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„Moral Disengagement and Motivated Reasoning in
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1. Introduction

This master's thesis investigates the socio-psychological concepts moral disengagement and motivated reasoning in a management accounting context. Moral disengagement tries to find explanations as to why individuals behave in an unethical manner and, at the same time, do not feel mental burdens (Moore, 2012). In an accounting context, managers can benefit from dishonest behavior. For example, when they create slack by overstating their costs and/or understating their revenue (Daumoser et al., 2018). Acting against the moral standards generally harms the individual's self-perception and leads to negative feelings. In order to avoid this, individuals apply moral disengagement mechanisms, which allows them to behave against their moral standards without suffering mental distress (Bandura, 2012). Subjects with a high degree of moral disengagement use those mechanisms customary in order to reframe their conduct, e.g. the misreporting, in a way that mitigates their ethical value (Moore, 2008).

The second psychological concept, that this thesis examines, is motivated reasoning. It describes how an individual's perception and information search is influenced by the individual's motivations. Managers often have to make decisions and judgements when they are strongly motivated to come to a certain conclusion, for example to promote a proposal or to confirm the launch of a new product. In order to make a good decision, it is necessary to consider and scrutinize all relevant information, without being biased. The information should be assessed accurately, without the judgement being influenced by the desired conclusion. Certainly, it can be a challenge to ignore preferences and motivations, while handling information (Boiney, 1997). Research on motivated reasoning proposes that managers assess, evaluate, and construed data in a way, that is in line with their preferences. It enhances the propensity for them to arrive at their favored conclusion (Kunda, 1990). In accounting research, motivated reasoning is investigated in the context of audits, performance evaluation, forecasting and accounting estimates.

The focal point of this master thesis lies in the literature review that investigates research in the intersection of moral disengagement and management accounting and/or motivated reasoning and management accounting. This delimitation therefore

excludes literature concerning financial accounting research, such as Beaudoin et al. (2015), Kadous et al. (2013) and Slapnicar et al. (2015).

The objective of this thesis is primarily to provide a solid overview of the current state of empirical research, and to further investigate how moral disengagement and motivated reasoning can affect different areas of management accounting. This thesis contributes to the management accounting literature that investigates socio-psychological concepts. It provides an extensive overview of empirical literature that scrutinizes how moral disengagement and motivated reasoning mechanisms are applied in a management accounting context. The thesis will also show which and how contextual factors or personal preferences influence the application of moral disengagement mechanisms and motivated reasoning. The psychological concepts, in turn, affect the honesty of reporting managers or the level of biased perception and decision making in management accounting. Based on these findings, I extract implications and practical applications for organizations. The recommended actions can support the improvement of managerial honesty in budget reporting or reduce biased decision making or information assessing in management accounting. Those implications might generally help to mitigate the negative effects resulting from moral disengagement or motivated reasoning. The master thesis is therefore of interest for researchers in the fields of business management, economics and social sciences, as well as for practitioners.

In this thesis, I aim to answer the following research questions: How does moral disengagement and motivated reasoning affect managers' behavior in a management accounting context?

There is currently a wide and continuously growing range of empirical literature available, which addresses management accounting areas from a socio-psychological and behavior perspective. This reflects the importance and relevance of this research field, also for practical applications. The great amount of relevant literature made it easy to focus on high quality research. For the literature review I aimed to incorporate papers that are directive for this field of research (such as Diekmann, 1997 and Boiney et al., 1997). I further included literature that is very current and provides new findings for this field of research (such as Church et al., 2019 and Chong and Wang, 2018). I

found a good composition of papers to cover the key areas of management accounting, while still keeping the quality of examined research high.

For a better overview, I organized the literature into the management accounting fields managerial reporting, accounting estimates & forecasting and performance evaluation. An overview of all literature studied, including the research methods and information concerning the samples, is available in Table 1 in the appendix. Please note that in Table 2 in the appendix all experimental variables and main study findings of the considered empirical literature are illustrated. The results of my literature review will be summarized briefly below.

The goals of an individual manager might not always be in line with the objectives of the firm. This is the case, for example, when managers benefit from untruthful reporting (Daumoser et al., 2018). However, individuals generally are not easily able to act against their moral standards, as this harms their self-perception and leads to negative feelings (Bandura, 2012). Albert Bandura (1990, 1999, 2002) introduced the process of moral disengagement, that allows subjects to act in a contradictory manner to their moral standards, without feeling guilty or suffer from other forms of mental distress. To morally disengage, individuals use cognitive mechanisms, for example moral justification, diffusion or displacement of responsibility, or minimizing the consequences of the misconduct. In management accounting research, the utilization of those mechanisms has been investigated mainly with a focus on budgeting. Schreck (2015), for example, examines rivalry in an organization as a driver for misreporting, as those internal tournaments can be used to morally justify misreporting. Church et al. (2012) provide evidence, that managers can justify their misreporting, when they share the benefits resulting from budgetary slack with a non-reporting employee. Other mechanisms, that managers can use to justify their dishonest reporting behavior, are displacement of responsibility or diffusion of responsibility. The former is scrutinized by Mayhew and Murphy (2014). They examine the effect that a superior's order to misreport has on the reporting behavior of a lower-level manager. The latter is observed by Diekmann (1997), who suggests that subjects allocate significantly more resources to their group, compared to when they allocate the resources only to themselves. This is, because they can distribute the responsibility for this unequal allocation to the whole group.

The second psychological concept, observed in the course of this thesis, is motivated reasoning. It states that an individual's goals and motivations will influence their reasoning. It makes individuals search for and construe information, so that it is in accordance with their persuasions (Kunda, 1990). It leads to a biased perception, which is still perceived as being objective (Eply and Gilovich, 2016). In an accounting context motivated reasoning emerges, and is evaluated, especially in connection to auditing, performance evaluation, forecasting and accounting estimates. Tayler (2010), for example, has discovered that managers see their own strategic projects as a greater success, than those managers, that were not involved in the implementation of the project. The reason behind this is, that they are motivated to do so. In his dissertation Hayes (2016) scrutinizes how motivated reasoning affects the managers evaluation of accounting estimates. Another paper, that will be discussed in the course of the literature review, is by Boiney et al. (1997). The researchers investigate the influence of a manager's motivation to favor a market entry decision of a new product on his forecasts of sales. They are able to show, that managers bias their evaluation of accounting estimates, as necessary, to favor their wanted conclusion.

The master thesis is structured in the following way: In section 2 the theoretical framework is provided, and the two underlying concepts of moral disengagement and motivated reasoning are explained in detail. The research approach, that is applied to the subsequent literature overview, is explained briefly in chapter 3. The literature review in chapter 4 is the core focus of this master's thesis. It includes literature on managerial reporting, accounting estimates, forecasting, and performance evaluation. Based on the literature review, a collection of implications and proposals for practical application is presented in chapter 5. The thesis concludes with the discussion and conclusion in chapter 6. Two summary tables, including the sample sizes and research methods in table 1, and all study variables and main findings of the reviewed literature in table 2, can be found in the appendix.

2. Theoretical Framework

This chapter aims to introduce the underlying socio-psychological concepts, namely moral disengagement and motivated reasoning. It provides further details about the different mechanisms of moral disengagement. Additionally, the two kinds of

motivated reasoning are outlined in greater detail. Lastly the differences, but also similarities, of both psychological concepts are illustrated. This chapter provides the base frame of this thesis and is vital in order to comprehend the following chapters.

2.1. Moral disengagement

The socio-psychological concept of moral disengagement was established by Albert Bandura (1990, 1999, 2002). He tries to provide explanations why individuals are, to a certain extent, able to behave in an unethical manner, without feeling mental burdens (Moore, 2012). Generally, individuals prefer to act in accordance with their moral values, that determine their conduct. Violating moral values harms the individual's self-image and can increase their self-contempt. Usually self-sanctions align the behavior with the inner moral stance and hinder people from acting against their moral standards. There are mechanisms, that allow individuals to morally disengage and to dissolve those self-sanctions from immoral behavior. This enables people to behave against their moral standards, without suffering mental distress (Bandura, 2012). Subjects with a high degree of moral disengagement will use those mechanisms customary to reframe their conduct in a way that alleviates that their ethical value (Moore, 2008).

