

# Target Setting And Firm Performance: A Review

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## ABSTRACT

*The consequences of missing targets can be found on a daily basis in many organizations. As such, targets and target setting in an extremely important topic to companies and one that should receive more attention.*

*Although the vast amount of reasons for missing targets are difficult to study, the process of setting the target which includes budgeting has been proven to affect performance and achievement through goal setting theory (Locke & Latham, 2002). Thus, targets are an important element in almost every organization (Chenhall, 2003).*

*We focus this review of literature exclusively in the relationship between target setting and firm performance and as such consolidate, organize, and synthesize past literature in this field and provide a clear direction for future research. We further identify two impactors found to affect firm and management performance but never researched as an impactor of the relationship between target setting and firm performance. Those impactors are Transparency of targets and length of management experience.*

*In this paper, we fill the gaps identified above and inform the study of target setting in order to spark future research on this topic. We also identify the dimensions affecting the relationship between target setting and firm performance as well as the different measurement approaches in target setting literature.*

**Keywords:** Target Setting; Firm Performance

## INTRODUCTION

*M*anagement control systems (MCS) is defined as to includes all the devices/mechanisms managers use to ensure that the behavior of employees is consistent with the organization's objectives and strategies (Merchant & Van der Stede, 2007). An area of MCS which remains a focus of researchers is targets and target setting. A large body of literature has emerged, with varied findings by researchers. A major goal of MCS is to achieve objectives through specific strategies (Hemmat et al., 2018). Target setting is an important topic in business studies and important to researchers because it establishes an inextricable link between the profit-building activities of the organization and financial outcomes (Hartmann & Schreck, 2018). Conceptualizing the way in which target setting works with firm performance fills a gap in the current body of literature by establishing a model by which management's design of targets gives workers and management a goal to achieve, while also setting a benchmark for other stakeholders to understand firm performance and the standards upon which management sees the position of the business in the external environment. Without setting targets for the performance of the firm, it is difficult to make sense of performance reports, scorecards and other measures of firm performance (Ihrig, Ishizaka, & Mohnen, 2017). While essential, gaps continue to persist. The objective of this review is to describe the link between target setting and firm performance while illustrating this link through the use of a conceptual model where theory behind the relationship between these two concepts becomes illuminated.

Targets are an important element of performance in every organization (Nutti, Vainieri, & Vola, 2017). Budgeting, which is a type of target set by organizations, is used for several purposes such as planning activities, allocating resources, and motivating employees (Deschamps & Mattijs, 2017). Covaleski, Evans, Luft, and Shields (2006) discussed target setting, noting that the importance of target setting will only increase, and that the topic will also grow

in importance to researchers. Apart from performance evaluation, targets also play a role as a decision-making tool in planning and coordination of resources (Van Dooren, Bouckaert, & Halligan, 2015).

With the prominence of target setting and the more recent focus on the characteristics of target setting, this is an opportune time to review the state of literature in the area. The purpose of this research paper is to identify the building blocks of target setting as they relate to firm performance. In addition, we will set the tone for future research in this field by identifying less explored and unexplored areas within target setting and firm performance.

This paper will proceed as follows: we first explain the scope and coverage of the literature review. This is followed by a section defining target setting and how it affects firm performance. We then describe researched and potential elements and characteristics that affect the relationship between target setting and firm performance. This is then followed by a developed conceptual model. We conclude with a discussion for future research followed by a conclusion.

### **SCOPE AND COVERAGE OF THE LITERATURE REVIEW**

Management Control and Management Control Systems are those tools within the study of management accounting that support manager control in the workplace in terms of the behavior of their employees to ensure achievement of corporate objectives and strategies. In the scope of the study of Management Control, numerous avenues have been pursued by researchers; one in particular that will pursue in the literature review below. This literature review conceptualizes the area of target setting, which is used extensively in management accounting to provide employees with targets to achieve. In terms of target setting, prior literature that deals with target difficulty and target adjustment was synthesized. Both target difficulty and target flexibility are characteristics of target setting and have allowed researchers to obtain a deeper understanding of what constitutes a good target. The contribution emerging from this literature review is to not only review prior research within target difficulty and target flexibility, but also push at the currently boundaries that will uncover potential future research in this area.

