ECOFEMINISM, WOMEN, AND THE SQUANDER CYCLE IN FOOD WASTE IN THE UNITED KINGDOM: EVALUATING THE INFLUENCE OF VALUES AND GENDER IN FOOD SHOPPING

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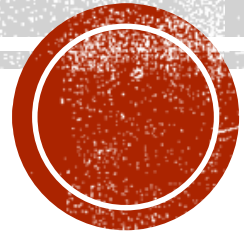

THE CONTEXT

- Food security and sustainable economies are often intertwined and linked with women, women's incomes, and women's values (Belahasen, et al., 2018; Dangour, 2018; Garcia and Wanner, 2017; Kasearu, Maestripieri, and Ranci, 2017; Reeves, Loopstra, and Stuckler, 2017).
- Women as majority in the environmental movements, defence of animals, etc. (Puleo, 2017, p. 27; Dimitropolous, 2018).
- Feminist economics versus ecofeminism – a difficult relationship
- "Although ecological economics has mushroomed as an area of inquiry, it has barely mentioned gender or women (…), just as feminist economics has largely ignored ecological concerns (Perkins et al, 2005, p. 108).

THE RATIONALE

- This paper examines the direct interconnections between gender, class, food security, sustainability and food waste, and value-driven choices.
- We link feminist economics and ecofeminism in the context of grocery shopping in the United Kingdom.
- Neither feminist economics neither ecofeminist approach exclusively
- **CENTRAL ASSUMPTION:**
- The earth is "being violated and degraded resulting in damage that is often irreparable, yet only a small proportion of humans have engaged their consciousness with this crisis" (Spretnak, 1988, p. 2) and also that sustainable living is necessary if we are to avoid environmental catastrophe, regardless of whether or not the importance of sustainability is recognised (Puleo, 2017).

THE RATIONALE

- Ecofeminism argues that the attitudes that lead to environmental degradation and women's oppression are grounded by the social construction of patriarchy where both women and nature are dominated as property (Adams, 2007; Besthorn & Pearson McMillen, 2002; Warren, 2000; Emel, 1995; Salleh, 1992).

- CSR, grocery shopping are hotly debated in the UK
- Shopping as a social suicide (Lowery, 2014; Topic & Tench, 2014)
- Persistent class inequality in the UK

RESEARCH QUESTIONS

- **Research Question 1:** Are there gender-based differences in food economy in the UK?
- **Research Question 2:** What factors contribute to women's evaluations of yellow-sticker food shopping?
- **Research Question 3:** What factors contribute to women's identification with reduced price shopping profiles?
- **Research Question 4:** What factors influence women's perceptions of food waste?

METHOD

- Smart Survey: 792 respondents from the UK (all regions)
- women 51%, men 49%
- a median income of approximately £30,000 (i.e., 41.6% of all participants had an income between £20,000 and 39,000 with the median in the £30,000 band).
- Expected household composition with mean household size of 2.7 people
- In addition to the demographic and socio-economic data, the questionnaire was comprised of questions evaluating the perceived quality of yellow sticker food, shopper profile; self-reported food waste behaviours, and value orientation along with some original measures adapted to the research context and questions.

METHOD

- An exploratory factor analysis was conducted, followed up by Cronbeck's alpha to verify the reliability of the measures resulting in the operationalisation of the study.
- All scales were five-point Likert style scales with 5 representing the highest value (i.e., most likely, strongly agree, etc.).
- ANOVA was run using gender as the independent variable and all outcome variables as dependent variables.
- For the remaining research questions, correlations were first run between each of the dependent variables and the independent variables to establish significant relationships and then hierarchical multiple regression tests were performed entering demographic IVs, then socio-economic IVs, shopping profiles, and then values, thus minimising multi-collinearity in the regression equations. Additionally, to further explore differences in womens' evaluation of yellow sticker shopping and shopping profiles for RQ2 and RQ3, paired t-Tests were run to further explore differences.

