifer Tabanico, Adam Zaleski,
Jessica Nolan, Azar Khazian, Robert Cialdini, Noah
Goldstein, Vladas Griskevicius

About the Presenter

- ◆ Ph.D. in applied social psychology
- ◆ Academic position (professor)
- ◆ Senior Scientist, Action Research
- ◆ Numerous consulting, writing, and applied research projects
 - **Private:** Southern California Edison (energy), Hewlett Foundation, Brookfield Zoo, EDCO Waste Management, Keep America Beautiful
 - **State:** California Integrated Waste Management Board (used oil recycling, waste tires), TN, FL, TX
 - **Local and County:** Napa, Madera, Los Angeles, San Diego
 - Cities of San Diego, Vista, San Marcos, Escondido
 - **Federal:** National Academy of Sciences, Environmental Protection Agency (EPA), Department of Justice,
 - **International:** United Nations, London Zoological Society, World Wildlife Federation, Canadian Centre for Pollution Prevention



Fundamental Assumptions



1. Change is needed
2. Behavior matters
 - A little psychology can go a long way
3. Existing approaches have largely failed
 - Education campaigns
 - Price triggers and financial incentives
 - Environmental messages
 - Raising awareness



Normative Social Influence

Social norms--an individual's beliefs about the common and accepted behavior in a specific situation.

1. Powerful influence on behavior
2. Formed using a variety of cues (social and otherwise)
3. Influence not limited to social contexts
4. Types of norms (injunctive and descriptive)



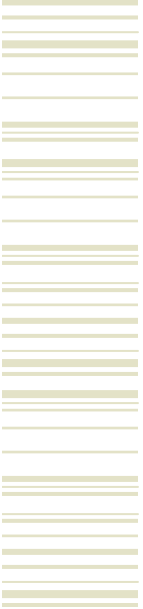
Social Validation

- ◆ Gawking (Milgram, Bickman, & Berkowitz, 1969)
 - N=1 (4%)
 - N=5 (18%)
 - N=15 (40%)--stopping traffic!









Social Validation

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- ◆ Seeing others not act (Latane & Darley, 1968)
 - Smoke study
- ◆ Tip jars empty versus full
- ◆ Litter begets litter
- ◆ Substance use among teens



Awareness Campaigns

- ◆ Highlight the seriousness of the problem
- ◆ Often utilize incidence rates
- ◆ “Look at this big problem”
- ◆ Lurks the message that most other people are doing the undesirable behavior
- ◆ Potentially undermines our efforts to promote conservation

Social Norms

-- A constructive alternative

- ◆ Energy conservation--studies funded by Hewlett Foundation following the 2000 “energy crisis.”
- ◆ Statewide survey of Californians over 2 years (N~3000)
- ◆ Three primary reasons for conservation:
 - Environmental Protection (biospheric)
 - Social responsibility (altruistic)
 - Self interest (egoistic)
- ◆ “In deciding to conserve energy, how important is it that saving energy ...”

More Normative Social Influence

-- Household energy conservation



Note: These findings are based on a thesis by Jessica Nolan, with assistance from a team of CSUSM students, including: Matt Dorlaque, Dulce Contreras, Veronica Bresiño, Monica Tinajera, Nigel Hartfield, Leezel Nazareno, Ron Tilos and Christina Wade.

More Normative Social Influence

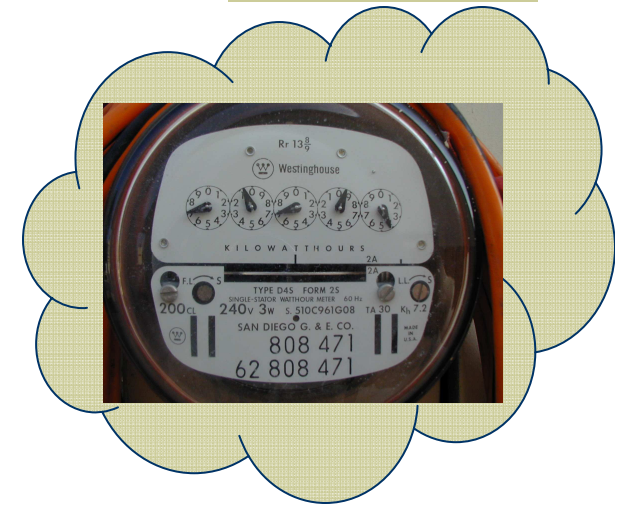
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More Normative Social Influence

-- Household energy conservation

- ◆ Experiment to test effectiveness of various messages
- ◆ Sample: 1207 households in San Marcos.
- ◆ Experimental conditions:
 - environmental,
 - financial,
 - social responsibility,
 - Information,
 - descriptive norms
- ◆ Delivered on doorhangers to households for 4 consecutive weeks.
- ◆ Door-to-door interviews with household residents, meter readings of electricity consumption.

Join your neighbors in conserving energy



Summer is here and most San Marcos residents are finding ways to conserve energy at home.