#### **Target Setting**

Target setting or goal setting is defined by goal setting theory that states that specific and challenging goals along with appropriate feedback contribute to higher and better task performance (Locke, 1968). In management control, targets are an important element in almost every organization (Lau, Scully, & Lee, 2018). Budgeting, which is a type of target set by organizations, is required for a multitude of reasons, including planning and coordination of an organization's activities, allocating resources, motivating employees, and expressing conformity with social norms (Covaleski et al., 2006). Covaleski et al. (2006), inferred that targets play a particularly a critical role in the evaluation of performance due to the fact that bonuses are often tied to targets. Workers experience an extrinsic motivation from bonuses to work harder; however, it is also possible for bonuses to create inefficiencies in terms of the use of organizational resources. While workers meet targets, it is possible their reward could impact firm performance in a detrimental fashion.

Nevertheless, target setting is essential for an organization. Li, Wang, and Zhu (2017) and Pulakos, Hanson, Arad, and Moye (2015) noted that target setting is critical for managers responsible for performance of an organization. Therefore, targets can induce or prevent motivation among employees, which is a major elements of management control. Covaleski et al. (2006) and Bloom, Propper, Seiler, and Van Reenen (2015) indicated that target setting as a tool for evaluation and rewarding performance will likely continue, and that the complexities which come from it in terms of management control, motivating workers and the financial impact it has on the organization will require further research. This research must focus on how it is that target setting establishes a path of goals for the worker. Further, the research must focus on exposing links which persist between targets and financial performance where it is possible to continuously improve the status of financial performance in the organization through targets.

Apart from performance evaluation, targets also play a role as a decision-making tool in planning, coordination, and resource allocation. Hansen and Van der Stede (2004) surveyed managers and identified several findings related to budgeting. One was that budgeting and targets have different rationale. These reasons included operational planning, performance evaluation, communication of goals and strategy formation. The authors concluded that while these reasons for budgeting overlap, they are substantially unique in their own use. Another finding was validation of the

purpose of budgeting and that rationale emerged from different conditions and that each purpose performance is connected with different budgeting features. An example of this is that they establish that budgets tend to be used more for performance evaluation in larger firms with more connected resources. They also find that more competitive situation negatively impacts the standing of budgets for performance evaluation. It is therefore valid and important to identify reason for budget or the reasons for which target are used in any such studies. They further found that budget characteristics affect budget performance differently, dependent on the reason to budget.

One such budget characteristic studied is target difficulty. Uyar and Kuzey (2016) contributed further evidence of budget characteristics and contextual factor affect how the firm performs and budget use. In their study, the researchers concluded that how the budget is used, and firm performance are impacted significantly by context factors. IT plays a positive role in budget use, while PEU also affect budget use. The study also found that strategy does not play a significant role in impacting budget usage. These findings are pervasive in several different settings. Research by Goebel and Weißenberger (2016) investigated the effects of tight financial controls (target setting) on dysfunctional employee behavior. The researchers found that even when there is emphasis on financial performance, it is essential for there to be a focus on targets (Goebel & Weißenberger, 2016). Furthermore, as the body of literature related to target setting and budgeting matures and becomes more detailed, more emphasis is placed on characteristics of targets and how they affect the target setting and its effectiveness in improving firm performance. The importance of target setting for firms and the large body of behavioral accounting research on the topic, almost no empirical research has been conducted (Capaldo, Costantino, Pellegrino, & Rippa, 2017). This is especially true when it comes to targets settings use and performance effects.

