

Motivations of Recycling Behavior: A Qualitative Study

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1. Summary

In February 2008 I conducted a set of brief interviews with individual residents of San Francisco concerning their motivations for participating in the city's (voluntary) separate food waste collection program. The objective of the study was to gain some basic insight into the language participants use and the stories they tell concerning their motivations for separating recyclables, specifically food waste.

Predictably, participants who separate their food waste from their regular trash talk about a concern for the environment. However, in many cases, environmental considerations are simply assumed and the foreground discourse focuses on issues of habit, identity, learning, and community. These findings suggest that the official focus on financial incentives and convenience to compel participation in food waste recycling does not map very closely to the actual experience of participants who have successfully undertaken a relatively demanding behavior change.



2. Approach

In order to achieve a state-mandated 75% diversion goal for municipal solid waste by 2010, the city of San Francisco introduced a food waste recycling program several years ago. According to NorCal, the garbage collection agency that carries out the separate collection of organics and composts them, the program is garnering a 40% participation rate. The agency cited a lack of convenience as the principal reason that participation rates are not higher.¹ A modest financial incentive is provided, by which all recyclables collection is free while there is a fee for garbage designated for landfill, based on the size of the can. This makes it possible that a family might drop a can size and qualify for a lower rate if they present food scraps separately from trash.

I was curious about the way people actually think and talk about their recycling behaviors, especially their handling of food waste, without the screen of interpretations offered by NorCal officials. I emailed a brief questionnaire² to my own network of acquaintances living in San Francisco. I followed up with a phone interview on the first 25 responses in which the participant identified him- or herself as a decision maker in the household waste management practices.

In the phone interview, I invited participants to tell me in more detail about their experiences separating food waste from trash as well as the reasons they do or do not participate in the organics recycling program. The goal was to elicit stories for analysis, without suggesting any particular discursive pattern or strategy to participants.

Participants cannot be taken as a representative sample of the San Francisco population, and their responses form no basis for conclusions about the *prevalence* of particular attitudes. It's worth noting that a preponderance of participants were female (19 out of 25), which may be a reflection of the fact that women are more likely than men to be in charge of food preparation and food waste. Ages ranged from 32 to 72, meaning that the youngest householders were not represented at all. In terms of socio-economic position, the sample skews upward. Reservations about quantitative validity aside, the responses afford some insight into the ways people make change for increased sustainability as refracted through these narratives.

In addition to the 25 telephone interviews, I received a string of emails from acquaintances of one of the interview participants. That participant forwarded my initial email inquiry to the cooperative pre-school community she belonged to. I didn't follow up the responses that ensued with additional phone interviews, but I note the community-based behavior in findings below because it offers an especially interesting example of how change for sustainability can come about.

3. General Findings

All 25 participants reported engaging in recycling behavior of some sort, and all participants appeared to find food waste recycling a laudable goal in principle and generally in line with their other recycling behaviors. Since all responses came from my own network, this is hardly surprising. It's possible I could have flushed out someone with a generally different stance, but not very likely.

Of the 25, only 12 currently separated food waste. It is worth noting that questions were phrased in such a way as to make no distinction between private food waste recycling efforts and participation in San Francisco's citywide program. One of the 12 separators was a backyard composter, while two others said they separated out food waste but did so by sending the scraps

¹ Telephone interview with Bob Besso, Waste Diversion Program Director at Norcal, January 31, 2008.

² For the questions in the questionnaire, see Appendix A.

down the garbage disposal and commingling with sewage instead.³ One participant indicated that she separated food scraps only about half the time.

Food Waste Separation Behavior		# of Participants
Currently separating		12
Not separating currently	Planning to separate (2)	13
	Used to separate (3)	
	Never separated (8)	

Table 1: Food waste separation behaviors

Of the 13 participants who did not currently separate food waste, one lived in a large apartment building where there were no arrangements to participate in San Francisco's food recycling program. Three had done so at one time but had suspended the practice, possibly temporarily. (A persistent ant problem had put a stop to separation in one case, another participant had recently moved and now found herself without her accustomed under-sink food waste bin, while a third had ended up in a dispute with neighbors over the smell of the green bin and eventually desisted.)

Two others were in the midst of preparations for private food waste recycling solution, one of them by backyard composting and the other by means of a vermicomposter because his yard was not large enough to accommodate a regular compost heap.

