Motivation and Self-Efficacy Explain Professional Landscape Service Users' Intention to Request Wildlife-Friendly Landscape Maintenance

Introduction

Urban land cover is projected to increase by 200%, and the global urban population is expected to increase by 70% between 2000 and 2030 (Fragkias et al., 2013). Although urban expansion continues to threaten natural habitats, well-managed urban green spaces can provide important refuges for pollinators and other wildlife (Callaghan et al., 2018). The extent to which these spaces support wildlife depends largely on landscape management decisions (Paker et al., 2014). In the United States, private residential yards constitute a substantial share of urban green space, underscoring the importance of homeowner landscape maintenance practices (Hordley & Fox, 2024). Previous studies indicate that 40–80% of homeowners rely on professional landscape services (Khachatryan et al., 2021; Warner et al., 2020). Therefore, our study examined landscape maintenance decisions in private residential yards in Florida, focusing on factors that shape professional service users' readiness to request wildlife-friendly landscape maintenance (WFLM).

Theoretical Framework and Research Hypotheses

Behavior change, according to the Transtheoretical Model (hereafter, TTM), follows five stages where an individual may be: not ready for change (pre-contemplation), getting ready for change (contemplation), ready for change (preparation), making a change (action), and sustaining a change (maintenance) (Prochaska & DiClemente, 1982). Progression through these five stages is expected to occur only when a person's assessment of potential pros and cons of taking action, formally known as decisional balance, supports it (Prochaska, 2008). In this study, we operationalized pros and cons as motivators and barriers. Our research focused on behavioral intent, which aligns with the preparation stage within the TTM. An individual in the preparation stage intends to take action relatively soon, especially when perceived motivators outweigh the perceived barriers (Prochaska, 2008). In addition, the transition from pre-contemplation to the action and maintenance stage is accompanied by increased self-efficacy (Prochaska & Di Clemente, 1982). Thus, our study aimed to investigate the effect of perceptions of barriers, motivation, and self-efficacy on a professional service users' intentions to request wildlife-friendly landscape maintenance services. The primary research question guiding this study was: How do perceived barriers, motivation, and self-efficacy influence behavioral intentions? We proposed four hypotheses as follows:

1. H1: Perceptions of motivating factor relates positively to intent to request WFLM practices from hired professionals
2. H2: Perceptions of barrier factor relates negatively to intent to request WFLM practices from hired professionals
3. H3: Self-efficacy relates positively to intent to request WFLM practices from hired professionals
4. H4: Barrier mediates the relationship between self-efficacy and intent to request WFLM practices from hired professionals.

Methods

We employed a cross-sectional survey research design to collect data (Creswell & Creswell, 2017). A non-probability quota-based sampling approach was employed to recruit

adults with lawns or yards who hired green industry professionals for landscape maintenance services (Baker et al., 2013). We asked participants to rate their level of agreement or disagreement with a literature review-informed list of 22 barriers and 14 motivator statements on a five-point Likert scale, ranging from "*Not at all a motivator/barrier*" (1) to "*A very strong motivator/barrier*" (5). Similarly, behavioral intention to request WFLM was measured using three statements adapted from Armitage et al. (2004) and Ajzen (2002). Self-efficacy was measured using six different items adapted from Doran et al. (2022). Participants' responses to both behavioral intention and self-efficacy items were measured on a five-point Likert scale ranging from *Strongly Disagree (-2) to Strongly Agree* (2). The survey was reviewed by a panel of experts, and a pilot test was conducted with a small sample of the target population. A total of 1,219 completed responses were used for formal analysis, following the two-step framework of Anderson and Gerbing (1988). A confirmatory factor analysis (CFA) was first conducted in R (version 4.4.1) to assess the adequacy of our measurement model and then structural equation modeling (SEM) was employed to evaluate the fitness of our data with the hypothesized model (Kline, 2023).

Results

Examination of our measurement model revealed that all factor loadings exceeded 0.50 and were significant ($p < .001$), indicating strong construct measurement (Hair et al., 2019). Average variance extracted values were 0.5 or higher, confirming the convergent validity of the latent variables (Hair et al., 2019). The correlations among the latent variables were below the 0.85 threshold, supporting divergent validity (Fornell & Larcker, 1981). The *CFI* and *TLI* values for our structural model were 0.847 and 0.839, suggesting a marginally acceptable model. The *RMSEA* and *SRMR* values were 0.069 and 0.080. Motivation and self-efficacy had a positive, significant direct effect on behavioral intention to request wildlife-friendly landscape services. However, self-efficacy did not have a significant effect on the barriers. The barrier index had a non-significant direct effect on the behavioral intent index, and its mediating effect on the relationship between self-efficacy and intention was also non-significant. We failed to reject hypotheses H1 and H3, but we did reject hypotheses H2 and H4. Overall, the hypothesized model explains 63% of the variance in the behavioral intention index and 1.0% of the variance in the barrier index.

Conclusions and Implications

Motivation emerged as the strongest predictor, implying that increased perceived motivation would strengthen an individual’s intention to request WFLM practices from landscape professionals. Our findings align with Darner (2009) in that motivation is a key driver of pro-environmental behaviors and is widely used by environmental education programs. Self-efficacy was the second most important predictor of residents’ behavioral intention, implying that increased self-efficacy should lead to greater intention to request WFLM practices from landscape professionals. Our findings align with Prochaska and DiClemente's (1982) description of the role of self-efficacy in progressing from pre-contemplation to the action stage and ultimately in sustaining behavior. These findings suggest that educational and skill-building programs should be prioritized to enhance individuals’ motivation and confidence to request wildlife-friendly services from landscape professionals.

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