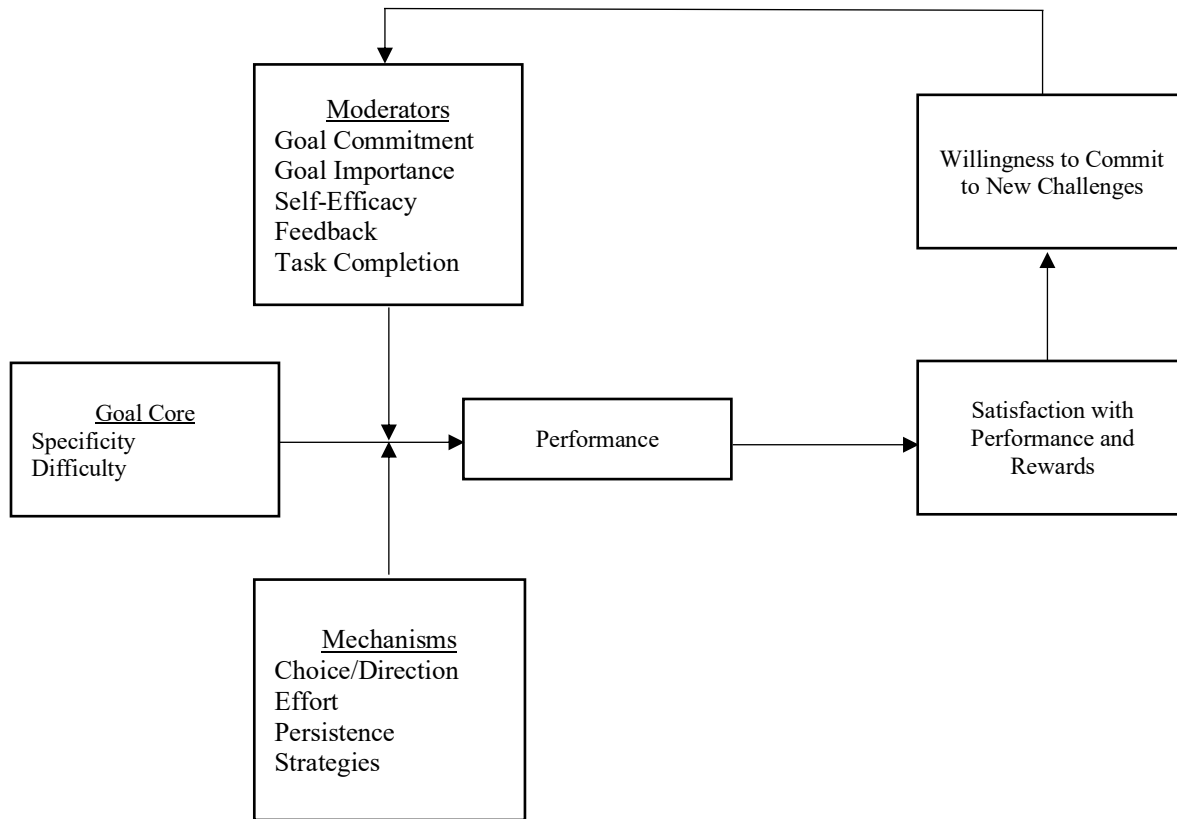
### **Target Difficulty**

An important element of the setting of targets is target difficulty (Aranda, Arellano, & Davila, 2017). Target difficulty is a characteristic of target setting that affects performance (Bol & Lill, 2015), and is defined as a level of change related to the expectation of a firm from the beginning of the year the level of challenge associated with a target at the beginning of the year (Arnold & Artz, 2015). Merchant and Manzoni (1989) refer to target difficulty as the level of achievability of targets. Both definitions are similar even though they are many years apart.

Goal setting theory was formulated by Locke and Latham and summarized after 35 years of empirical research (Locke & Latham, 2002). This theory was built on Ryan's (1970) idea that conscious goals impact actions. Ryan (1970) argued that "it seems a simple fact that human behavior is affected by conscious purposes, plans, intentions, tasks and the like" p. 432.

As shown in Figure 1, goal setting theory contains two goal core items that impact performance.

**Figure 1.** A figure of goal-setting theory and the high-performance cycle.



The first is goal difficulty, where Ioannou, Li, and Serafeim (2015) found a positive linear where difficult goals lead to greater performance. Performance remained constant or decreased only when ability was limited or commitment to difficult goals failed (Ioannou, Li, & Serafeim, 2015). The second goal core item is Specificity whereby specific difficult goals are measured for their effect on performance vs a goal such as do your best. The researchers identified that precise difficult goals always created better performance than simply asking employees to do as well as they can. When employees were asked to just do as well as they can, they don't because such goals are not specific and have no frame of reference (Aranda et al., 2017).

