ROLE OF GOAL SETTING AND SELF-EFFICACY IN SUPPLY CHAIN DECISION MAKING

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ABSTRACT

In this paper, we apply Goal setting theory to decision making in the supply chain context. Short term feedback about an individual's decisions on the supply chain (e.g. increasing holding costs) could signal positive or negative evaluations about their long term success (e.g. long term profits). Goal setting theory suggests that specific and difficult goals help individuals to perform better than in the presence of no goals [2].

While setting goals may motivate individuals to perform well, it could also bring expectations and constant comparisons with short-term performance outcomes. This phenomenon has been studied as discrepancy creation and discrepancy reduction. Goals allow for the creation of discrepancy. Individuals exert effort to reduce this discrepancy. Research suggests that feedback enhances the effectiveness of goals on performance. Continuous comparisons with short-term goals would lead to higher levels of motivation. In the supply chain scenario, each decision made by individuals have (assigned or self-set) goals associated with it. Therefore, we hypothesize that specific and difficult goals will increase long term supply chain performance. Previous research also suggests that individual's belief in their ability to do a particular task, i.e. their self-efficacy will have a positive impact on their performance. Therefore, we hypothesize that higher self-efficacy will be directly and positively related to long term supply chain performance.

Subjects (N = 198) participated in a simulated two-stage supply chain. Each participant was randomly assigned to a goal (specific and difficult net profit; N = 98) or a no-goal/do-your-best (as much net profit as you can; N = 100) condition. Participants played the game for 200 simulated cycles (days). In each cycle, they had to make inventory ordering decisions at a warehouse and three retailers. The net profit and fill rates were monitored. Participants were reminded of their goal condition halfway through the game (on the 100^{th} day).

Our results indicate that performance levels did not vary significantly between goal and no-goal conditions, although subjects in the goal condition performed marginally better. Our results also indicated that self-efficacy was significantly related to net profits at the end of the 200^{th} day. By examining the effects of goal setting and self-efficacy in supply chain decision making, we respond to the call for more behavioral investigations in the supply chain context [1]. Though we did not find statistically significant influences of setting goals on long term performance on a supply chain, we did find that self-efficacy had a significant impact on performance. It's been found that employees' self-efficacy can be significantly increased through the use of training and educational programs. This study provides evidence that increasing training specifically targeted to improve self-efficacy can in fact boost long term profits in a supply chain setting.

A full set of references is available on request.