Clearly participation is not an all or nothing proposition. People can go back and forth in their behaviors depending on circumstances, participate some of the time, and experiment with different solutions. More insight into what helps them overcome the barriers to participation and transform the behavior into habit had best start with a better understanding of the barriers themselves.

4. Barriers to Participation

In line with NorCal's emphasis on convenience, the people who were not currently separating food waste talked quite a bit about the practical challenges, including smells, nuisances like ants, time constraints, disagreements with housemates and near neighbors over proper handling, and a general aversion to dealing with organic garbage without the aid of plastic bags.

Clearly, separating food waste is more challenging than separating aluminum cans or newspapers. The difficulty opens up the well-known attitude-behavior gap, by which people admit to concern about the environmental impact of their actions without making any changes to minimize, let alone reverse, that impact.⁴

A certain note of defeatism also pops up occasionally in the stories of participants who didn't separate their food waste. The participant who had stopped separating food scraps because the neighbors were bothered by the smell of his bin also noted that "I have seen the garbage

³ As far as I know, expert opinion is divided about the relative environmental impact of composting by garbage disposal compared to other trash disposal methods. While some favor the method as a way to keep organics out of the landfill, others raise doubts about using water as a transportation method. William Rathje and Cullen Murphy, *Rubbish! The Archaeology of Garbage* (2001) reviews the impact of kitchen garbage disposals on both landfill and sewage, pp. 171-74.

⁴ A recent survey conducted under the auspices of the RBRC suggests that more than half of Americans now suffer "green guilt," a feeling that appears to express itself only very weakly in behavior change. (see http://wasteage.com/news/Survey_green_guilt_RBRC/).



collectors just throw everything into the same compartment in the truck. This is not some story. I actually saw it. It's hard to care about recycling when you know it all ends up in the landfill regardless."

Interestingly, the stories of the participants who separate food waste just barely make reference to the inconveniences. Something fundamentally different propels them across the threshold of initial difficulty and transforms the challenge into habit. They don't sound likely to give up their behavior if they were to notice a collection crew throwing recyclables into a regular garbage truck.

I searched for common themes in the stories to begin to explore the shape and circumstances of their transformation.

5. Transitioning to a New Behavior

My primary interest was in how participants talked about the way they got started separating food scraps in a sustained manner. Inconveniences and financial incentives are very much downplayed by participants who have successfully made the transition to food waste separation. They tend to talk more about a sense of accomplishment and satisfaction.

5.1. Financial Incentives

Financial incentives play a big role in the standard incentive repertoire for sustainable behavior change. However, they only make one appearance in the stories of food waste separators, and the participant who mentions it explicitly gives it a subordinate status, mentioning it as "a nice perk" and as something of an afterthought. Here is the context in which she raises the financial aspect of her experience:

I learned from the other mothers at my kids' school what you can put in the green bin. You can even recycle paper plates and stuff. I feel much better now. You know, I used to worry about my garbage. I felt bad. It seemed like it was always so much. Often I could barely squeeze down the lid by the end of the week. I like the feeling of setting my stuff out by the street now. There is so much less of it. And it's a nice perk, that I pay less for garbage pickup too."

The financial incentive is indeed so small that it is unlikely to register with the vast majority of San Franciscans as anything more than a compliment for work well done, like a star on your report card. It is hardly surprising that it doesn't loom large in the stories I heard from these participants.

Two themes of identity and learning in community (as already broached in the story above) are much more powerful and common among the participants than financial incentives.

5.2. Identity: Rejecting an Outmoded Model

Different participants reflected on their recycling behaviors in general and food waste separation in particular in terms of their own sense of who they are. One participant noted that "I don't want to have to think of myself as the kind of person who just leaves his trash for future generations."

The perspective of future generations, as a lens on current behavior patterns that brings identity issues into focus, is mentioned with some frequency. "My kids are going to look back at us and wonder how we could do it," noted another participant, "just like we look back to our parents' generation and think, how could they just throw their trash in the water?"



Children come up as an essential element in the general frame of reference in multiple ways. One participant mentioned her college-age daughter bringing up her own environmental concerns: “She started talking about how she feels about all the environmental degradation, and I had to sit there and say, yes, that was us. We’re responsible for all of that.”