Goal setting theory includes 4 mechanisms through which goals affect performance. These mechanisms are choice, effort persistence and strategies. Choice happens when goals are salient and attract attention. Effort comes from difficult goals requiring greater effort than simple goals. Persistence comes from the need to achieve tight deadlines where it is important to perform at a rapid pace. Strategies come from there being numerous ways for goals to be achieved and the development of a plan to accomplish the goal (Wood & Locke, 1990). There are also several moderators. These moderators include goal commitment, goal importance, self-efficacy, feedback and task complexity (Otley, 2016). Overall, goal setting theory and the experiments done as evidence, tells us that hard but possible goals have a positive impact on performance. It is important to note that all evidence to support goal setting theory was attained through experimental methods, with most experiment conducted in a university setting with university students as subjects (Bedford, 2015).

Despite the conclusions and evidence provided by goal setting theory, empirical studies associating target difficulty and performance has been mixed and ambiguous. Studies seem to contradict each other with some showing a positive relationship, while others showing no association, and yet others a negative relationship. Furthermore, despite the relative importance of target setting few field studies have been attempted. Table 1 below summarizes some of the ambiguity in studies on target difficulty.

**Table 1.** Target Difficulty and Performance.

Author	Method	Measured	Relationship between target difficulty and performance
Simons (1988)	Survey	Budget Control	Significant & Positive
Webb, Jeffrey and Schulz 2010	Survey	Goal Difficulty	Significant & Positive
Hansen and Van der Stede (2004)	Survey	Target Difficulty	Insignificant
Hirst and Lowy (1990)	Survey	Goal Difficulty	Insignificant
Kenis (1979)	Survey	Goal Difficulty	Significant & Negative
Webb, Williamson and Zhang (2013)	Experiment	Target Difficulty	Significant & Negative
Ioannou, Li and Serafeim (2015)	Experiment	Target Difficulty	Significant & Positive
Aranda, Arellano and Davila (2017)	Survey	Target Difficulty	Significant & Positive
Bol and Lill (2015)	Survey	Target Difficulty	Significant & Positive
Ioannou, Li and Serafeim (2015)	Survey	Target difficulty	Significant & Positive
Whittington, Meskelis, and Asare Beldona (2017).	Survey	Target Difficulty	Significant & Positive
Chan and Hsu (2018)	Archival	Target Difficulty	Significant & Positive
Douthit and Sauciu (2017).	Survey	Target Difficulty	Significant & Positive
Urschel (2015)	Experiment	Target Difficulty	Significant & Positive
Richins (2018)	Experiment	Target Difficulty	Significant & Positive

Research findings which illustrated a target difficulty producing a positive effect on performance and are in line with goal setting theory includes Simons (1988), who used a survey on a Canadian firm and identified that tight budget controls positively affected performance. Simons further found that business strategy and internal organizational conditions are associated with tightness of budget controls. Another study by Webb et al. (2010), collected survey data from 598 employees in 4 north American call centers of a financial services company found that higher goal difficulty led to higher performance. The study also found that past performance was also positively associated with current performance.

Studies that identify no connection between the difficulty of targets and performance are Hansen and Van der Stede (2004), who conducted a survey on 65 managers responsible for budgeting in a consortium for advanced manufacturing. Their study looked at reasons to budget as well as budget characteristics. One of the budget characteristics researched was target difficulty. They found that each “reason to budget” requires a different level of budget characteristics in order to be effective but found that target difficulty on its own did not affect budget performance. Another such study is Hirst and Lowry, (1990) who conducted a survey of 44 senior managers from a property management firm with budget responsibilities and found that goal difficulty alone does not affect budget performance. Their finding did find that goal difficulty and feedback interact together to impact performance.

Kenis, (1979) surveyed 169 department managers at the plant level who have budget responsibility. The study found that there was a negative association between a very difficult budget goals and the attitudes and performance of managers. Another study, Webb et al. (2013), conducted an experiment on undergraduate students and found that although target difficulty negatively affected performance due to the fact that it hindered the discovery of production efficiencies, it did enhance productive effort by motivating participants.

From the above review of studies that test the interaction between the difficulty or targets and firm performance, it is quite apparent that many questions still exist, and more research is required. Not only are there differing results from studies, but the field studies testing target difficulty are very few and almost no confirmation has been done through replication of studies. Every past study performed has a different type of sample, from manager in a single organization, to manager in a few different organizations, to managers in a division of a single organization. These differences and the relatively small samples used may have had an impact on results. A common theme among past studies is their agreement that target difficulty is an important aspect of target setting and performance as well as the fact that other characteristics of a target together with target difficulty affect performance in some way. Some other notable and influential studies in the area of target difficulty are noted in Table 2.

