What factors influence Chinese university students' food waste behavior?

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Food waste is a major social problem that contributes to the overutilization of natural resources, affecting economic progress and environment protection. Food waste occurs at all stages of the food supply chain, including production, transportation processing and consumption. Reducing food waste in the consumption stage has been an important goal attracting global concerns.
University students are a crucial and special group of food consumers and their food waste behavior in university deserves more attention. Hence, identifying the factors affecting university students' food waste behavior in canteens can provide insight of great scientific significance for reducing food waste among college students.

Previous research demonstrates that the theory of planned behavior is effective to understand behavioral patterns of consumers. Therefore, how to apply the theory of planned behavior to explain students' food waste behavior in Chinese university canteens has become a research priority for the Academy of Global Food Economics and Policy at China Agricultural University.

In this study, their team investigated the actual situation of food waste at China Agricultural University canteens in Beijing, China. The results of field survey indicate that the percentage of students who waste food in canteens is relatively low, at roughly 27%. They expand the theory of planned behavior to better explain the students' food waste behavior.

They group the influencing factors of students' food waste behavior into three categories: sociopsychological factors, individual characteristics and dining factors, and construct a theoretical model based on the expanded theory of planned behavior.

Compared to previous research, their study chooses a more comprehensive research perspective to measure the impact of three types of factors on students' food waste behavior in university canteens and they incorporate the students' environmental awareness in the theoretical model to study whether students' environmental awareness affects the intention to waste food.

Empirical evidence reveals that perceived behavior control, gender, monthly living expenses, BMI, mealtime, meal expectations and food
portion are significantly correlated with students' food waste behavior, among which perceived behavior control has the most prominent correlation, followed by food portion, which mean that the correlation between students' personal experience, expectation and food waste behavior is the most obvious.

Behavior intention, household location and palatability are not significantly correlated with students' food waste behavior.

In summary, the expended theory of planned behavior has a moderate capacity to explain the food waste behavior of university students in China. Nonetheless, the food waste behavior of students is still related to individual differences and dining factors. Priorities should be placed on objective factors such as school cafeteria management with regard to food portions and mealtimes in order to promote food waste reduction in colleges and universities.

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