“How are most San Marcos residents conserving this summer?”

By using fans instead of A/C!



Why?

According to a recent telephone survey conducted by Cal State San Marcos, **77% of San Marcos residents said that they often use fans instead of air conditioning to keep cool in the summer.**

**Using fans instead of air conditioning –
San Marcos' Popular Choice!**



Please direct questions or comments to Jessica Nolan at CSUSM: 760.750.3022

Energy Conservation

Summer is here and the time is right to conserve energy

How can you conserve energy this summer?

By using fans instead of A/C!



Conservacion de energía

El verano esta aquí y es justo el tiempo para conservar energía

"¿Como podrá usted conservar energía este verano?"

¡Usando ventiladores en lugar de aire acondicionado!



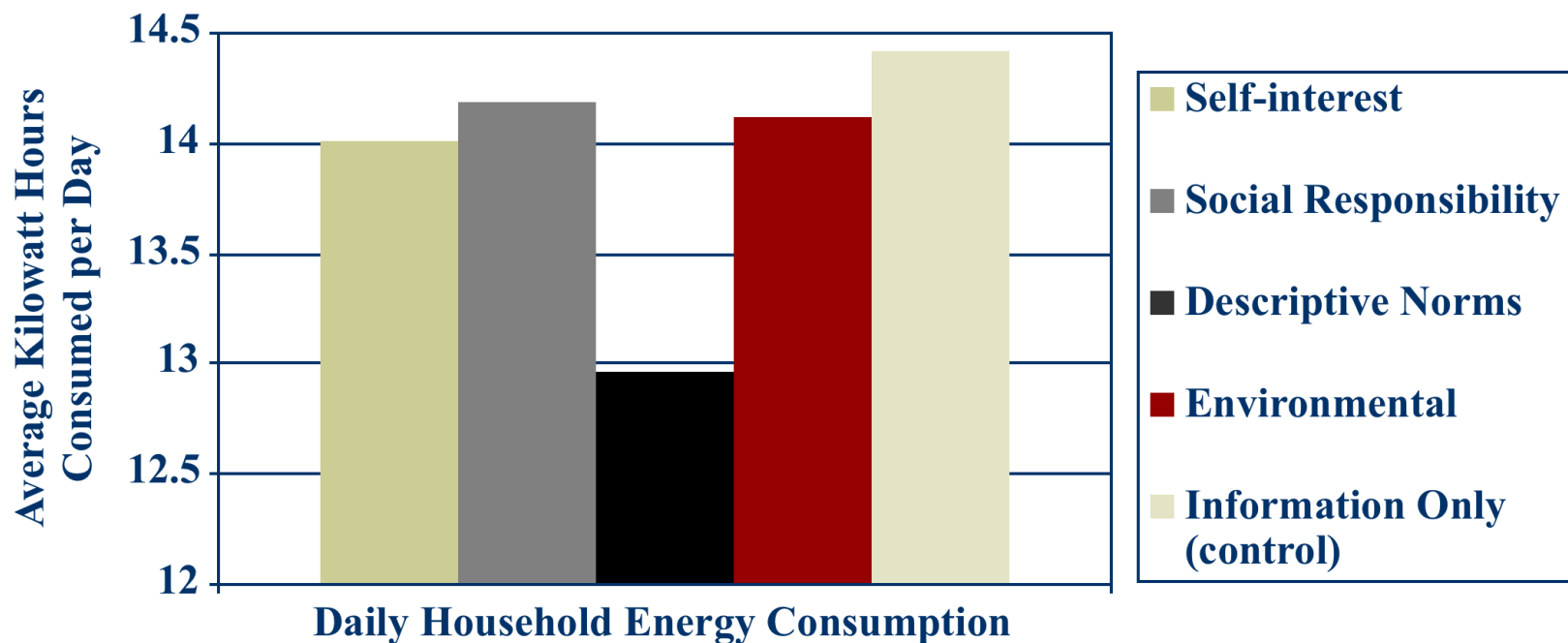
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Results:

Average daily household energy consumption during the intervention

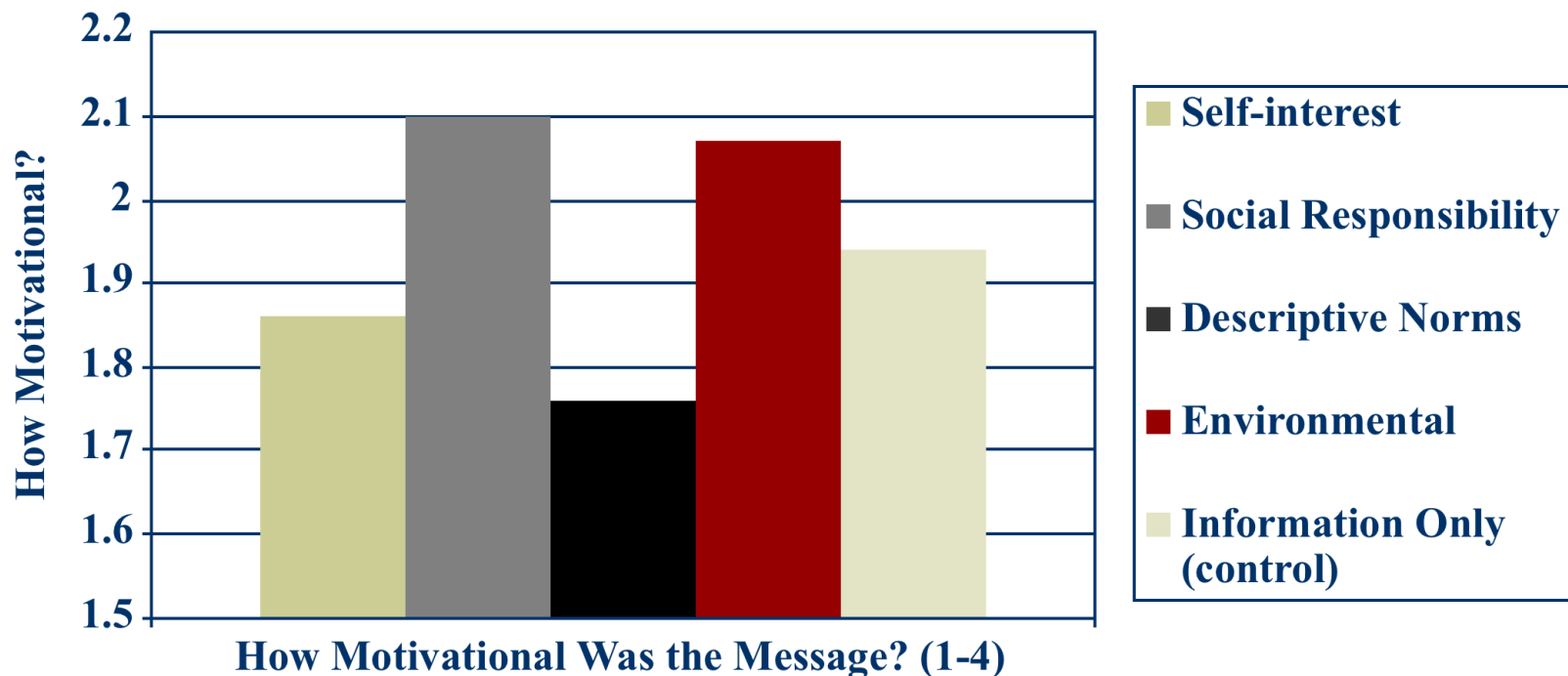


Results based on an ANCOVA using baseline consumption as a covariate. Pairwise comparisons show descriptive norms to be significantly lower than all other conditions.

Nolan, J., Schultz, P. W., Cialdini, R. B., Griskevicius, V., & Goldstein, N. (2008). Normative social influence is underdetected. *Personality and Social Psychology Bulletin*, 34, 913-923.

Results:

Q: “How much did the information on these doorhangers motivate you to conserve energy?” 1 (not at all) to 4 (extremely)



Results based on oneway ANOVA. Pairwise comparisons show descriptive norms to be significantly lower than environmental and social responsibility.

Nolan, J., Schultz, P. W., Cialdini, R. B., Griskevicius, V., & Goldstein, N. (2008). Normative social influence is underdetected. *Personality and Social Psychology Bulletin*, 34, 913-923.



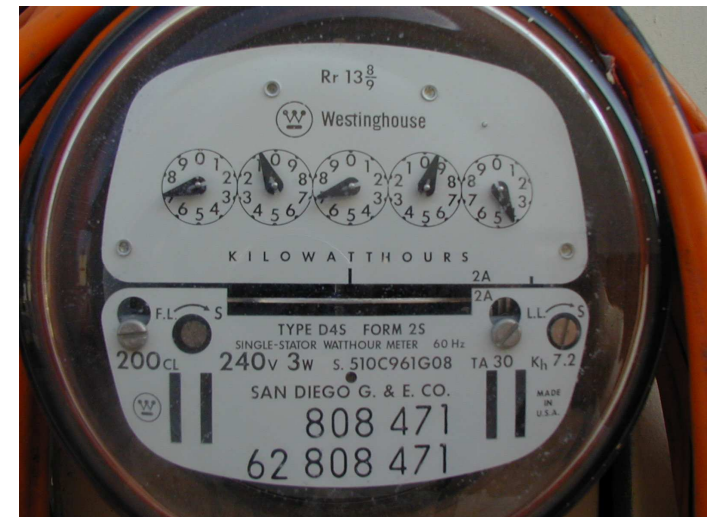
Normative Social Influence

- ◆ Our Results (constructive):
 - Can cause behavior
 - Not perceived as motivational
 - Apply to both private and public behavior
- ◆ Problems in Application (destructive)
 - Can serve as an anchor for folks already doing the behavior
 - Implemented incorrectly (awareness campaigns)

Normative Feedback

-Reconstructive

- ◆ Participants: 290 households with visible utility meters
- ◆ Distributed individual feedback and normative feedback to households for two consecutive weeks
- ◆ Conditions:
 - Usage level (above or below neighborhood average)
 - Emoticon (positive or negative 😊)



Energy Conservation: How Do You Measure Up?



