

*Affective and values-related aspects of a
NGO's impact in motivating food-waste
recycling in China*

FUDAN SUSTAINABLE BEHAVIOR RESEARCH GROUP

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CONTEXT

- Food-waste recycling in Shanghai residential communities
- Street community → community committee → housing committee
 - Recruiting volunteers, placing new communal bins in 1-3 sites
- Implementation of waste sorting program
 - Kitchen wet waste bins distributed to residents, volunteers man the bins 2hr, twice/day for 1-3 months, lots of publicity about recycling food waste
- SBRG observed and carried out interviews

EXAMPLES FROM THE WASTE STATION



WHAT WERE WE LOOKING FOR?

- Main research question: Why were recycling rates so high?
- Using designed interviews and observations, checked for 12 determinants:
 1. Knowledge
 2. Skills
 3. Social / Professional Roles
 4. Beliefs About Capability
 5. Belief About Consequences
 6. Motivation
 7. Prompting
 8. Facilities
 9. Norms (Social Influences)
 10. Action Planning
 11. *Emotion*
 12. *Evolutionary Stage (Nature Of The Behaviours)*

Developed from the work of Michie et al.,
(2005)



FINDINGS

- In the core data, 67 interviewees spontaneously mentioned *xinku* or related concepts 38 times
 - Across all 12 topics, unprompted.
- Is this a new discovery in waste management?
 - Good behavior change is generally very difficult to achieve.
 - Recycling rates in these cases are “off the map unseen”, which is both exciting and worrying if unexplained.
 - Waste management does not have good frameworks to understand this.
 - Behavior change theory is either too complex, too vague, or both.

WHAT IS *XINKU*? Ex.1

- In our data, the concept of *xinku* has showed up in interviewee responses such as the following:
 - “In reality, they [the volunteers] are doing unnecessary work, we should rely upon self management to comply, sometimes when we go there, when they will meet us they will also say "thank you" to us, I say "no need to thank us," I say "you are also very *xinku*, especially standing in the cold weather and when there is strong wind.”
 - **“事实上他们都是多余的工作，应该我们就是自觉配合，有时候我们过去的时候，他们碰到我们也会跟我们说声谢谢，我说不用谢，我说你们也是挺*辛苦*的，特别是天冷站在外面风也是很大的。”**

WHAT IS *XINKU*? Ex.2

- “What is moving is the residential community's volunteers, when they first started, they worked every night until 2100, regardless of whether the weather was very cold or very hot, seeing them this way, **who would have the heart not to complete such a simple task well**, after all it has to be done well. They are very *xinku* like this, you must definitely do it well.”
- “**感动就是这个小区的志愿者，刚开始的时候，他们每天晚上值班值到九点钟，不管是很冷的天气或者很热的天气，看到他们这样子，谁还忍心这么简单的事情还不搞好呢，总归要搞好的。他们这样*辛苦*，肯定要搞好的。**”

WHAT IS *XINKU*? Ex.3

- “They all did it very well, I think they are very *xinku*, I always told them I'm sorry, I'm sorry, you all are too *xinku*, when I went down to take out the trash, they were very good, they would also help me with how to do it, how to empty it.”
- “他们都做的很好，我们觉得他们很*辛苦*，我一直跟他们说不好意思，不好意思，你们太*辛苦*了，我下去倒垃圾，他们很好的，还会帮你们怎么搞，怎么倒。”

BUT WHAT IS *XINKU* REALLY?