**Table 2.** Main studies on the topic of target difficulty.

Author	Method	Measuring
Chow, Hirst and Shields (1994)	Experimental	Structure of Incentive Contracts
Young, (1985)	Experiment	Consequences of Employees Setting Goals
Kaplan and Norton (1996)	Theoretical	Achieving Targets through Discovery of Efficiencies
Thompson, Hochwarter, and Mathys (1997)	Discussion	Achieving Targets through Discovery of Efficiencies
Wood and Locke (1990)	Experiment	Flexibility in Efficiency Location
Chen and Jones (2005)	Survey	Financial Incentives in Productivity
Dunk (1993)	Survey	Budgetary Participation and Slack
Merchant and Manzoni (1989)	Survey	Achieving Budget Targets
Aranda, Arellano, and Davila (2018)	Survey	Target difficulty and subjective bonuses
Matějka and Ray (2017)	Survey	Balancing difficulty of targets

### Target Adjustment

While different target adjustment methods has been studied as to their on performance, some studies dealing with target setting and target difficulty identify target adjustment as an impactor of performance along with target difficulty and other characteristics. While field studies in the area of target adjustment have been few, the studies typically fall into 3 categories summarized in Table 3.

**Table 3.** Target Adjustment Studies.

Author	Method	Measuring
Leone and Rock (2002)	Financial Data	Target Revisions at Year-End
Indjekian and Matejka (2006)	Financial Data	Target Revisions at Year-End
Burt, Libby, and Presslee (2017)	Financial Data	Target Revisions at Year-End
Kim and Shin (2017)	Financial Data	Target Revisions at Year-End
Murphy (2000)	Survey	Effects of Anticipation of Adjustment
Anderson, Dekker, and Sedatole (2010)	Financial Data	Effects of Anticipation of Adjustment
Bouwens and Kroos (2011)	Financial Data	Effects of Anticipation of Adjustment
Casas-Arce, Holzhaecker, Mahlendorf, and Matějka (2018)	Financial Data	Effects of Anticipation of Adjustment
Ahn, Choi, Hwang and Hyeon (2018)	Financial Data	Effects of Anticipation of Adjustment
Mahlendorf, Matejka, and Schäffer (2015)	Survey	Effects of Anticipation of Adjustment
Choi, Kim, and Merchant (2017)	Financial Data	Effects of Anticipation of Adjustment
Arnold and Artz (2015)	Survey	Target Flexibility

1. Target revisions at year end - identifying target ratcheting: Some such studies have examined how much firms modify targets at the end of the year, such as Leone and Rock (2002), who proved that targets ratchet and that current performance influences subsequent targets. They hypothesized and prove that managers will make income decreasing decisions to offset surprise increases beyond that required by the budget. Another study, Indjekian and Matějka (2006), studied the determinants of slack in an organization and find similar results. They study the causes of firm slack and find that slack is seems to increase business unit growth.
2. Effect of anticipation of adjustments (how target ratcheting hurts year end performance): Other studies have looked at how the anticipation of an adjustment in targets negatively affects year end performance. One such study was conducted by Murphy, (2000), where he distinguishes between externally and internally determined standards or targets. He finds that in organizations that use internally determined standards, there is a higher likelihood of income smoothing as managers anticipate the impact of current results on future targets. Another such study is Anderson et al. (2010) show that after the implementation of a pay-for-performance plan, where managers participate in setting goals, there is a tendency for those managers to affect goal levels in addition to its effect on effort. Yet another study, Bouwen and Kroos, (2011), who study the target ratcheting and its effects on effort reduction. In their study, they look at stores in a retail firm and prove that managers engage in sales reducing activity in anticipation of lowering their subsequent budget target.
3. Target Flexibility: A much more recent type of target adjustment identified in literature is how firms handle targets intra-year. To date, only one study (Arnold & Artz, 2015) studies this approach. In their paper, they introduce and define “target flexibility” as “The extent to which firms potentially adjust targets in the course of a period”. In their study, they hypothesize and prove that the level of target flexibility is a variable that mediates in the association between the difficulty of targets and firm performance. In effect, they suggest that Target flexibility may explain the inconsistent results obtained by researchers studying difficulty of targets and firm performance as described above. Through a survey to 97 of the largest organizations in Germany, they find that target flexibility leads to an adverse mediating impact on firm performance even through target difficulty affects performance positively, which is consistent with goal setting theory. Arnold and Artz also suggest that if a firm uses budgets mainly for decision making purposes (vs control), this should moderate the impacts of the difficulty of targets on performance as well as target flexibility on performance. This effect is consistent with a study described above (Hansen & Van der Stede, 2004). Table 4 further illustrates the types of studies on target adjustment.