Recently, researchers from Cal State San Marcos were in your neighborhood collecting information about energy consumption. Here is what we found out about households in the Woodland Park area:

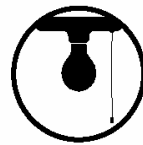
Electricity Consumption January 16-29, 2004	
Your household used:	Similar households in your neighborhood used:
kWh	kWh

Details about our measures: The results reported above are specific to your home and similar homes in your neighborhood, and were collected by researchers at CSUSM. Kilowatt Hours (kWh) are the units used to measure electricity consumption.

Last week, your household consumed **MORE / LESS** than other households in your neighborhood.

Here are some good ways to reduce your home energy consumption:

- Wear extra layers of clothing instead of using heat
- Turn off unnecessary lights
- Turn off your computer when not in use



Address: _____
This information has been provided to you because someone in your household completed a survey on home energy use over the summer. Please direct questions or comments to Jessica Nolan at CSUSM: 760.750.3022.



Energy Conservation: How Do You Measure Up?



Recently, researchers from Cal State San Marcos were in your neighborhood collecting information about energy consumption. Here is what we found out about households in Discovery Hills:

Electricity Consumption January 8-16, 2004	
Your household used:	Similar households in your neighborhood used:
kWh	kWh

Details about our measures: The results reported above are specific to your home and similar homes in your neighborhood, and were collected by researchers at CSUSM. Kilowatt Hours (kWh) are the units used to measure electricity consumption.

Last week, your household consumed **MORE / LESS** than other households in your neighborhood.

Here are some good ways to reduce your home energy consumption:

- Turn off the heat at night
- Turn off the TV when you leave the room
- Install energy saving light bulbs



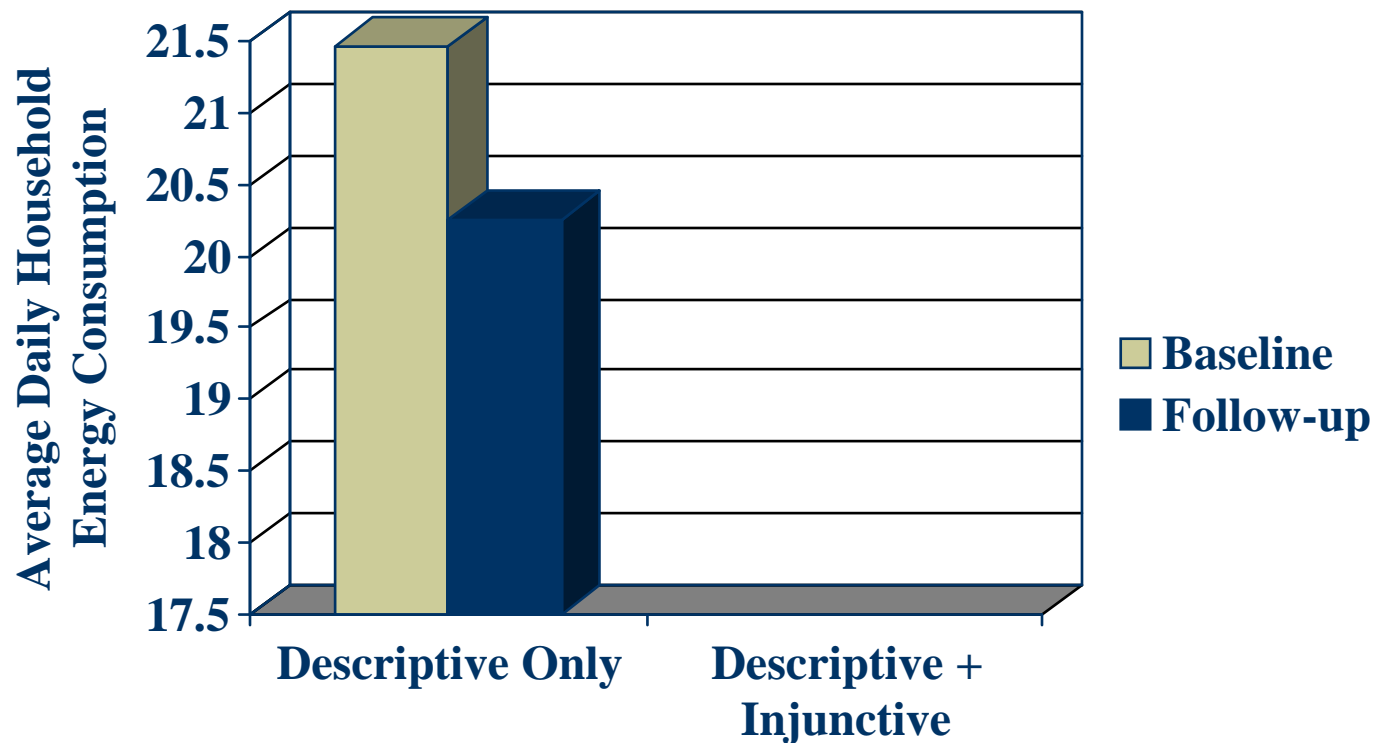
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Normative Social Influence