Using cognitive mechanisms facilitates individuals to de-emphasize their conduct and to suspend self-regulation by self-sanctions (Moore, 2008). Albert Bandura (1999, 2002) and Bandura et al. (1996) identify eight disengagement practices, which deactivate ethical self-sanctions and allow individuals to disengage morally from detrimental conduct. The mechanisms of moral disengagement, which can be applied in different steps of the process of moral control, are illustrated in figure 1.

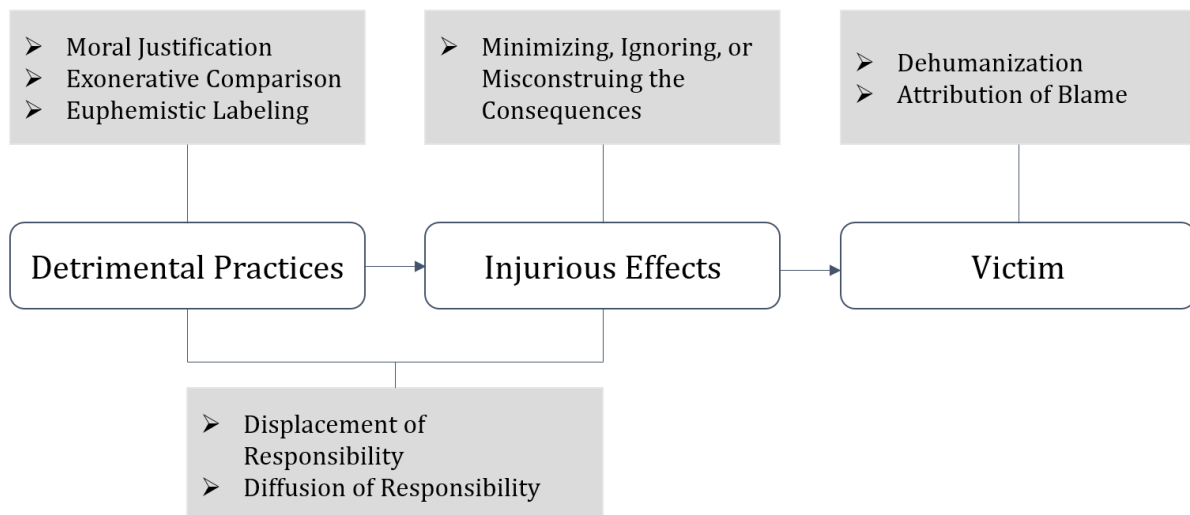


Figure 1: The eight mechanisms of moral disengagement (Bandura, 2012: 1)

Individuals are generally hindered from engaging in damaging behavior, due to self-regulation and self-sanctions. In a first step, they need to self-justify the morality of their doings, before they engage in unethical conduct. The first mechanism **Moral Justification** helps to mentally restructure an action. Self-justification makes unethical conduct appear, as if it serves a moral function, which makes it socially acceptable and helps the individual to keep a positive self-perception, while causing damage to others (Bandura, 1999). Moral justification makes it a challenge to bring up moral concerns, when it comes to violent or generally unethical acts. Rivals denounce the violent actions of their opponents, while seeing their own harmful conduct in a good light and both sides see themselves as being morally superior (Bandura, 1999). An example for moral justification by Moore (2008), is that a manager might tell himself that making product information selectively transparent to consumers might be critical to keep the firm's public perception positive.

Euphemistic labeling means utilizing language, to make harmful conduct sound legitimate and to downsize the responsibility for malicious behavior. This widespread mechanism is used in a variety of contexts. It helps to present harmful conduct in innocent words, which makes it appear less conflicting (Bandura, 1999). Some examples of sanitized euphemisms are: If an employee is "given an opportunity to develop" instead of being "fired", (Bandura, 1999), if lies are presented as "alternative facts" (Cooke, 2017) or when calling someone, that engages in corrupt behavior, a "team player" (Jackall, 1988: 52).

The mechanism of **Exonerative Comparison** (also: Advantageous Comparison) can make someone's behavior look less harmful, by comparing it to an even more malicious action (Moore, 2008). If one compares his harmful conduct to an alternative, which is far worse, the own behavior seems reasonable and is trivialized. Generally, liberating oneself from feeling guilty, by advantageous comparison, does depend on moral justification. An example for such justifications is the exclusion of nonviolent alternatives from consideration, e.g. by presenting them to be inefficient, or by framing one's harmful actions as necessary to prevent even more sorrow (Bandura, 1999).

Moore (2008) combines Bandura's mechanisms and forms three fundamental classes, by grouping related mechanisms together. The three mechanisms moral justification, euphemistic labelling and advantageous comparison enable the individual to mentally restructure unethical and inconsiderate conduct. It is then understood as being less destructive, by the disengaging individual. This is possible, as it makes the conduct appear somehow beneficial. Restructuring harmful behavior via moral justification, euphemistic language and advantageous comparison is very effective in disengaging moral control. It makes the harmful conduct seem valuable and less damaging to the individuals involved (Moore, 2008). Bandura (1999) views those three mechanisms as being the most powerful among the psychological mechanisms for releasing from moral regulation.

The next two disengagement practices displacement of responsibility and diffusion of responsibility are used to reduce the accountability of an individual for the damage that the unethical behavior causes (Moore, 2008). **Displacement of Responsibility** helps subjects justifying their behavior with social pressure, or the instruction of an authority, in order to deny the responsibility for its own unethical conduct (Schwering, 2015). The responsibility for one's conduct is often moved on to authorities, that can, actively or passively, influence the morally disengaging person's behavior (see Mayhew and Murphy, 2014). This mechanism enables individuals to think that the responsibility for their actions lies with someone else. They do not see themselves as being the true agent, but only as the person that follows the order, which makes self-condemning redundant (Bandura, 1999). In the frequently quoted Milgram-Experiment, by psychologist Stanley Milgram (1963), subjects were instructed to punish students with powerful electrical shocks that increased in intensity. The

subjects were able to diffuse the responsibility to an authority, that told them to go on with the shocks, in case they doubted. In practice, an authority might not openly assume responsibility, but might rather subtly encourage misconduct (Bandura, 1999).

If responsibility is spread among several people, no one feels responsible for the consequences arising from their behavior. Bandura calls this mechanism **Diffusion of Responsibility** (Schwering, 2015). However, this does not mean that engaging in certain behavior must benefit the whole group. It must only be perceived to do so. The acting individual does not necessarily need to provide legitimization for his behavior, but *“the justification may already exist in the behaviour itself”* (Diekmann, 1997:4), meaning that the justification is already implied in the conduct. Just having a justification, is sometimes not enough. Some justifications suit better than others. Generally, the justification needs to be perceived as reasonable and appropriate (Diekmann, 1997). If a person sees himself as being part of a group, he can diffuse the responsibility by distributing it to all members of this group and by telling himself, that he only played a small part in the misconduct (Moore, 2008). Research found that partially diffusion of responsibility determined the disaster of the challenger space shuttle in 1987 (Vaughn, 1996 as cited in Moore, 2008:130).

Distorting or Disregarding the Consequences of one's actions makes it possible to minimize or at least reduce the perceived harm that misconduct causes. In case it is not possible to minimize the consequences of unethical behavior, individuals are still able to doubt the evidence of the damage. If harmful consequences of wrongdoing can be trivialized, ignored or excluded, individuals do not need to apply self-censure. Excluding consequences from perception makes it even easier to impair others. When people witness the harm that their actions cause, they otherwise feel distressed (Bandura, 1999). In an organizational context, where steep hierarchies are in place, superiors form strategies and delegate actions to intermediaries, who further hand them down to functionaries, who will complete the formulated tasks. When the authority is further away from the person executing the task and the end result, it does not face the consequences being inflicted. Therefore the *“restraining power of injurious effects”* are weaker in a steep, than in a flat hierarchy (Bandura, 1999: 199). An example for Distortion of Consequences is stating corruption as “victimless” (Moore, 2008).

Another mechanism, used to morally disengage, is **Dehumanization**. Together, with attribution of blame, it affects the perception of the victims of the misconduct. How a person sees individuals, who are affected by their behavior, does affect the intenseness of their moral self-censorship. This self-censure makes it challenging to maltreat humanized individuals, without feeling mental distress. Individuals can morally disengage, by mentally revoking human attributes of their victims (Bandura, 1999). Dehumanization can happen in situations of war (see Primo Levi, 1989). As well as in less threatening situations, especially when individuals interact anonymously and impersonally or when people change their mind-set and classify groups as “us” vs. “them” (Bandura, 2002).