**Table 4. Studies On Target Adjustment**

Author	Method	Measurement
Weitzman (1980)	Theoretical	Model Explaining Ratcheting
Chow, Cooper and Haddad (1991)	Experimental	Truth on Pay Schemes
Dechow and Sloan (1991)	Archival Analysis	Ratcheting CEO Pay
Defond and Park (1997)	Archival Analysis	Smoothing income on Future Earnings
Chowdhury (2006)	Archival Analysis	Manager Performance and Discounts
Indjejikian and Nanda (2002)	Archival Analysis	Meeting Targets Consecutively
Holzhammer, Kramer, Matějka, and Hoffmeister (2018)	Archival Analysis	Relative target setting and cooperation
Armstrong, Chau, Ittner and Xiao (2017)	Archival Analysis	Target Ratcheting in CEO incentives
Brahm and Poblete (2017)	Experimental	Ratcheting in a Multiproduct Firm
Kuroki (2018)	Archival Analysis	Budget Ratcheting Under Zero-Profit Incentive
Cardella and Depew (2016).	Experimental	Testing for the Ratchet Effect

### Target Transparency

Target Transparency, also known as horizontal information asymmetry (Fisher, Maines, Pfeffer, & Sprinkle, 2002), is a very seldom studied element of target setting with potential impacts on a number of aspects of target setting and firm performance. Transparency has been shown to take two forms by (Feichter, Grabner, & Moers (2018): Firstly, there is the notion of transparency of target, which indicates if final targets are disclosed to all divisional managers or only to the managers individually. (Feichter et al., 2018) Secondly, transparency of process identifies if the target setting process is such that it includes a discussion among all divisional managers together or whether each divisional manager is spoken to individually to set targets. (Feichter et al., 2018) Although (Feichter et al., 2018) find that transparency is one of managers important design choices in target setting, little research has been done on this topic. With few studies looking at budgeting in multi-divisional firms, one study, Fisher et al. (2002), finds that transparency reduces attempted slack in manager. Feichter et al. (2018) have suggested that a possible reason for transparency is to mitigate fairness concerns, but this has yet to be proven or disproven. Differing types of target adjustment as described above may also be employed to mitigate fairness concern in that organizations that allow for adjustment to make up for budget errors and imperfections, especially in situation where transparency does not exist. Organizations may therefore employ either a policy of adjustments or of transparency to mitigate fairness concerns. We could therefore suggest that target transparency may impact target adjustment and thereby have an impact of firm performance. No studies to date have looked at transparency and its relationship to target flexibility as well as ex post target adjustment.

### Experience Effects on Performance

A number of prior studies have measured the effect of manager experience on performance. With a common theme of measuring length of experience in some way, past studies have looked at many different aspects of experience: McEnrue (1988), studied a restaurant and its managers and found that length of experience as a store manager was positively related to performance, while length of time managing the particular store as well as length of time in the organization was not related to performance. McDaniel, Schmidt, and Hunter (1988), studied a sample of 16,058 and found a correlation between job experience and performance which is also consistent with the results of Schmidt, Hunter, and Outerbridge (1986). In another study by Toft-Kehler, Wennberg, and Kim (2014), they look specifically at entrepreneurs and find that a low amount of entrepreneurial experience leads to poor performance while a high amount of experience leads to improved performance. In a more recent study, Bradley, Gokkaya and Liu (2017) find that overall related experience does lead to improved results and performance. Studies executed on the impact of experience on performance have been relatively scant and results have been inconsistent. It is important to note that in our review of research on experience, we found that studies have used different elements of experience in their research. Sometimes more than one element of experience is tested and often they yield different results. This means that the measure of experience must be defined and may alter the impact on dependent variable. The most widely used measures of experience are: 1. Length of experience in a particular function, 2. Length of experience in a single location, and 3. Length of experience in the organization. Past studies also all assess the impact of experience on performance without considering other impactors on performance. Due to the fact that effort reduction as an effect of target ratcheting has been shown to help managers perform to targets, experience may play a role in effort reduction.