RESULTS

- **RQ1: Differences Between Men's and Women's Attitudes**
- Men and women do see grocery economy differently.
- Men seem to look for the best deals while maintaining the perceived highest quality food.
- Women seem to be focused on minimising potential money wasted by taking a more conservative approach to food spending decisions.
- Where there are differences in spending, men also seem to spend more money on groceries and have a significantly more negative evaluation of yellow-sticker food than do women.
- These results warrant analysing women's evaluations of food economy separately from men's. As such, our first assumption that food economy is a distinctive issue based on gender is verified by these data in the

RESULTS

- **RQ2: Factors Influencing Women's Evaluations of Yellow-Sticker Food Shopping**
- Overall, these data suggest that values are the most important predictors of the ways in which women evaluate yellow-sticker food shopping.
- However, the data also reveals that socio-economics also significantly influences how women evaluate yellow-sticker food shopping.

RESULTS

- **Positive attributes of yellow-sticker food.**
- Two variables were significantly correlated with positive attributes of yellow-sticker food – the value of social responsibility ($r = .14, p < .01$) and positive affect for environmentally friendly shopping ($r = .23, p < .01$)
- These data suggest that while core demographics and household characteristics do not meaningfully predict positive attributes that women make towards yellow-sticker food, values do.
- Specifically, the more that women identify with the values of social responsibility and environmentally-friendly shopping, the more likely they are to view yellow-sticker food as having positive attributes. This accounts for a small, but meaningful 5% of variance in women's attribute evaluations of yellow-sticker food.

RESULTS

- **Suitability of yellow-sticker food.**
- Four variables were significantly correlated with evaluations that yellow-sticker food is suitable for consumption in different settings – the total monthly spend on food shopping ($r = .11, p < .05$), the value of social responsibility ($r = .16, p < .01$), positive affect for environmentally friendly shopping ($r = .25, p < .01$), and the value of domination ($r = .15, p < .01$).
- These data suggest that while the total amount of money that women's households spend on grocery shopping each month is a significant predictor of their evaluation of the suitability of yellow-sticker food for consumption, it only accounts for approximately one-percent of the variance in this evaluation. Women's values are a much more important predictor of this evaluation.
- Though significantly correlated, valuing social responsibility does not significantly predict suitability evaluations of yellow-sticker food. However, valuing environmentally friendly shopping and domination values are more meaningful predictors, accounting for an additional eight percent of the variance in women's suitability attitudes.

RESULTS

- **Overall quality impressions of yellow-sticker food.**
- Three variables were significantly correlated with the overall quality impressions of yellow-sticker food – education ($r = .12, p < .05$), the value of social responsibility ($r = .14, p < .01$), and positive affect for environmentally friendly shopping ($r = .24, p < .01$).
- These data suggest that women who are more educated are more likely to view yellow-sticker food as having a higher overall quality compared to those with less education. This had a relatively weak effect, only predicting about one percent of the variance in women's attitudes about the quality.
- Additionally, while social responsibility is significantly correlated with women's evaluations of the overall quality of yellow-sticker food, it was not a significant predictor in the regression model. However, valuing environmentally-friendly shopping was a significant and more meaningful predictor of women's attitudes about the overall quality of yellow-sticker food, accounting for six percent of the variance.

RESULTS

- **Negative evaluation of yellow-sticker food.**
- Six variables were significantly correlated with the negative evaluation of yellow-sticker food – age (r = -.14, p < .01), education (r = -.13, p < .01), the number of people living in a household (r = .14, p < .01), the value of social responsibility (r = -.22, p < .01), the value of domination (r = .21, p < .01), and anti-environmental attitudes (r = .43, p < .01).
- These data suggest that personal demographics, household demographics, and values all significantly predict negative evaluations of yellow-sticker food, with values being the most important predictor. Initially, young women and those with less education are significantly more likely to hold negative attitudes about yellow-sticker food, accounting for four percent of the variance.

RESULTS

- **Women's core attitudes about yellow-sticker shopping.**
- Overall, the *t-test* confirms that there is a significantly more positive feeling about yellow-sticker shopping than negative evaluation of it.
- Overall quality assessments of yellow sticker food are significantly higher than any other measure of women's evaluations of yellow-sticker food suggesting that generally speaking, women to see it as being high quality.