Two participants told stories about how their behavior changed in the wake of their (young) children coming home from school with new-found imperatives about sustainable behavior and all

the zeal of a new moral awareness. One participant explained that “your goose is cooked when your 8-year-old tells you you’re ruining the planet. You just have to get with the program then. You don’t want to look like a bad person in their eyes.”⁵

5.3. Learning in Community: Trying on a New Way to Be

The story quoted above, of the pre-school mother who learned from the school community how to deal with the practical challenges of separating food waste, brings up a regular theme. Almost everyone who successfully separates food scraps mentioned learning from someone they know—a friend, a relative, or a whole community.

A participant who relies on her kitchen disposal mentioned learning from her brother, a sanitary engineer, what happens to garbage in landfill. He was also the one who recommended using the disposal instead. Another instance concerned someone who learned what works from a spouse who had grown up with a compost heap, while a third mentions experimenting with flatmates until they developed a workable routine together:

“We were all pretty much committed to participating in the program, but it took a while before we had a routine. At first we weren’t sure what could go in the blue bin and often we forgot. I was really bad. I just threw stuff in the garbage a million times, and as soon as I did it, I would think, oh, geez ... Well, I’m not going to pull it out again. You know? That gets to be a bit much. And then we had to make sure someone took the little blue bin under the sink to the big blue bin outside before things got overly ripe. We had a few arguments and some fairly unpleasant kitchen situations for a while.”

The stories I heard suggested that the stronger the community in which the learning happens, the stronger the commitment to the resulting behavior. The participant who learned about separating food waste at her child’s preschool forwarded my initial inquiry to the preschool community. Fourteen other mothers emailed me to tell me about their own experiences, offering a highly instructive example of a community that had a ripple-effect on members. As the coop made a commitment to food waste recycling, parents had to learn how to implement the program. A high percentage took that knowledge home, almost as if the behavior and the developing competency activated a set of dormant values and offered a desired new identity.

Some of the language they used suggests that there is a connection between competency and identity in a mutually reinforcing dynamic. Only one participant talked about making the behavior change as one in which values dictated behavior. All the other stories suggested a more circular, iterative, non-linear pattern in which values were not irrelevant but often trailed behavior. The strongest example of such a pattern was offered by one of the preschool mothers, who mentioned that after learning about the practical challenges of food waste separation, she volunteered for the task of teaching others at the pre-school. When her children moved on to another school, she

⁵ These stories are balanced out by the frustrations of parents who struggle with their teenaged children over following general household rules to conserve energy, curb consumption, and handle waste responsibly.



volunteered to teach people how to go about food recycling. “I just became the expert, though I really hadn’t meant to,” she commented.

6. Conclusion

These findings suggest some patterns of behavior and meaning that deserve further investigation. Additional research is called for to validate the role of the themes identified here in the ways that people make behavioral changes for greater sustainability. However, even in this preliminary stage, findings suggest a middle road in presenting information about sustainable behavior that steers a middle course between the Scylla and Charydis of overt moralizing on the one hand and a complete abjuration of values in favor of a discourse of self-interest revolving around convenience and financial gain. Latent aspiration to “do the right thing” can come to life in the context of practical, community-based learning.



Appendix A

The initial emailed questionnaire contained the following questions:

1. Do you make decisions or participate in making decision in your household about how to handle garbage and recyclables?
2. Do you separate out any recyclables? What motivates your behavior?
3. Do you separate out any food waste? What motivates your behavior?
4. If you don't separate out food waste at this time, what would have to change for you to start doing so?

Appendix B: Overview of Phone Interview Participants

	Age	Sex	Behavior
P1	72	M	Currently separating
P2	55	M	Not separating
P3	36	F	Not separating
P4	39	F	Not separating
P5	32	F	Not separating
P6	51	F	Not separating
P7	40	F	Currently separating
P8	45	F	Not separating
P9	35	M	Currently separating
P10	44	M	Not separating
P11	32	F	Currently separating
P12	38	F	Currently separating
P13	46	F	Currently separating
P14	43	F	Currently separating
P15	52	F	Currently separating
P16	43	F	Currently separating
P17	73	M	Currently separating
P18	36	F	Not separating
P19	61	F	Not separating
P20	57	F	Not separating
P21	35	F	Currently separating
P22	47	M	Not separating
P23	53	F	Currently separating
P24	64	F	Not separating
P25	59	F	Not separating