This is, are managers with more experience, more likely to reduce effort and could this explain part of their tendency to achieve targets. No prior research has looked at this relationship. Table 5 outlines studies conducted to look at experience effects on performance.

**Table 5. Studies On Experience Effect On Performance**

<b>Author</b>	<b>Method</b>	<b>Measurement</b>
McEnrue (1988)	Survey and Archival analysis	Job experience of early career managers on performance
McDaniel et al, 1988	Archival Analysis	Job experience and job performance
Quiñones, Ford and Teachout (1995)	Meta-data Analysis	Work experience and job performance
Toft-Kehler et al. (2014)	Archival Analysis	Entrepreneur experience and performance

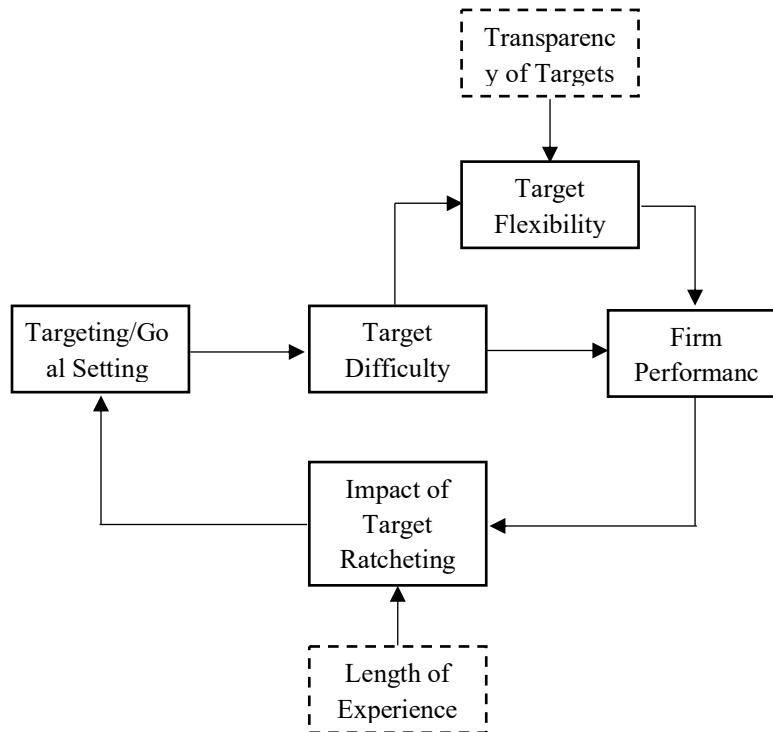
### **Conceptual Model**

Based on the findings of current literature and conceptualization of the way in which goal setting and targeting theories work through the difficulty of organizational objectives, Figure 2 is an illustration of the way in which targeting works to meet organizational goals (Hemmat et al., 2018). The model is iterative in that as performance improves, targets improve as well. It begins with targeting and goal setting (Ihrig et al., 2017). Through targeting and goal setting the difficulty of the target is articulated, which in turn impacts firm performance by giving workers a standard to work up to and possible rewards (Lau et al., 2018). Once performance is achieved, the target can then be ratcheted. This in turn leads to changes in target and goal. Furthermore, target difficulty is then mediated by target flexibility as higher difficulty increases flexibility and then greater flexibility reduces firm performance.

We have also added two constructs with dashed lines to the conceptual model that will be studied in the second and third paper of this thesis. The first construct is transparency of target which we will assess its impact on Target Flexibility. The second construct is Length of experience which we will assess its impact on the effects of target ratcheting. Both, constructs and studies will be introduced our discussion and conclusion below.



**Figure 2.** A conceptual model of target-based firm performance.



**DISCUSSION AND FUTURE RESEARCH DIRECTION**

The purpose of this review was to analyze the literature in the area of target setting and identify the building blocks of target setting as they relate to firm performance. In doing so we also identify the dimensions affecting the relationship between target setting and firm performance as well as the different measurement approaches in target setting literature. This review distinguishes itself from others in that it focuses on the relationship between target setting and firm performance specifically while identifying effects of those relationships by dimensions not previously studied. It also brings target setting effects on performance to the forefront which has not been done by prior review. Thus, this review provides a new perspective to the field.