Attributing the Blame means shifting the liability for unethical behavior on to other individuals or circumstances. It makes the person’s harmful actions feel justifiable and moreover self-righteous, when applying this mechanism. Attributing the Blame of misconduct on to the victims, appears in numerous contexts. It can have catastrophic consequences for the victims, for example in the case of abuse (Bandura, 1999). The cognitive mechanisms distortion of consequences, dehumanization and attribution of blame have in common, that they all reframe the consequences and outcome of one’s behavior. This is done by reducing the effect of the act, or the perception of the harm it does to others. In contrast to the other mechanism, they are not designed to see the conduct in a positive way, but they try to alleviate the actual consequences the conduct has on others. (Moore, 2008).

2.2. Motivated reasoning

Goals and motivations of an individual highly influence their reasoning. The process of motivated reasoning makes people search for and interpret information in a way that is in accordance with their beliefs and ideals (Kunda, 1990). Individuals reason how they arrive at a preferred conclusion. Their preferences and goals affect how they collect and process information and even how they recall memories. This leads to a biased perception, which moreover is perceived as being objective (Eply and Gilovich, 2016). Kunda (1990) forms two types of motivated reasoning. In the case of goal-oriented motivated reasoning, the motivation of the individual is to come to a determined, directed conclusion. While in the case of accuracy-oriented motivated

reasoning, the motivation is to arrive at a conclusion, which is accurate. It is important to distinguish between those different kinds of motivations, as the mechanisms involved differ. Kunda (1990) proposes that both types of goals, which can influence the choice of beliefs and approaches that are applied to a question, affect reasoning. In the case of accuracy-oriented goals, the suitability and applicability of strategies and beliefs is in focus. While in the case of directional goals the strategies and beliefs, that lead to a certain outcome, are favored (Kunda, 1990). In the following two sub-chapters, the different drivers of reasoning are explained in detail.

2.2.1. Goal-oriented motivated reasoning

In the case of goal-oriented motivated reasoning people seek to come to conclusions that they favor. Objectively the very same circumstances are evaluated and interpreted subjectively different, by motivated individuals (Bieneck, 2006). Individuals who are motivated to come to a determined conclusion endeavor to be rational and try to find a justification for their favored conclusion. However, they will only draw the favored conclusion, if they can gather evidence that is needed in order to support it (Kunda, 1990). Individuals, motivated by directional goals, want to uphold an “*illusion of objectivity*” (Pyszczynski and Greenberg, 1987: 302). In case of directional goals, the procedure of a memory search, along with the construction of beliefs, is biased. This is because individuals search their memories for evidence and beliefs, that makes it possible to sustain their favored conclusion. Individuals might also combine findings, to build new perspectives, in order to find support for their wanted conclusion (Kunda, 1990). At the same time, they do not perceive that their process of establishing a justification is being biased. Further, they might only consider parts of their knowledge. In contrast, if directional goals are absent, the subjects will probably access different rules and beliefs. In an experiment by Wyer and Frey (1983; as cited in Kunda, 1990: 489), the researchers asked participants to conduct, and later assess, an apparently new intelligence test. Before the subjects rated the validity of the new intelligence test, they received manipulated feedback of their own results. Not surprisingly, those subjects who received good feedback, assessed the intelligence test as more valid, than those subjects who received a bad result as a feedback. Motivated reasoning, directed by goals, is limited by its ability to generate justification for a favored conclusion. When

confronted with undeniable arguments, that would result in an undesired conclusion, individuals will be forced to admit and accept the unwanted conclusion (Kunda, 1990). There is a range of goals that influence reasoning, such as fundamental requirements, which ensures survival and reproduction. Another goal could be to have higher aims, like to reach a higher social status, to achieve self-realization or to hold consistent beliefs, that promotes successful actions. Reasoning, which is only oriented towards one goal, can adversely affect other goals. An individual, who likes to convince others of a belief, will highlight reasons why this belief is solid. This reasoning could potentially undermine the validity of their evaluation (Epley and Gilovich, 2016). If individuals have the impression, that a peer group holds certain beliefs, they will more likely reach out and consider such information, that support those beliefs of the peers. In addition, they will react with skepticism to any conflicting information. In summary, the information collection and handling process is systematically influenced by motivated reasoning and might deviate from rational information assessment. Examples for goals, that drive reasoning, are the wish to persuade someone, to agree with peers, having a certain self-image or self-defense. It is necessary to be aware of the goals that are responsible for guiding reasoning, in order to anticipate the effects of certain measures (Epley and Gilovich, 2016).

2.2.2. Accuracy-oriented motivated reasoning

In the case of directional goals, individuals seek information that confirms a concrete conclusion. If motivated reasoning is driven by accuracy, individuals are motivated to achieve an outcome that is preferably accurate. They do extend their cognitive effort on task-related reasoning. They also handle material information more thoughtfully and deeply (Kunda, 1990). There are different grounds that can lead to accuracy goals. For example, when individuals assume that they need to defend certain decisions or when they know that much depends on their decisions. Another trigger for accuracy-driven reasoning is the fear of losing a good reputation, or when others are treated unfairly. In such cases, plausible reasoning and the gathering of all relevant information is needed. Hence, in case of accuracy goals, information is processed in a more systematic way, than in case of goal-oriented motivated reasoning. Furthermore, subjects make more effort in finding an accurate solution. They do not end the

information gathering and evaluating process as soon as a somewhat acceptable solution is found (Bieneck, 2006). It is argued that accuracy goals can lead to a weakening of numerous cognitive biases (see Freund et al., 1985; Kruglanski and Freund, 1983). However, there are also several studies that found biases, which were not eliminated by the desire to be accurate (see Kahneman and Tversky, 1972; Lord et al., 1984; Tversky and Kahneman, 1973) (Kunda, 1990). One example for such a bias is the hindsight bias. It affects the tendency to overestimate the extent to which one can correctly predict certain outcomes with hindsight (Bieneck, 2006). Kunda (1990) states that to diminish cognitive biases it is essential that individuals, a) have suitable reasoning strategies, b) consider those as predominant to alternative strategies and c) must be able to use them at will. The researcher proposes that when accuracy goals are present, reasoning might be worsened and bias aggravated, if individuals choose to adopt the wrong reasoning procedures. Therefore, it is necessary to recognize, and make alterations to the correct elaboration processes, in order to make an optimal decision. A study by Tetlock and Boettger (1989), was able to show that individuals, who were motivated by accuracy goals, are more responsive to the dilution effect. This means that they were willing to moderate their prognoses, when new information, regarding their target, was provided to them. As information processing is more complex when accuracy goals are present, overall judgement might become less rational (Kunda, 1990). Because individuals, who are determined to be accurate, have a tendency to consider a broader range of evidence, arriving at a conclusion will eventually be delayed (Kruglanski and Ajzen, 1983). Kunda (1990) argues that accuracy goals increase the quantity, as well as the quality, of evidence processed, due to the increased usage of complex deductive procedures.

2.3. Similarities and differences of moral disengagement and motivated reasoning

Moral disengagement and motivated reasoning are both socio-psychological concepts that affect cognition (Moore, 2018; Kundra and Sinclair, 1999). Numerous psychological processes like perception, problem solving, decision-making and information interpretation are bundled under the term cognition. Cognitive research investigates how subjects process, interpret and recall information (Holsanova and

Jana, 2012). Motivated reasoning and moral disengagement affect different processes of cognition. In cases of motivated reasoning, motivations affect cognitive processing by influencing a person's judgement. It influences which and how cognitive elements, such as beliefs and concepts, are used for judgement. Subjects generally wish to be unbiased and try to find valid justifications for the conclusions they want to reach. However, this construction of justification is likely to be influenced by the subject's motivation. This is because the available subsets of cognitive elements such as beliefs, concepts, and rules used to justify the judgement, might already be biased by motivation. This leads to subjects drawing the conclusions they favour (Kundra and Sinclair, 1999). Moral disengagement describes an individual's tendency to exercise cognitive mechanisms. Those mechanisms help to restructure the conduct, in order to make it seem less harmful, minimize or shift the responsibility for an action, or mitigate the perception of harm cause by the unethical behaviour (Moore, 2008). While motivated reasoning is very situative and does depend on subjects' motivations, using moral disengagement mechanisms heavily depends on the subject's personality. Despite that moral disengagement is understand as a process by its originator Albert Bandura, nowadays it is often measured as individual difference (Moore, 2008). Moore (2012) argues, that a subject's inclination to morally disengage drives unethical conduct. There are differences in how subjects cognitively digest decisions and conduct of ethical meaning, which allows subjects prone to morally disengage to act unethical and still feel no negative emotions. A study by Graça et al. (2016) for example, finds that subjects, who morally disengage at a higher level, incline towards eating more meat. They are less emphatic and feel less often negative emotions when doing so. Motivated reasoning, on the other hand, does depend on an individual's motivations, their desired outcomes or their wish to be accurate (Kunda, 1990). In summary, both mechanisms influence the judgement of an individual. While, in the case of moral disengagement, unethical or questionable conduct at hand will harm the individual's self-image, if no moral disengagement mechanisms can be applied (Bandura, 1999). In case of motivated reasoning, there must not evidently be questionable conduct at hand. Different behaviour is evoked in both mechanisms. However, reasoning plays a role in both concepts. While in the case of moral disengagement, the misconduct is reasoned, e.g. by mentally re-structuring the questionable conduct. In case of motivated reasoning, the reasoning itself is influenced by the individual's motivation.