- Thematic coding of interviewee responses was used to divide *xinku* into four constituent parts: effort, hardship, lack of personal gain, and public good.
- Further, behavior change literature stresses the importance of ideas including guilt, empathy, self-efficacy, social norms, reparation, empathic responsiveness...
- From these concepts and thematic coding, we assembled further indicators of the *xinku* effect:
 - Interpersonal guilt
 - Societal guilt
 - Image-related guilt
 - Acknowledgement
 - Own effort, often relative
 - Hypothetical reciprocity
- Panhandler analogy

WHAT *XINKU* DOES NOT NECESSARILY REFLECT

- Respect
- Admiration
- The definite earning of status
- Guilt alone
- Pitiable or endearing
- **And occasionally, anything beyond politeness**

ANALYSIS

- *“What is moving is the residential community's volunteers, when they first started, they worked every night until 2100, regardless of whether the weather was very cold or very hot, seeing them this way, who would have the heart not to complete such a simple task well, after all it has to be done well. They are very xinku like this, you must definitely do it well.”*
- Determinants fit into three groups:
 - Most frequent: effort, hardship
 - Frequent: no personal gain, public good
 - Less frequent: final group

Xinku determinants: Given Example

Effort	x
Hardship	x
No personal gain	
Public good	
Interpersonal guilt	x
Societal guilt	
Image-related guilt	
Acknowledgement	x
Own effort, often relative	x
Hypothetical reciprocity	x
Politeness?	

SOMETIMES *XINKU* LOOKS LIKE:

- Basil's idea that empathy and self-efficacy create guilt (and mediate potentially negative reactions), which leads to donations
 - Self-efficacy: "individuals must perceive that they have the ability to perform a particular behavior before they are willing to make the attempt"
 - Empathy → increased guilt, decreased mistrust → increased donation intention
- *Xinku* as an interpersonal understanding, awareness of one's own relative effort, guilt, resulting reciprocity

SOMETIMES *XINKU* LOOKS LIKE:

- Dahl's finding that social connectedness can lead to a guilt response, which leads to pursuing reparative purchases
- In Dahl's example:
 1. Customer feels social connectedness with salesperson
 2. Customer perceives they have control over the purchase decision
 3. Customer does not purchase → guilt response → customer pursues reparative actions directed towards the salesperson specifically
- *Xinku* as an interpersonal understanding, awareness of one's own relative effort, reciprocity as an attempt to avoid guilt

SOMETIMES *XINKU* LOOKS LIKE:

- Fong's idea of an “empathic responsiveness” that results in higher giving to recipients viewed as “industrious”
- In Fong's example:
 1. Subjects are invited to donate to a real-life welfare recipient, with limited information about the recipient, either:
 - “Industrious”
 - “Lazy”
 - No information
 2. Donations to the “industrious”-indicated recipient profile were higher than to that representing “lazy”
- *Xinku* as an evaluation of another's effort and hardship, corresponding reciprocity

IMPLICATIONS FOR SHANGHAI

- Shanghai-based programs should leverage these advantages: plan *xinku* in, make *xinku* visible, etc.
 - Don't shy from accepting volunteers from elderly or student populations – they elicit *xinku*.
 - Volunteers should be unpaid and seen as such.
 - Increase personalization, story-telling, study visits.
 - Encourage spaces for person-to-person conversations.

IMPLICATIONS FOR BEHAVIOR CHANGE... GENERALLY

- The *xinku* effect is relevant to other fields such as health care compliance, energy use, sustainable living...
- The *xinku* effect and its constituents merit further exploration.
 - Does observed effort increase credibility or the value of the message?
 - Do hardship/suffering increase this further?
 - Does *xinku* make the requested behavior change appear small in comparison?
 - Is this what “I will if you will” [Defra] is intuitively based upon?

CONNECTION TO VALUES

- Traditionally, Waste Management has focused on logistics and activities.
- Traditionally, Behavior Change approaches focus on narrow aspects of values, if any, as pre-defined by the theories.
- Our approach:
 - spanned an 'complete' set of determinants relating to recycling behavior, with many open questions permitting rich answers
 - has revealed that key aspects for the residents are mainly values-based: the *xinku* effect is one of them.
- **This might suggest that recycling schemes which use a 'values-lens' to decide on approaches might be more effective.**
- We have not seen this idea explicitly put forward before.

THANK YOU!

- Questions, comments, other ideas?