

Financial Self-regulation: How Does Expense-Tracking Inform Financial Behaviors?

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Individuals may encounter numerous temptations in their daily lives, which may conflict with their financial goals. Failing to execute self-control to resist these temptations can lead to negative financial outcomes, such as overspending. Such outcomes not only hinder financial well-being but also have broader implications for life and social aspects, including strained family relationships, stress, poor personal health, and lower life satisfaction (Bearden & Haws, 2012; Diener & Biswas-Diener, 2002; Gutter & Copur, 2011; Hayhoe et al., 2000; O'Neill et al., 2005; Xiao et al., 2014).

Tracking one's expenses can assist with financial self-control if it is treated as self-regulatory behavior within the context of financial self-regulation. Self-regulation refers to a dynamic process of identifying a desired end state and working toward it while keeping track of progress along the way (Carver & Scheier, 1998). Despite the importance of expense-tracking, there are significant gaps in the existing literature. First, expense-tracking has mainly been studied within the mental budgeting domain as a behavior to support budgeting (Heath & Soll, 1996; Thaler, 1985, 1999; Zhang & Sussman, 2018), instead of a self-regulatory behavior. Moreover, previous research in this domain has mainly centered around the challenges of recording expenditures (Barsalou, 1991; Gourville, 1998; Sussman et al., 2015; Sussman & Alter, 2012), and often conducted in laboratory settings (Zhang & Sussman, 2018) with limited exploration of how individuals track spending in real-world contexts. Second, while financial goal setting is a common practice, research on self-regulation has predominantly focused on education (Duckworth et al., 2016, 2019) and health goals (Burke et al., 2011; Mairs & Mullan, 2015; Thompson-Felty & Johnston, 2017; Todd & Mullan, 2014), such as academic achievement, weight loss, and sleep. There is a lack of research specifically addressing financial self-regulation, and existing studies have a narrow scope, primarily examining general self-regulation strategies (Peetz & Davydenko, 2022) and factors associated with self-regulation in financial decision-making (Howlett et al., 2008; Palmer et al., 2021).

This paper examines expense-tracking as a self-regulatory behavior within the financial self-regulation context and investigates how expense-tracking informs financial behaviors. Drawing on self-regulation and mental budgeting theories, I hypothesize that expense-tracking collects personal spending data, which provides critical feedback for (a) evaluating whether one's spending is aligned with their financial goals and (b) adjusting financial goals. Since expense-tracking provides personal spending information, which needs to be recognized to change individuals' subsequent behavior, I also propose that financial self-awareness mediates the impact of expense-tracking on financial behaviors.

This paper involves two studies. In Study 1, I used novel user data from a Chinese financial app where users can manually record their income and expenses, set spending limits, and perform basic spending analyses. The findings indicate that expense-tracking is associated with a reduction in the share of discretionary spending (Analysis 1), an increase in budget slack (Analysis 2), and making budget adjustments accordingly (Analysis 3). In Study 2, I used survey data from the U.S. population to extend previous findings. I document that financial self-awareness mediates the relationship between expense-tracking and saving decisions (Analysis 4), and financial self-awareness can induce the pain of paying (Analysis 5). Additionally, this study highlights the importance of attention to information tracked in promoting financial self-awareness (Analysis 6). Different types of expense-tracking methods were compared. Automated tracking, with automatic collection of spending data through bank accounts or financial tools, is convenient but linked to lower attention and less financial self-awareness. In contrast, active tracking through manual expense recording requires more engagement and is associated with higher financial self-awareness.

Collectively, these findings contribute to the literature on mental budgeting and mental accounting by providing new empirical evidence on the relationship between expense-tracking and budget

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adherence/adjustments. Furthermore, this research not only reconciles the findings with the established literature but also expands our understanding of expense-tracking within the financial self-regulation context by highlighting it as a self-regulatory behavior that informs financial behaviors. Expense-tracking not only aids in achieving specific spending limits but also supports broader money management goals, such as building savings and gaining insights into personal spending patterns (Heyen, 2020). Additionally, promoting positive financial behaviors through expense-tracking has important implications for financial education and public policy, offering insights into fostering responsible financial decision-making.

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