The similar-sounding concept of motivated moral reasoning emerges when an individual is motivated to arrive at a specific moral conclusion. It affects the individual's perception of moral accountability for an action and influences the moral principles that individuals use to judge said morality (Ditto et al., 2009). This concept is not investigated in the course of this thesis.

3. Research Approach

I conducted my literature research mainly on the database u:search by the University of Vienna, JSTOR, or directly on a databases of known publishers like Elsevier (ScienceDirect) or John Wiley & Sons (Wiley Online Library). There is a wide, and continuously growing, range of empirical literature available that examines management accounting topics and especially managerial reporting, from a behavioral and socio-psychological viewpoint. Therefore, a challenge was to screen out literature that is not related to motivated reasoning or moral disengagement in an accounting context and to include literature that does not seem to be relevant to this topic at first glance, but certainly does after a closer look. My goal for my selection of considered literature, was to find a good composition of directive papers for this field of research and newer empirical literature, which has not been discussed in a broader way. At the same time, I wanted to offer research with a high level of quality. Further, I wanted to consider a wide range of aspects and focus areas, while still being able to go into detail. I did not incorporate literature that focused solely on financial accounting (e.g. Beaudoin et al., 2015, Kadous et al., 2013, Slapnicar et al., 2015), because this thesis lays the focus on management accounting. In order to distinguish between management and financial accounting literature, I considered the classification by Fischer et al. (2015). Financial accounting is concerned with capturing and controlling an organization's cash flows. It provides financial information to an external audience. Management accounting, on the other hand, aims to provide financial and non-financial information for an internal audience and is not legally regulated (Fischer et al., 2015). Based on this definition, I included literature concerning performance evaluation via balanced scorecards (Tayler, 2010 and Luft et al., 2016), forecasting sales figures (Boiney et al., 1997) and accounting estimates (Hayes, 2016) and excluded literature that investigates motivated reasoning when auditing financial statements. I

incorporated research published in journals ranked between A+ and B (according to the VHB-JOURQUAL3 ranking). This approach was adapted from Daumoser et al. (2018). There are two exceptions to this selection criterion. Paz et al. (2013), which was published in the book series “Advances in accounting behavioral research” and Hayes (2016), which is a dissertation from Arizona State University. Paz et al. (2013) is included as it is a widely recognized paper. It fits very well and complements my selection of literature. The dissertation by Hayes (2016) was selected, because I also wanted to discuss a scientific work that investigates motivated reasoning affecting accounting estimates and it was the only reference that I could find discussing accounting estimates in this context. In 15 out of the 16 considered empirical papers, laboratory experiments were conducted. In the remaining one (Chong and Wang, 2018) the researchers performed an online experiment. For more information regarding the research methods and samples, please note Table 1 in the Appendix. An overview of the variables and main results of the reviewed studies can be found in Table 2 in the Appendix.

For a better overview, the research was clustered into the management accounting fields managerial reporting, accounting estimates & forecasting along with performance evaluation. The major part of my literature review focuses on managerial reporting, as this focus is also reflected in the present literature. In a second step, I further categorized the managerial accounting literature into papers that examine social influences, those that consider the character traits of subjects, organizational settings and authority’s instructions to misreport. There may be overlaps. However, I organized all literature into papers regarding social influence first. The remaining were organized into the section concerning character traits etc. Within the sub-clusters, I arranged the literature by year of publication.

The goal of this literature review is to provide an overview of research that investigates how moral disengagement and motivated reasoning arises in a management accounting context. I aimed to comprehend how researchers develop their discussed hypotheses and outcomes related to these topics. Based on the findings in this literature review, I infer implications and discuss possible actions for practical utilization in the remainder of this thesis.

4. Literature Review

The subsequent literature review aims to work out how moral disengagement and motivated reasoning is discussed in the management accounting research. The studies, that are relevant to this overview, are arranged within the management accounting areas or the subsections of the managerial reporting subchapter, based on the year of publication.

4.1. Managerial Reporting

In this first subchapter, the role of moral disengagement and motivated reasoning in managerial reporting and how their exploitation can influence how managers justify dishonest reporting behavior, is observed. Budgeting is often discussed and considered in literature and makes up the largest part of this literature review. Generally, budgeting enables coordination, for example, via the allocation of resources. It is further utilized as a motivational factor, as it can be used as a stimulus to align an employee's behavior to the goals of the organization (Liessem et al., 2015). Organizations are restricted in the allocation of resources. They want to provide them, e.g. to the manager that proposes the most attractive projects. How an organization distributes the scarce resources is based on the managers' budget proposals. This creates a competitive environment among the reporting persons. Overstating their budget reports, enhances the managers' chances to receive the necessary resources from their organization (Brüggen and Luft, 2011). However, as discussed in chapter 2, individuals generally prefer not to act against their moral standards. Being able to misreport and at the same time, not suffering from any negative feelings like guilt or discomfort, can be achieved by applying moral disengagement mechanisms or motivated reasoning tactics.

It is important to note that all studies examining honesty in an experimental setting, mentioned in this literature overview (Cardinaels and Jia, 2016; Church et al., 2012; Church et al., 2014; Church et al., 2019; Mayhew and Murphy, 2014; Paz et al., 2013; Rasmussen and Leopold-Wildburger, 2014; Schreck, 2015; Schwering, 2017) measure honesty based on Evans III et al. (2001) in the following way:

$$\text{honesty} = 1 - \frac{\text{reported cost} - \text{actual cost}}{\text{maximum cost} - \text{actual cost}}$$

Chong and Wang (2018:17), who conducted an online survey, used a “6-item, 7-point Likert-type instrument” to measure honesty in terms of reporting.

Liessem et al. (2015) argue in their literature overview, that there are two aspects which affect the occurrence of moral disengagement. On the one hand, character traits and on the other hand, social influences of others. Therefore, I decided to structure the research related to managerial reporting further into papers observing i.a. social influences and character traits. I then structured the remaining papers into research related to the organizational setting and authorities’ instructions.

4.1.1. Social Influences in a budgeting system

The first paper by Diekmann (1997) investigates whether individuals allocate more resources to themselves, if they are part of a group versus if they only allocate resources to themselves. This means that managers request more than a fair share of resources, when they do this for a group, because they are able to disperse their responsibility for overstating the resources needed to the whole group. These findings are consistent with the research by Church et al. (2012). Church et al. (2012) found that managers will report less honestly, when they share the budgetary slack with a non-reporting employee. In this case sharing serves as a moral justification. Paz et al. (2014) further investigate the influence the disclosure of peers’ reports has on the manager’s level of honesty. However, Paz et al. (2014) have a different understanding of the notion “disclosure of peer reports”. The researchers consider the highest 20 percent of reports, in their partial disclosure setting. Brunner and Ostermaier (2017) take another approach. They analyze only disclosing the reports (and not the costs) in the partial disclosure setting. When the dishonest reporting behavior of peers is observed,

managers can use this to morally justify their own misreporting. In this context, Cardinaels and Jia's (2016) paper is discussed. They scrutinize the effect that audits, used to detect misreporting, have on managerial honesty, in the light of social influences and moral justification. Lastly, I discuss the work by Schwering (2017) who investigates how the manager's level of honesty decreases over time, when dishonest peer behavior is used to morally disengage.