- Results

High Consumers ☹️

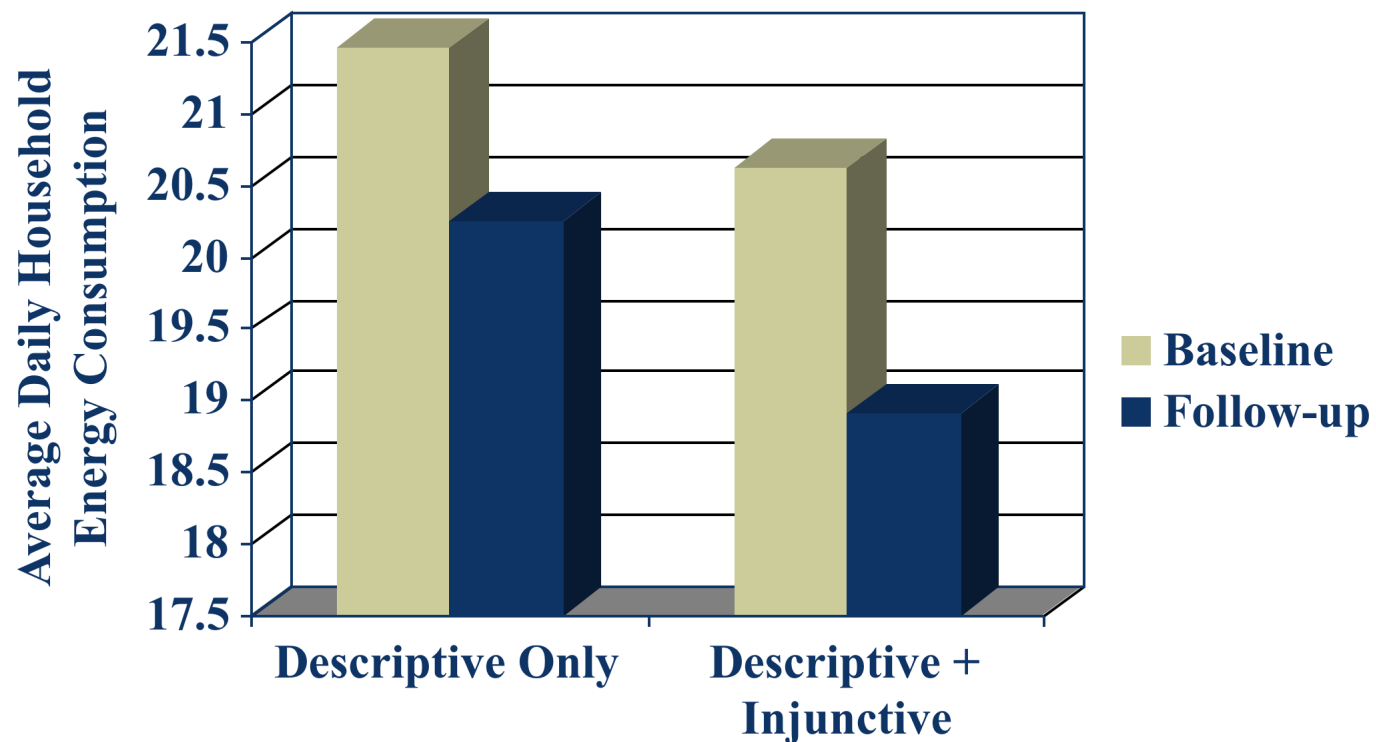


Schultz, P. W., Nolan, J., Cialdini, R., Goldstein, N., & Griskevicius, V. (2007). The constructive, destructive, and reconstructive power of social norms. *Psychological Science*, 18, 429-434.