As the conceptual model implies, numerous relationships exist between different aspects of targets as it impacts firm performance. Furthermore, great variations in individual firms amongst the different affecters of firm performance necessitate repetition in research to confirm results. While some of the relationships presented in the conceptual model have been researched more than others, none have been researched extensively. Furthermore, some of the relationships have been studied very few times and require replication to confirm. Some relationships as well, have never been studied and those provide clear direction for future research in the field of Target – Firm Performance.

One relationship presented in the conceptual model that has only been studied once prior and requires confirmation through replication is the impact of target flexibility on firm performance as a mediator of the effect of target difficulty. One study (Arnold & Artz, 2015) studies the effects of the flexibility of targets on a firm’s performance. In their paper, they introduce and describe “Target Flexibility” as “The extent to which firms potentially adjust targets in the course of a period”. No other studies have investigated how intra-year adjustment of targets impact performance like the Arnold and Artz (2015) study. In their study, Arnold and Artz (2015) hypothesise and prove that the level of Target Flexibility is a mediator of the relationship between Target Difficulty and Firm Performance. This is an area of Target setting that required confirmation through replication.

A relationship identified in the model that has not previously been studied is that of the effects of transparency on target adjustment availability as well as target flexibility. More specifically if managers know that they will be able to adjust targets ex post, may be less likely to adjust target in the course of the year. As well, as targets are more transparent to other managers in the organization, managers may be less likely to adjust target either ex post or in the course of the year because transparency may mitigate fairness concerns (Feichter et al., 2018). While transparency of targets, which indicates if final targets are disclosed to all divisional managers or only to the managers individually has been studied in the past, Martin and Thomas (2017) but no studies have tested this constructs impact on Target flexibility and then the subsequent impact on firm performance. We believe that this is an area of target setting that should be investigated further and may yield interesting and helpful results as well as be fruitful for further research.

Another relationship within our conceptual model that has not yet been studied is that of the effect of experience on effort reduction due to target ratcheting. Experience elements have been proven to affect firm performance in the past and may impact the effort reduction discussed above. A number of prior studies have measured the effect of manager experience on performance, but with some inconsistent results. Many of those studies assess the impact of experience on performance without considering other impactors on performance. Due to the fact that effort reduction as an effect of target ratcheting has been shown to help managers perform to targets, future studies could look at the impact of experience in effort reduction. This is, are managers with more experience, more likely to reduce effort and could this explain part of their tendency to achieve targets. No prior research has looked at this relationship. Looking at this relationship could not only shed light on the initial question posed but could also lead to other research opportunities relating to experience effects on targets setting.

## CONCLUSION

In closing, the development of targets can contribute to improved firm performance; however, the relationship between performance and targeting is complex and elegant. Management must approach targeting from the standpoint of understanding that it is essential to use the tactic as a means by which workers can be set on the right path to achieve improved performance in an organization. Financial performance of a firm can increase significantly through the use of targeting, but it is essential that management design their plan for the use of targeting in such a way that workers will see value from increased work output. The worker should also be presented with rewards that will encourage them to accept new standards, as well as to go above and beyond current standards. By setting goals which conform with reasonable targets and relying on industrial benchmarks, it is possible to move the firm in a positive direction.

In the next paper we will fill the gap identified with respect to the effects of transparency of targets. We test if the transparency of targets decreases target flexibility. In addition, we test whether the availability of target adjustment ex post leads to a decrease in target flexibility. That is, as managers know that they can adjust target at the end of the year, they have less reason to adjust in the course of the year. The paper, therefore, fills a gap in literature with relation to target transparency's effect on targets and performance.

In our third paper, we again confirm past seldom studied relationships while filling the third gap in literature identified above. We fill a gap in literature by looking at elements of experience in our study and test if experience in the organization overall as well as in a specific store impact effort reduction positively. We also test if managers that reduce effort in such a way have a greater likelihood of achieving their next year's sales target than those that do not. Our unique data set allows us to point these results to target ratcheting as well as specifically to effort reduction on the part of store managers. The third paper therefore fills a gap in literature with relation to the experience of manager's effect on targets and performance.

## AUTHOR BIOGRAPHIES

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