Diekmann (1997)

Although this paper does not name budgeting per se, the situation in the experiment is very similar to progressive planning in cost budgeting (Schwering, 2016). Diekmann (1997) investigates, if it would make a difference, if individuals were to distribute resources to their group or only to themselves, in terms of a fair resource allocation. The researcher furthermore examines, if allocating privately causes a higher deviation from a fair share, than having to allocate in public. In line with Bandura's (1999) cognitive mechanism of diffusion of responsibility, Diekmann's (1997) study finds that individuals will take a larger percentage of the obtainable resources, if they do this for their group, in contrast to when they allocate resources only to themselves. Taking more, than what is considered a fair share, can be implicitly legitimized. The justification for it is that the other group-participants will also benefit from the additional resources. This implicit legitimization covers self-interested motivation. In the case of implicit legitimization, the behavior itself already constitutes a justification. In the case of explicit legitimization, on the other hand, a specific behavior needs to be explicitly justified, as it is generally perceived as unfair. In this scenario, the fact that also others gain from the unequal resource allocation in the group-allocation setting, serves as an implicit legitimization for an unfair allocation. When asking senior management for a departmental bonus, the manager already has a justification for his request. The justification is, that it will be used for the whole department. Irrespective of whether or not it really benefits all department members. In such a case no explicit legitimization for the bonus proposal is required. Generally, individuals are more likely to engage in conduct, that would be considered as unfair, if the behavior itself already includes a justification, such as, allocating more than a fair share to their group (Diekmann, 1997). Splitting resources equally between individuals or between groups

is generally perceived as the easiest, most fair and acceptable solution for all parties (Messick, 1993). Nevertheless, as people are motivated by their own personal advantage, they are willing to receive a greater portion of, what would be equal. In particular when they can expect that they can get off with it (Diekmann, 1997). For the other way around this is not true. Subjects do not perceive unequal and unfavorable allocations as fair. They will only believe that an unequal allocation is fair, if it is in favor of themselves (Diekmann et al., 1997). To test her predictions Diekmann (1997) conducted an experiment. Subjects had to distribute money to themselves or their team, and a competitor person or team. In the experiment, the recipient of the allocation (single person vs. group) and the privacy of the allocation (private vs. public) was manipulated. Most subjects only allocated resources fairly, when their allocation was made public and they only allocated for themselves. Therefore, only in case diffusion of responsibility to the whole group is not possible and participants want to keep a positive impression and be perceived as fair. When their allocation only to themselves is kept private, they allocate almost as much to themselves, as when allocating for their group (Diekmann, 1997). It is argued, that this is because it is possible to get away with an unequal distribution, when no other people are aware of it. Participants were further asked to forecast how their competitors will allocate the resources. Interestingly, subjects are severely biased when they had to predict their opposite's resource allocation. They predict their counterpart would be far more selfish (prediction to take on average 62.6 percent) than the competitors really were in the experiment (took on average 56.8 percent). Diekmann (1997) finds a positive correlation between the participants resource allocation and their predictions of what their competitors would take for themselves (Diekmann, 1997).

Church, Hannan and Kuang (2012)

Church et al. (2012) question whether, and how, sharing the profit of budgetary slack with a non-reporting employee influences the level of honesty of the manager. This study contributes to the literature, as it specifies when dishonest reporting behavior occurs, and managers create unnecessary slack (Church et al., 2012). Derived from the concept of moral disengagement (Bandura, 1999), it can be argued that managers must self-justify their conduct, to bring it in line with their moral stance, before they

participate in willful misconduct. Church et al. (2012) state that sharing benefits of overstated reported costs with a non-reporting assistant, will provide a strong moral justification. This leads to a decrease in honesty when the slack is shared. In addition, the researchers examine if the non-reporting employee having knowledge of the misreporting has an influence on the manager's level of honesty, when it has no financial impact. The researchers indicate that such knowledge has no influence on the conduct of the manager, if the benefits are shared, as the sharing can be used to self-justify the over-reporting. However, if the slack is not shared, Church et al. (2012) predict that it will be a positive effect on the managers level of honesty, when the manager is aware of the non-reporting employee's preference for honesty. This is because the manager worries what other colleagues think of him misreporting. Additionally, he will not be able to utilize shared interest for self-justifying his wrongdoing (Church et al., 2012).

To prove their hypothesis the researchers conducted two experiments. In the first laboratory experiment, subjects took over the role of either a division manager or his assistant. The manager's task was it to request budget to finance production costs for his department. Thereby, the full authority over stating the budget lies in the hand of the manager. This prevents him from dispersing the responsibility. He is then further not affected by the passive assistant's influences. The results of the first experiment suggest, that indeed, the participants that act as managers are less honest, when they share the slack created by misreporting, in comparison to when the slack is not shared. The awareness of misreporting of the non-reporting employee has no impact on the level of honesty of the manager. This occurs when the slack is shared, but contrary to what the researchers predict, also when the slack is not shared (Church et al., 2012).

Church et al. (2012) conducted a second experiment, to scrutinize what organizations can do to weaken the effect that shared slack has on the level of honesty of the manager. They predict that managers are not able to utilize the fact that the assistant receives a portion of the benefit resulting from slack, to justify their misreporting, when the assistant has a preference towards reporting truthfully. In their second experiment, Church et al. (2012) identified the level of honesty the assistant prefers. They categorized them into two preferences, honest and selfish, and forwarded the preferences to the manager. As a baseline some managers did not receive information

concerning the honesty preferences of the assistant. It was clearly communicated to the subjects, that the assistant's preference was non-binding. The results of the second experiment indicate that managers, whose assistant favors honest behavior, report much more honestly. In contrast, managers, whose assistant prefers maximizing wealth or in the cases the preference is not communicated, report more wealth maximizing (Church et al., 2012).

Paz, Reichert and Woods (2013)

Paz et al. (2013) extend the budgeting honesty literature, by considering the influence that revealing the reporting behavior of same-level managers has on the honesty of the focal manager with regard to reporting. The researchers argue that the disclosure of peer honesty could have both, positive as well as negative, effects on the manager's honesty level. Generally, if compliant peer behavior is observed, the psychological and emotional cost of infringing the social norm (e.g. the compliant behavior) increases. Paz et al. (2013:86) call this the "*restraining effect of disclosure*". Managers might not automatically consider the norm-following behavior. They might rather focus on those of their peers being non-compliant and violating norms. The dishonest conduct of their peers can be used by the manager to carry out their own wrongdoing through motivated reasoning (Paz et al., 2013). The wish to follow social norms, on the one hand, and the simultaneous presence of unethical behavior of peers, on the other hand, builds ethical dissonance, making the manager feel an inner conflict (Ayal and Gino, 2011). This can lead to a dissonance reduction mechanism. Furthermore, it can result in the use of moral disengagement and the motivation to forget moral rules, because the manager is not able act honestly. Observing peers acting unethically and being dishonest can be utilized to rationalize the own lack of honesty (Shu, Gino and Bazerman 2011). In their experiment, Paz et al. (2013) manipulate the level of disclosure in two ways and use the non-disclosure scenario as a benchmark. In the partial disclosure scenario, the participants are presented with the cost reports of the least honest 20 percent of subjects. In the full disclosure scenario, the participants reporting behavior is made transparent, but their identity is kept undisclosed. Paz et al. (2013) argue that disclosing the subjects' identities would make the control problem obsolete, as dishonest behavior would be penalized directly. The researchers propose

partially disclosing only the least honest budget proposals, results in lower honesty in comparison to no disclosure (H1). This would enable the manager to morally defend his own dishonesty and to minimize his own personal costs that come with acting dishonestly. Paz et al. (2013) further suggest that full disclosure causes less honest behavior, compared to when nothing is disclosed (H2). It would also lead to more honest behavior in comparison to the partial disclosure scenario (H2b). It is argued, that when the conduct of all peer managers is disclosed, at least some honest behavior will be revealed. Those good, norm-complying examples might have a restraining effect on the focal manager. In the full disclosure setting, the individuals are able to choose what behavior they perceive as being the standard approach. They can either adapt honest behavior and set a good example or adapt dishonest behavior. As the contagion effect is stronger in the full disclosure scenario, the researchers argue that honesty will be lower in the full, compared to the non-disclosure setting (Paz et al., 2013).