Normative Social Influence

- Results

High Consumers ☹️

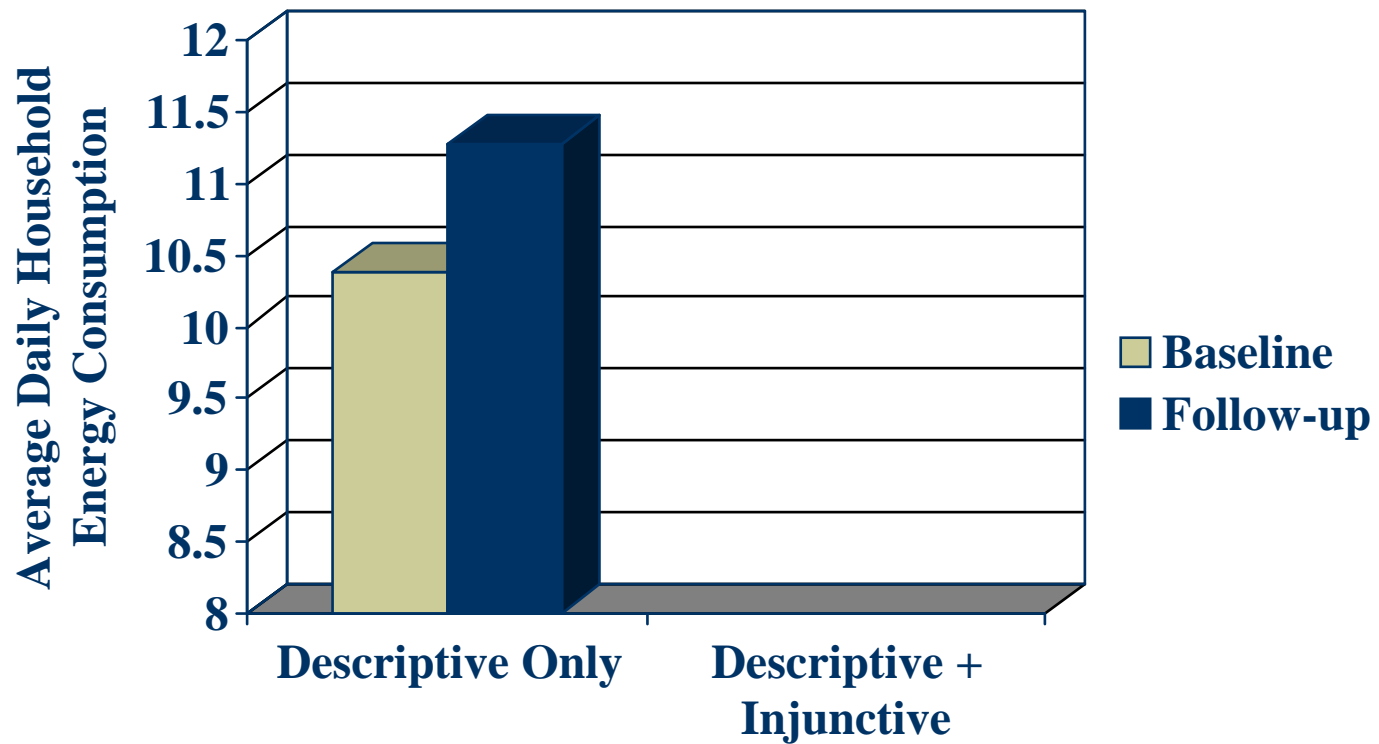


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Normative Social Influence

- Results

Low Consumers 😊

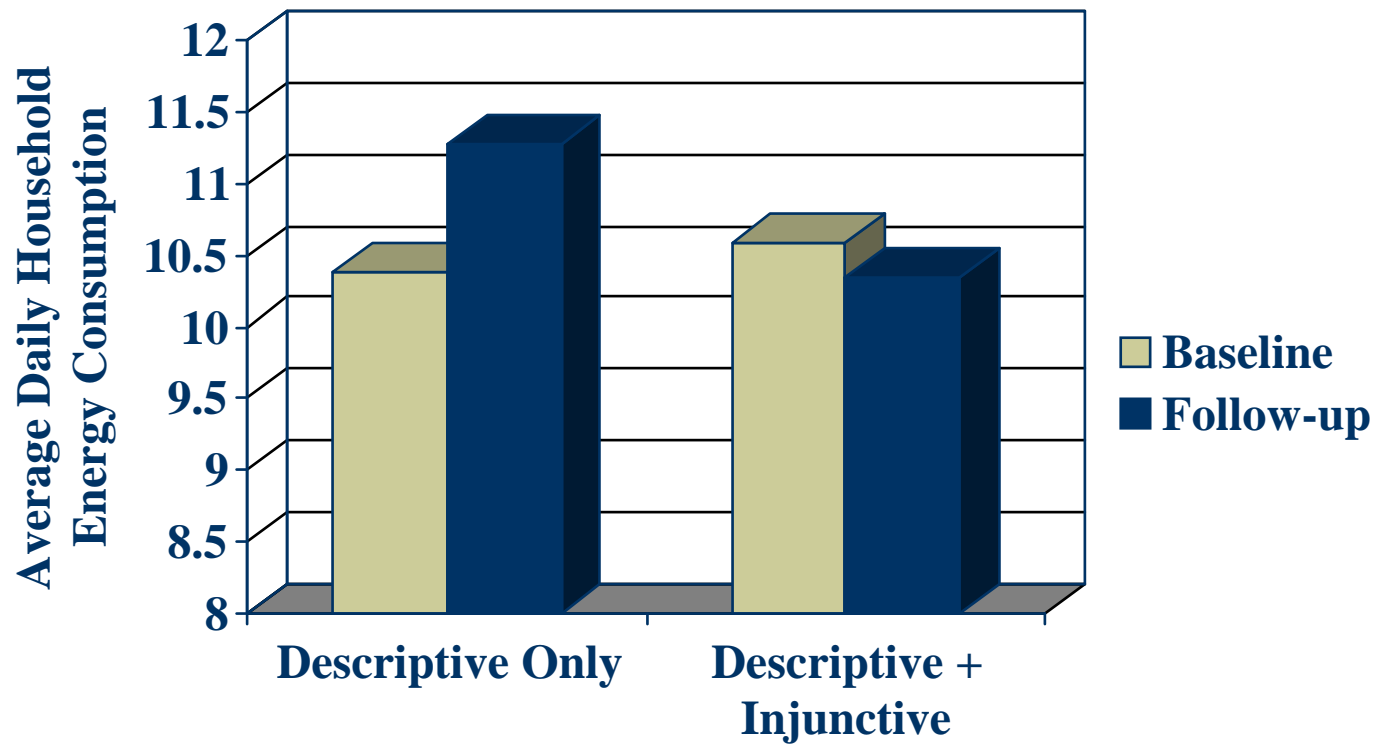


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Normative Social Influence

- Results

Low Consumers ☺



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Conclusions



- ◆ Normative beliefs can strongly influence behavior
- ◆ **Constructive:** Normative messages can be used as a tool to change behavior
- ◆ **Destructive:** We should be reconsider “awareness campaigns.”
- ◆ **Reconstructive:** We need to be careful in the application
- ◆ Important interface between basic researchers and applied interventions

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*Last Name

*Address Line 1

Address Line 2

*City

*State *Zip

E-mail

*Birthdate

Please indicate which, if any, of these conditions apply to you:

Diabetes High Blood Pressure High Cholesterol

*Deliver the kit & offer to me by:

U.S. Mail Online Both

*Do you wish Schering-Plough Corporation,



HOW MUCH DO YOU KNOW ABOUT STORMWATER POLLUTION?

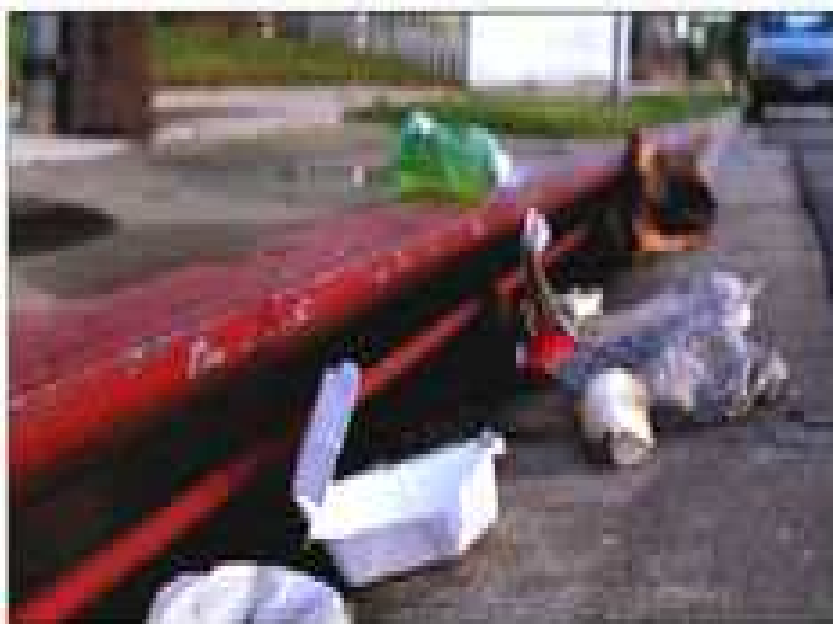
The following questionnaire is provided for you to self-test your knowledge of storm water pollution and encourage you to be part of the solution! (The statistics below were developed based on studies in other areas.)

