Everyday Life Behavior and the Environment: The Role of Self-Interest, Conditions and Learning in Personal Transportation Choices
Dissertation, Matt Biggar
Stanford University Graduate School of Education
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ABSTRACT

Engaging individuals in environmentally related behaviors is critical to addressing today's pressing environmental challenges. This dissertation—which is comprised of three related studies—examines transportation behavior, as a case of everyday life behavior with a large aggregate impact on the environment and society. The studies address gaps in research on environmental behavior, particularly sustainable transportation behavior, by examining the role of different conditions on transportation mode choices and drawing on literature from areas related to human learning and behavior such as participation, intrinsic motivation, and situated learning. Through narrative interviews, field observation, short oral surveys, participant documentation of transportation behavior, and document analysis, primarily qualitative data were gathered and used to analyze conditions and other factors that influence transportation behavior and the mechanisms of those influences. A longitudinal approach was taken to gathering data in the first two studies; this approach allowed the overall data to be understood in a broader temporal context. In the first two studies, small, purposeful samples facilitated a deep dive into each study subject's transportation behavior and related thinking. The data on each individual were then compared and aggregated across subjects within each study. The third study used a similar approach but at the group, rather than individual, level. Through methods and protocols focused on eliciting current thinking and behavior, nuances of everyday life behavior were revealed, highlighting the convergence of daily demands, human needs, perceptions, and conditions in influencing one's behavior.

In the first study, the influence of conditions was studied through five individual cases involving attempted change in personal transportation behavior over a one-year period. The amount and intensity of supportive conditions relative to barriers were found to influence the degree of engagement with sustainable transportation choices. Participants who regularly engaged in sustainable transportation behavior experienced physical and social conditions that promoted competence and satisfaction. Learning certain types of knowledge and competence through direct experience and from others facilitated undertaking, and sustaining, environmentally friendly behaviors. Satisfaction that was both practical and life-enhancing helped individuals maintain motivation and engage in sustainable transportation behavior. This study's findings also highlighted the important role of social conditions, whether acting as a support or barrier, in influencing personal transportation behavior, providing a basis for further inquiry in the second study.

The second study—which focused on a workplace-based commute alternative program—examined the role of transportation-related social context and past transportation experience in commute mode choice. Narrative interviews and a commute documentation activity were conducted with five participants and five non-participants in the program over a three-month period. The study was designed to focus on one workplace and using a purposive sample; this allowed for holding the demographic factors and residential location constant by matching participants with non-participants. In this way, the analyses were able to identify and examine more subtle influences on behavior. The commute behavior and attitudes of social ties were found to be related to individual perceptions and attitudes toward commute alternatives and helpful in explaining choice of commute mode. A sense of participation with similar commuters was another influential social mechanism with individuals who reported participating in alternative

commuting. Past transportation experience, mediated by perceptions, attitudes, and navigational competence, also related to commute mode choice. The situational relevance of both past transportation experience and social ties' commute behavior were important in whether these factors influenced commute mode choice.

The third study built on the first two studies by examining the influence of community-level conditions on community transportation patterns and analyzing the fulfillment of different human needs as potential mediating variables. In this study, communities consisted of specific groups of people who generally lived near one another and shared demographic characteristics or similar interests (e.g. senior citizens, college students, or community service club members). Data were collected through 14 modified focus groups, or "community listening sessions." Three types of transportation orientation in communities were found: (1) car-dominant, (2) mixed-mode, and (3) sustainable transportation-oriented. In all three types, physical and sociocultural conditions that met different practical needs related to community transportation patterns. In sustainable transportation-oriented communities and some mixed-mode communities, conditions related to sustainable transportation modes also met psychological needs, such as connecting with others and enhancing the quality of life. Sociocultural barriers, particularly the cultural norm of driving and time-related pressure, and physical barriers were hard for individuals to overcome in car-dominant communities. Groups from these communities discussed dilemmas related to concern for the environment and interest in driving less but felt unable to change their driving habits.

These three studies collectively reveal how different social, cultural, physical, and learning conditions can be supportive and also can act as barriers to sustainable transportation behavior. Specific perceptions and attitudes; types of knowledge and competence; and types of satisfaction were found to mediate the influence of different types of conditions on transportation mode choices. To a certain extent, most participants chose a transportation mode that they felt most effectively fulfilled their self-interest in managing daily life, meeting their needs for efficiency, convenience, dependability, comfort, and safety. Individuals regularly engaged in sustainable transportation behaviors did not feel they had sacrificed practical needs or types of satisfaction to travel in this way. Furthermore, these individuals often derived satisfaction and met needs beyond those at the practical level, thus enhancing their life through benefits such as experiencing improved health, connecting with others or their community, experiencing a sense of joy, or feeling a sense of contributing to something beyond themselves through their choice of transportation behavior. For many individuals and communities, however, barriers in the form of varied conditions made it hard for sustainable transportation to meet mostly practical needs of everyday life. Overall, the findings suggest the importance of conditions that appeal to motivations other than those that are directly environmental and those that bring together individual self-interest with environmental behavior.

Implications for designing social or educational interventions include matching individuals by situational relevance; providing time for individuals to plan and practice these behaviors; distributing navigational knowledge among individuals using a particular mode; and timing interventions to initiate with significant contextual and/or life-stage changes for individuals, such as new job, new residence or becoming an 'empty nester'. The findings also suggest the importance of locating interventions, or opportunities to learn new behaviors, in real-life settings such as through commute alternative programs in workplace settings. Due to the strong, pervasive influence of varied conditions on everyday life behavior, a final implication is the need for a multi-sector, collaborative approach at a community or regional level to coordinate and work toward changing conditions to better support environmental behavior. This combination of theoretical and practical contributions suggests that, with supportive conditions for sustainable transportation, individual, community, and environmental well-being can coincide.