Honesty is not steady. It might change over time. A decrease in honesty could be explained by an alteration of the perception of what behavior is the social norm, resulting from the recurring disclosure of peer honesty (Paz et al., 2013). Generally, persons follow the behavior that they identify as the social norm (Mazer et al., 2008). If the manager is able to monitor the reporting behavior of his peers, his view of what is considered the social norm might change. Paz et al. (2013) deduce, that the increase of dishonest behavior (as described in H1) results from the change of what is considered as the socially acceptable level of (dis)honesty. Managers will perceive dishonest behavior as being socially acceptable and use the monitored dishonest behavior of their peers to self-justify their own dishonest behavior. Nevertheless, despite being able to self-justify dishonest behavior, the manager bears an emotional cost resulting from the stress that comes with acting dishonestly. The last hypothesis that Paz et al. (2013) suggest is that *“the emotional cost of engaging in dishonest reporting is lower when a lower level of honest reporting is perceived social norm”* (Paz et al., 2013: 94). To agree with, or contradict, the hypotheses mentioned above, the researchers conducted an experiment, which will not be explained in detail here, as it is not vital in order to understand the results.

In the experiment, the level of honesty is similar over all levels of transparency in the first reporting period. It declines by 13.9 percent in the full disclosure setting and by

22.6 percent in the partial disclosure setting over ten rounds. However, when the peer behavior is not disclosed, the level of honesty stays nearly steady. Those findings are statistically significant and support the hypotheses proposed by Paz et al. (2013).

Via a questionnaire, Paz et al. (2013) try to find support for their hypothesis on social perception and the emotional cost on reporting dishonestly. The results reveal that in both reporting conditions, the participants experience a decrease of honesty as social standard over the ten reporting rounds. Their experienced emotional cost declines, because dishonest behavior is perceived as socially acceptable. Generally, the findings suggest that it is not beneficial for a company to create a transparent reporting environment. Even when both honest and dishonest reporting behavior is disclosed, managers tend to be oriented towards their dishonest peers. Being aware of unethical behavior can increase overall unethical behavior in a group or organization (Paz et al., 2013).

Cardinaels and Jia (2016)

The study by Cardinaels and Jia (2016) scrutinizes the effect that the implementation of an audit system, to unveil misreporting, has on incentives and descriptive norms of peers. Audit systems are primarily used to diminish the asymmetry of information between the organization and the reporting manager. Prior studies have found that those systems can moderate self-serving reporting behavior by managers (Xie, Davidson and DaDalt, 2003). It was further revealed that control systems, that make the reports publicly available, may reduce the level of misrepresentation (Maas and Van Rinsum, 2013). Recent research has discovered that an increase in the chance of detecting misreporting results in a decrease of the budgetary slack, due to reputational concerns (Hannan et al., 2006) and it might reduce the level of false presentation of an agent's private information (Maas and Van Rinsum, 2013). Cardinaels and Jia (2016) anticipate that audits lead to a reduction of misreporting. Audits raise the moral cost of misrepresentation and highlight the consciousness of preferred social norms. When the organization uses audits, it indicates that only honest reporting behavior is acceptable (Murphy, 2012). As misconduct is revealed to the organization, if it is detected, the personal cost of misreporting for the manager will rise (Mazer et al., 2008). Resulting from those findings, Cardinaels and Jia (2016) argue that audits might

affect the implication that incentives and descriptive peer norms have on misreporting. If the present descriptive peer norm is honest reporting behavior, then acting dishonestly results in high psychological costs, like disaffection and guilt, for the individual acting opposing to the descriptive peer norm (Fisher and Huddart, 2008). The personal costs, that occur when individuals do not follow peer behavior, can evoke preferable conduct by these persons (Cardinaels and Jia, 2016). The subjects can observe peer behavior when it is disclosed, e.g. via internal benchmarking. In this paper, the researchers argue that when the descriptive peer norms indicate honest reporting behavior, the level of dishonest reporting conduct will be low. This is also because peer behavior cannot be used to reason misreporting, when subjects are motivated to misreport. It is furthermore suggested that the effect that peer behavior has on misreporting is stronger in the presence of audits. When a dishonest report is discovered during an audit, the findings are unfolded to the firm. This makes the choice to misreport no longer anonymous (Cardinaels and Jia, 2016). Cardinaels and Jia (2016) make the claim that any influence that descriptive peer norms have on the extent of misreporting, is stronger when audits are carried out. The researchers refer to a study by Kachelmeier and Shehata (1997). They find that individuals will consider descriptive peer norm to a greater extent in an environment, where the level of anonymity is low, for example in an auditing setting, in comparison to when nonconformance in peer behavior cannot be observed by peers. Besides peer behavior, incentives do also affect the level of misrepresentation in an organization. Individuals need to balance the gain that comes from lying and the personal mental cost resulting from dishonesty (Cardinaels and Jia, 2016). Subjects care more about their profit, than the consequences resulting from their dishonesty, when their personal profit increases (Gneezy, 2005). Hence, Cardinaels and Jia (2016) predict that as the compensation rate increases, the managerial dishonesty will increase as well. The authors argue that when no mechanism is implemented in the organization to signal misbehavior, the personal benefits resulting from lying will make the managers misreport (Cardinaels and Jia, 2016). When no audits are present, individuals might reason that their reporting dishonesty is tolerable. Therefore, they do not have to bear the negative mental costs that comes with misconduct (Murphy, 2012). As a result, the manager might not concern himself with the effects that his misconduct has on others and therefore will misreport more, when the payment he receives increases. In case the organization uses

audits to detect misreporting, subjects will consider the trade-off between their benefit resulting from misreporting and the consequences, that their misreporting has on others, more, than in the absence of audits (Cardinaels and Jia, 2016). A weak control environment can lead to the activation of a subject's personal norms. This makes it less likely that subjects will act opportunistically, especially if their conduct has a harmful effect on others. When compensation rates are higher, misreporting has more negative effects on the firm, compared to when compensation is lower (Tayler and Bloomfield, 2011). Cardinaels and Jia (2016) reason that the likelihood of subjects acting self-servingly declines when incentive rates are high, as in such cases misreporting leads to more damage for the firm. Summarizing, the researchers predict that the impact the level of compensation has on the degree of misrepresentation in reports is weaker if audits are implemented, compared to when there are no audits (Cardinaels and Jia, 2016).

To test their predictions, Cardinaels and Jia (2016) conducted an experiment and find that on average audits have a significant positive effect on the level of managerial honesty. In line with their hypothesis, the researchers determine the positive impact that peer conduct has on the level of managerial honesty, under the precondition that honest reporting is the standard. The results further illustrate that the effect peer norms have on the level of honesty is dependent on the presence of audits. A stronger suggestion for honesty, by descriptive peer norms, positively affects the level of managerial honesty, when audits are used to detect misreporting. Consistent with the prediction, an increase in incentive compensation results in an increased level of misreporting. However, the experiment finds no correlation of incentive compensation and audits conducted (Cardinaels and Jia, 2016).

Brunner and Ostermaier (2017)

The paper by Brunner and Ostermaier (2017) studies how peers can influence the honesty of a manager in an accounting context under different ranks of transparency. In their investigation, two managers request budget by reporting costs to one superior. Both managers discover the proposals on two transparency levels. In the full transparency setting the reports as well as the costs are disclosed, while in the partial transparency setting only the reports are made transparent to the managers. Brunner

and Ostermaier (2017) claim that the managers adapt their slack-creating behavior to the observed behavior among their peer. This results in them creating more slack, if they sense that their peers also create slack. Derived from prior research (Diekmann et al., 2015 and Gino et al., 2009) Brunner and Ostermaier (2017) state that dishonesty is contagious. In the case of full transparency an increase of the manager's slack can be observed conditional on the slack created by the peer. In the partial transparency setting the slack of the managers increases, as the report of their peer increases. A reason for this is that those managers, interested in the honesty of their peers, must derive conclusions from only the information that is available to them. A low report will signal honesty, because the peers will request budget to at least cover their expenses. A reason for a high budget request may be that costs are overstated, but it could also be that the costs are indeed high. If managers compare the costs of their peers to their own, they can make inferences on the honesty of their peers (Brunner and Ostermaier 2017). It is debated that motivated reasoning makes it more readily for individuals to adapt to self-serving behavior. This leads to an asymmetric adaption of peer honesty, because managers acquire dishonest conduct easier than honest behavior. Peers being dishonest serve as a justification for the managers to be dishonest themselves. If honest peer behavior is observed, then managers might emphasize the difference of the peer's situation to their own situation. They could also disregard their observation of honest peer behavior, by stating it to be not relevant for their own behavior. Therefore, Brunner and Ostermaier (2017) suggest that when the peers' reports exceed the expectations of the managers, the managers' slack will raise more, than it will decrease when the reports by the peers are lower than forecasted. The last hypothesis stated in the paper is that this asymmetric adaption of peer honesty will be greater in the partial transparency setting than in the full transparency setting, as it enables further motivated reasoning. If the managers overserve that their peer files a relatively high report and they also know that costs reported are indeed high, they cannot use the peers reporting to justify their own dishonest reporting behavior. Seeing their peer being truthful causes the managers to experience cognitive dissonance. In order to dissolve this dissonance, they can apply different strategies. They can either be honest themselves, find a justification for their own dishonest conduct or ignore the evidence for their peer's honesty (Brunner and Ostermaier, 2017). How people collect and assess information in their decision-making process, is