1. Approximately how many residents pour something into the gutter or down a storm drain each month?

- A. Less than 3,500 residents each month
- B. Between 12,500 and 17,500 residents each month
- C. More than 25,000 residents each month

Answer: 12,500-17,500 residents

Solution: Recycle all hazardous waste including used motor oil, antifreeze and radiator fluid, paints, pesticides and household cleaners. Don't dump them into the storm drain -it's illegal. Call 303-316-6262 to learn how to dispose of household hazardous materials properly at the City-sponsored Rooney Road Recycling Center ([map](#)).



DON'T TRASH
CALIFORNIA

C A L T R A N S





References



- ◆ Göckeritz, S., Rendón, T., Schultz, P. W., Cialdini, R., Goldstein, N., & Griskevicius, V. (under review). Normative social influence: The moderating roles of personal involvement and injunctive normative beliefs. Under Review.
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- ◆ Schultz, P. W., Khazian, A., & Zaleski, A. (2008). Using normative social influence to promote conservation among hotel guests. *Social Influence, 3*, 4-23.
- ◆ Nolan, J., Schultz, P. W., Cialdini, R. B., Griskevicius, V., & Goldstein, N. (in press). Normative social influence is underdetected. *Personality and Social Psychology Bulletin*.
- ◆ Schultz, P. W. (1999). Changing behavior with normative feedback interventions: A field experiment of curbside recycling. *Basic and Applied Social Psychology, 21*, 25-36.