RESULTS

- **RQ3: Factors Explaining Women's Reduced-Price Food Shopping Habits**
- While it is useful to understand how women view food that is reduced price; better understanding their reduced-price shopping habits also provides insight into the squander cycle.
- Overall, these data suggest that both socio-economic factors and values significantly influence how women define their approach to reduced-price food shopping

RESULTS

- **Strategic reduced price shopper.**
- The strategic reduced price shopper (see Table 2) hunts good bargains, often going to multiple grocery stores. Six variables were significantly correlated with the strategic reduced price shopper – age (r = -.16, p < .01), number of people living in the household (r = .21, p < .01), the value of social responsibility (r = -.12, p < .05), positive affect for environmentally friendly shopping (r = .14, p < .01), the value of domination (r = .23, p < .01), as well as anti-environmental attitudes (r = .35, p < .01).
- These data suggest that household demographics and values influence whether women are likely to identify with being a strategic reduced-price shopper. W
- omen who live in larger households are more likely to be strategic reduced-price shoppers. Though age and social responsibility were significantly correlated with this shopper profile, they were not significant predictors in the regression model.

RESULTS

- **Value shopper.**
- The value shopper is focused on reducing food waste within their household and so relies on frozen versus fresh food and looks for the best value for money spent. Eight variables were significantly correlated with the value shopper – age (r = -.22, p < .01), number of people living in the household (r = .21, p < .01), education (r = .11, p < .05), employment (r = .11, p < .05), the value of social responsibility (r = .10, p < .05), positive affect for environmentally friendly shopping (r = .16, p < .01), the value of domination (r = .20, p < .01), as well as anti-environmental attitudes (r = .23, p < .01).
- These data found personal demographics, household demographics, and values all significantly predicted women's identification with being 'value shoppers

RESULTS

- **Shoppers minimising food waste.**
- The shopper who prioritises minimising food waste (see Table 2), are often shopping browsers who do focus their food consumption priorities on using short-dated food to avoid spoilage. Four variables were significantly correlated with the shopper who minimises food waste – the monthly grocery spend ($r = .12, p < .05$), the value of social responsibility ($r = .38, p < .01$), the value of environmentally friendly buying ($r = .34, p < .01$), and anti-environmental attitudes ($r = -.14, p < .01$).
- These data suggest that the more that women who spend on food each month, the more likely they were to adopt a shopping strategy to minimise food waste. Likewise, women with values of social responsibility and environmentally friendly shopping were also more likely to identify with this shopping strategy.
- Though anti-environmental attitudes were correlated, they did not predict the strategy in the regression model. Overall, these data account for 19 percent of the variance.

RESULTS

- **Yellow-sticker target shopper.**
- The yellow-sticker target shopper's strategy with food shopping centres on the best locations to buy price-reduced food.
- Five variables were significantly correlated with yellow-sticker target shoppers – age (r = -.15, p < .01), the number of people in the household (r = .18, p < .01), positive affect for environmentally-friendly shopping (r = .23, p < .01), the value of domination (r = .20, p < .01), and anti-environmental attitudes (r = .21, p < .01).
- These data suggest that household demographics and values influence women's identification with yellow-sticker target shopping.
- While age was significantly correlated, it was a not a significant predictor in the regression model. However, the larger their household, the more likely women were to identify with being a yellow-sticker target shopper.

RESULTS

- **Impulse sale shopper.**
- The impulse sale shopper is likely to buy food items they would not ordinarily buy because they are price-reduced, typically browsing for sales or what they perceive as good deals.
- Four variables were significantly correlated with impulse sale shoppers – age (r = -.20, p < .01), the number of people in the household (r = .13, p < .05), the value of domination (r = .21, p < .01), and anti-environmental attitudes (r = .23, p < .01).
- These data suggest that both individual factors and values predict whether women will identify with being impulse sale shoppers. Women who are younger, seek control, and are anti-environmental are more likely to be impulse sale shoppers. This accounts for nine percent of the variance in impulse sale shopping.

RESULTS

- **Differences in women's overall identification with food shopping profiles.**
- Overall, these data suggest that women most identify with food shopping strategies that minimise food waste and least identify with the strategic reduced price shopping strategy. More importantly, these data also confirm that women value food economy overall.

RESULTS

- **RQ4: Factors Influencing Women's Perceptions of Food Waste**
- As we layer the complexity of women's approaches to the squander cycle, the final element to understanding this initial exploration of the cycle is to better understand those factors influencing women's perceptions of food waste.
- These data demonstrate that socio-economics and values both influences perceptions of food waste.