highly influenced by their goals and their sentiments (Gino et al., 2016). The example this paper is built from, shows that managers argue that their peer actually wants to be dishonest as well, but is not able to. Because the costs are already high, the peer cannot further overstate costs, in order to create slack. Another reasoning, that the managers could provide, is that the honest peer does not constitute the majority (Brunner and Ostermaier, 2017). While actively arguing and dissolving the dissonance comes with psychological costs (Kunda, 1990), simply ignoring evidence about the cost of the peer might be more effective. If the cost is unknown to the managers, as in the partial-transparency setting, they must not use strategies to justify honest peer-behavior. In cases where the report of the peer is higher than expected, the managers can simply assume that it includes slack and use this pretext to incorporate slack into their own reports (Brunner and Ostermaier, 2017).

In the laboratory experiment, Brunner and Ostermaier (2017) asked two managers to report their expenditures to one joint superior who is not able to examine the accuracy of the costs reported, making it possible to create slack. The two managers received information about either both the cost report and the expenditures of their peer or only information about the peer's cost report. Beforehand, the managers had to indicate their expectations with regard to the peer's report, so that the researchers could state whether the manager's expectations were met or not. The experiment is able to emphasize how the impact of peers on the reporting behavior of the manager is depending on the degree of transparency. The researchers are able to show that generally managers mimic their peer's level of honesty and thus their level of slack. However, the influence of the peer's honesty is not symmetric. Dishonesty greater influences the manager's own level of honesty, than honest peer behavior does, since in the former case the manager can justify the own dishonesty by utilizing the peer's dishonesty. Those effects are stronger, when only the peer's report is disclosed to the manager, in comparison to revealing the report that includes the costs (Brunner and Ostermaier, 2017).

Schwering (2017)

Schwering (2017) proposes that a manager's budgeting honesty will decline over time, when peer honesty is made transparent, but not when it is kept private. The latter can

be explained by financial incentives and the personal preferences for honesty being the only factors influencing the behavior of the reporting manager, if peer honesty is not disclosed. Those factors are constant over time; therefore, the level of honesty is also constant over time. Disclosure of peer honesty reveals honest and dishonest behavior. The incentives of managers will determine how they interpret dishonest behavior. According to the motivated reasoning theory, managers perceive findings of dishonest behavior as being a common practice in the organization, if they have an incentive to report dishonestly. Such an interpretation of peers' behavior will allow the managers to morally disengage. They can use the dishonest behavior of their peers to justify their own immoral behavior (Schwering, 2017). Schwering (2017) predicts that this impact becomes stronger over time, as being exposed to an ethical conflict leads to "*a form of ethical numbing*" (Schwering, 2017:1158). When budgeting becomes a recurring task, it is easier to forget about the ethical dimension of it. This can further increase dishonesty. The second effect, that Schwering (2017) identifies to make honesty decrease over time, is connected to distributional fairness concerns. Individuals evaluate being treated fairly by comparing their own payoff ratio to that of their peers. Distributional fairness concerns occur when managers receive part of their remuneration based on a budget-based compensation scheme. Such a compensation scheme makes dishonest behavior, such as creating slack, lead to a higher payoff for the manager. The more honest managers start to have concerns about fairness of distribution. They observe that the other managers receive a higher payoff, because they are more dishonest in the budgeting process. The honest managers adjust their behavior by acting more dishonestly themselves, in order to establish distributional fairness, which leads to a general decrease in honesty over time (Schwering, 2017).

The previously discussed studies by Paz et al. (2014) and Brunner and Ostermaier (2017) focus on anonymous disclosure of the reporting behavior of peers. Schwering (2017) suggests that non-anonymous disclosure, thus the disclosure of both peer honesty and the reporter's identity, could imply peer pressure regarding the reporting behavior. Generally, we can deduce correct conduct, as well as conduct that is socially acceptable, from peers' behavior. Moreover, we are influenced by it, in such way, that we comply with the behavior pattern of our peers. Especially, when others can monitor our behavior. Applied to an accounting context, managers whose reporting behavior is made transparent, feel more pressured to conform with the reporting behavior of other

managers. As stated above, managers might believe that dishonest reporting behavior is a common practice and is therefore in accordance with the behavior of their peers. Impression management, meaning to influence the impressions that others have of oneself, plays also a role, when reporting behavior is made transparent. Honest conduct could be boosted by revealing the identity of the agents (Schwering, 2017). As stated by Schwering (2017), this is particularly the case before managers learn the reporting behavior of their peers. As already discussed, after the peers' level of honesty is disclosed, the managers will have the impression that the prevailing norm is wealth maximization and therefore that dishonesty is an accepted and justified conduct. The managers conform and by being dishonest, they demonstrate their capability. They seemingly detect the inducements in the budget-based incentive scheme (Schwering, 2017).

Schwering (2017) employed an experiment, where she manipulated peer disclosure on three levels. She used a budgeting task that was taken over from similar studies (e.g. Hannan et al., 2006; Church et al., 2012). In the anonymous disclosure setting the cost reports submitted by the subjects were shown to the participants in random sequence. In the non-anonymous disclosure setting, the cost report, the identification number and a photograph of the respective subject was presented to the group. The results of the experiment show that indeed the level of honesty remains constant, if the reporting behavior of peers is not disclosed. Schwering (2017) also finds statistical support for the hypothesis that managerial honesty declines over the reporting periods when the peers' level of reporting honesty is made transparent (Schwering, 2017).

Finally, the researcher tries to identify whether anonymous and non-anonymous disclosure of peers' level of honesty will affect the manager's level of honesty in different ways. The experiment is not able to provide an answer to that research question. There is no significant difference in the level of honesty that can be observed. In summary, a disparity in the influence of non-anonymous and anonymous disclosure of peer's honesty on the manager's honesty cannot be observed. This paper contributes to the literature as it continues and expands the research on social influence factors in a budgeting setting (Schwering, 2017).

4.1.2. Character traits influencing honesty in budgeting

The next three scientific papers, which are discussed in this subsection, have in common that they all incorporate the reporting manager's character traits and honesty preferences. Character traits highly influence if, and to what extent, individuals utilize moral disengagement and motivated reasoning. Church et al. (2014) examine how discretion in information acquisition allows the manager to apply motivated reasoning, to arrive at a desired conclusion. The researchers investigate to what extent discretion in information acquisition is moderated by the manager's preference for honesty. Rasmussen and Leopold-Wildenburger (2014) answer the question how the type of transmission medium, used for budget reporting, is connected to moral disengagement and influences the level of managerial honesty. Lastly, Chong and Wang (2018) observe how a manager's responsibility rationalization will influence the effect the delegation of decision rights has on misreporting.