Survey Results

Table 3: Descriptive Results for Items Measuring Personal Motives

Items Measuring Personal Motives	Average Response of Sample*			% Breakdown of Responses			
	N	Mean	SD	Not at All	Some-what	Very	Extremely
In deciding to conserve energy, how important is it to you that it protects the natural environment?	2418	3.31	.76	2%	12%	38%	48%
In deciding to conserve energy, how important is it to you that it benefits society?	2423	3.15	.78	2%	18%	43%	37%
In deciding to conserve energy, how important is it to you that using less energy saves money?	2433	3.12	.75	1%	19%	46%	34%
In deciding to conserve energy, how important is it to you that a lot of other people are trying to conserve energy?	2422	2.90	.82	5%	24%	47%	24%
In deciding to conserve energy, how important is it to you that people approve of trying to conserve energy?	2419	2.80	.92	10%	24%	42%	24%

Field Implementation at a local Beach Resort



Note: My appreciation to the team of CSUSM students who worked on this experiment: Azar Khazian, Michelle Hynan, Joy Francisco, Christine Jarvis, and Jenny Tabanico.

Old Message:



Different Rooms



Hotel Study

-- New Message



Many of our guests have expressed to us their approval of conserving energy. When given the opportunity, nearly 75% of hotel guests choose to reuse their towels each day. Because so many guests value conservation and are in the habit of conserving, this hotel has initiated a conservation program.

Washing towels every day uses a lot of energy, so reusing towels is one way you can conserve.

If you would like your towels replaced, please leave your used towels in the basket on the bathroom floor. Towels left hanging on the towel rack tell us that you want to reuse them.

PLEASE REUSE YOUR TOWELS

* If you have questions, please call the front desk *

Social Norm Messages



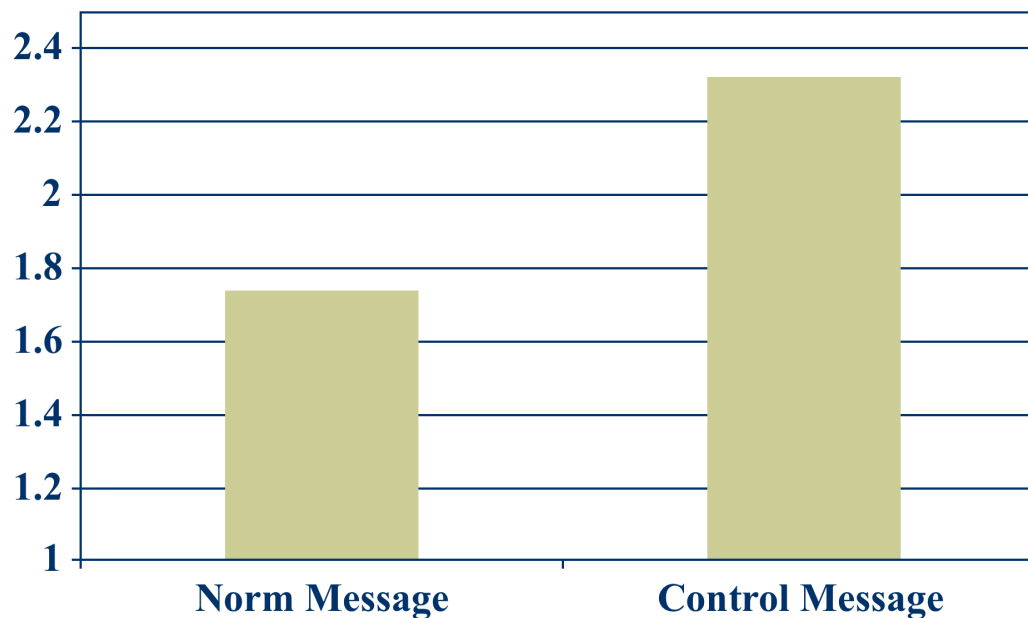


Intervention Implementation

- Study focused on 132 condo units (separate studies of hotel)
- Randomly assigned rooms to experimental ($N=102$) or control ($N=30$)
- Total of 794 guest “stays” were analyzed (each stay = 1 week)
- Number of towels taken from the room (continuous up to 4)

Results

Number of towels taken out of the room on the first towel replacement day.



$F(1,792)=13.40; p<.001$). A 25% reduction in the number of towels used!

Note: Data also tested in HLM with participant “nested” within room. $ICC=.07$;
At level 2, treatment effect ($\gamma_{01}=-.57, t(142.14)=-3.25, p<.001$)

Schultz, P. W., Khazian, A., & Zaleski, A. (2008). Using normative social influence to promote conservation among hotel guests. *Social Influence*, 3, 4-23.