Church, Hannan and Kuang (2014)

The paper by Church et al. (2014) scrutinizes the impact, that discretion in acquisition of information has on managerial reporting. It allows the manager to apply motivated reasoning and to consider only information that he needs, in order to arrive at his desired conclusion, e.g. that misreporting is a commonly accepted behavior (Church et al., 2014). Acquiring information includes collecting, screening and processing of information. It is ordinarily delegated to managers, as it requires specialization and know-how (Balakrishnan, 1991). Church et al. (2014) suggest that possible discretion can negatively affect the manager's reporting behavior. It enhances his opportunistic behavior and it can result in the manager influencing the information system and disregarding respective information. Studies by Dana et al. (2006 and 2007) reveal that rationalizing, by ignoring relevant information, frees the manager from feeling guilty when he maximizes his own wealth. Proceeding from those findings, Church et al. (2014) suggest that managers will overstate their needed resources more, in case of a possible discretion, rather than in the case of no discretion in information acquisition. To test this prediction the researchers conducted two experiments involving a reporting task. In the first experiment, they manipulated the discretion by either giving

the subjects private information about the as-is state before they report the budget. Or, they let the subjects decide by themselves, if they prefer to obtain the information at no charge beforehand. Another influencing factor, that potentially affects the reporting behavior of the subjects, is their preference for honesty. The preferences are revealed when the managers have to determine a trade-off between their preference for wealth and sincerity in the reporting setting (Church et al., 2014).

In the second experiment, Church et al. (2014) assigned the subjects into three categories of honest-preference, using the terms implemented by Rankin et al. (2008). The managers with a low level of honesty, that choose wealth over honesty, form the first group. The managers that favor a high level of honesty and would prefer honesty over wealth, represent the second group. The third group is the “*moderate honest preference*”- type (Church et al., 2014: 399). This particular group does neither clearly prefer one or the other level of honesty. They would not entirely report wealth maximizing, but they would also not be absolutely honest. The researchers suggest that the level of discretion of information acquisition will only have an impact on the level of honesty of managers with a moderate preference for honesty. It will make those managers apply motivated reasoning, as they utilize the discretion in information acquisition by not considering certain data. The managers use the omission of relevant information, to avoid the feeling of unease, that comes with intentional dishonest behavior. The types of managers preferring less honesty, and more honesty respectively, are expected to always act according to their preferences (Church et al., 2014).

Departing from the hypotheses that Church et al. (2014) propose, they did not find a general difference in opportunistic behavior, resulting from discretion of information acquisition in their first experiment. In this experiment, the discretion is manipulated between-participants¹. The data gathered in the first experiment, however, suggests that the participants’ preferred level of honesty might influence whether subjects make use of the discretion and therefore apply motivated reasoning. To test this assumption, the researchers conducted a second experiment where the discretion is manipulated

¹ The between-subject setting describes an experiment design in which the subject is only exposed to one treatment. In the within-participant design, every participant is subject to multiple processes and/or stimulus that are tested. If those exposures are independent of each other, it can be examined how subjects change their behaviour if one of the exposures is changed (Charness et al., 2012).

within-participant. The manipulation was used to reveal if the reporting behavior and therefore the participants' choices regarding information gathering is affected by the level of honesty the subjects prefer (Church et al., 2014).

In the second experiment, Church et al. (2014) establish that only the moderate honesty-preferring subjects are significantly affected by the discretion of information acquisition. 44 percent of them decided to not consider information, which lead them to a more opportunistic reporting behavior. The research by Church et al. (2014) adds to the managerial reporting literature, as it considers the managers' preference for honesty. It shows that the managers' type has a great influence on which and how information is selected and disregarded and further how reporting decisions are made. Based on those findings, it can be concluded, that the preference for honesty of a manager should be considered when decision rights are delegated.

Rasmu sen and Leopold-Wildburger (2014)

The focus of the paper by Rasmu sen and Leopold-Wildburger (2014) is on the examination of the type of transmission medium of budget reports and their influence on managerial honesty. The researchers conduct an experiment, in which they investigate the intentions to communicate information honestly, in a situation where monetary incentives tempt to misrepresent. In their experiment, they use a payment scheme for the better-informed agent, which is slack inducing. It provides financial incentives to understate production to the principal. The agent receives a premium when the production is over-fulfilled, therefore he is tempted to under-report production to the principal (Rasmu sen and Leopold-Wildburger, 2014). Rasmu sen and Leopold-Wildburger (2014) refer to the work of Naquin et al. (2010) who investigated, whether it makes a difference regarding honesty, if the communication medium is electronic or by pen and paper. Naquin et al. (2010) found that an e-mail is perceived as less durable, restricted and personal. As it is feasible to easily delete parts of an electronic document, the subjects feel less attached to its content. An e-mail might simulate psychological distance and allows it to morally disengage from misconduct and the resulting consequences easier. People are more dishonest when they use an e-mail as form of communication than when the communication is pen-and-paper-based. It is argued that subjects view lying in an e-mail to be more justifiable than lying on

paper, because in an online context there is greater ambiguity about what behavior is acceptable (Naquin et al., 2010).

Applying those arguments to an accounting context, Rasmußen and Leopold-Wildburger (2014) propose that a report created in digital form will be perceived as less durable and less personal. This makes it easier for managers to morally disengage from misreporting, in comparison to when a hard-copy version of the budget report is used. Consequently, the researchers state the hypothesis, that agents report more honestly in the paper-and-pencil treatment, rather than in the computerized treatment. Besides the communication medium, the researchers are interested in the impact that a person's social preference has on their reporting behavior (Rasmußen and Leopold-Wildburger, 2014). Rasmußen and Leopold-Wildburger (2014) measure the participant's social preference via their "social value orientation", which indicates the participant's viewpoint on outcome interdependence. The social value model, introduced by McClintock (1972), states that a person's social preferences are a linear *"combination of own and other's outcome"* (McClintock, 1972: 445). The most common social value orientations are cooperation, competition, individualism and altruism. A cooperative person will prefer to maximize the wealth of himself and other subjects combined, while a competitive person will focus on the maximization of his own advantage in relation to the advantage of others. An individualistic individual mostly has only his own outcome in mind. While in contrast, an altruistic person focuses solely on the maximization of the other person's payoff. The researchers suggest that a cooperative kind of person will be more honest when reporting than subjects that belong to the individualistic or competitive group (Rasmußen and Leopold-Wildburger, 2014). For measuring the subject's social preferences, the researchers use a questionnaire based on the "ring measure of social values" by Liebrand (1984). The questionnaire consists of 24 items, that are used to assign the subjects to one of the four characteristics (Rasmußen and Leopold-Wildburger, 2014).

The results of the study indicate that, in line with the researchers' predictions, the medium of communication has a significant influence on the tendency to misrepresent accounting figures. The subjects are more honest when they report via a hard copy than when the report is submitted digitally. However, the participants generally prefer honest reporting behavior. Most of them report partly honest and avoid big lies. It

seems that the digital report is perceived to be more anonymous than a written report. These findings imply for organizations that honesty could be improved by making changes in the form of how reports are submitted. Still it remains questionable if turning away from computerized reporting tools is practicable. The results further show that indeed cooperative subjects were more honest than those being individualistic, in both kind of treatments. While the cooperative persons' reporting behavior is stable in both treatments, individualistic participants are influenced stronger by the communication method. They are significantly more honest when the reports are submitted as a hardcopy. To sum up, individuals with different social preferences respond differently to a change in the reporting medium used (Rasmussen and Leopold-Wildburger, 2014).

Chong and Wang (2018)

Chong and Wang (2018) establish how managerial reporting behavior is affected by the delegation of decision rights, budget-based incentive schemes and responsibility rationalization. The delegation of decision rights is commonly used in organizations. It can reduce costs for information acquisition (Bushman et al., 1995), improves efficiency (Jensen and Meckling, 1995), and increases the overall performance of the organization (Abernethy et al., 2004). On the other hand, the delegation of decisions rights might have, to a varying extent, negative effects for the organization. It allows the delegated manager to make opportunistic decisions and engage in misconduct, which might finally eclipse the advantages of the delegation. The principal should try to reduce this incentive concern as much as possible, for instance by introducing budget-based incentive schemes to align the conduct of the agent with the organizational goals (Chong and Wang, 2018). The earlier discussed research by Cardinaels and Jia (2016) indicates that incentive-based compensation schemes lower the level of managerial honesty. Other experimental studies argue that most managers wish to be perceived as being honest (Maas and Van Rinsum, 2013) and that incentives could lower misrepresentation of information (Cardinaels and Yin, 2015). These opposing findings highlight, that there is currently no common ground in the discussion about the interrelation of compensation schemes and reporting behavior.

To study the impact of the delegation of decision rights and budget-based incentive schemes Chong and Wang (2018) take the moral disengagement theory into consideration. The researchers focus on two cognitive mechanisms: displacement of responsibility and diffusion of responsibility. They merge those mechanisms into one and call it “responsibility rationalization”, as in both mechanisms’ individuals transmit their responsibility to someone else (Chong and Wang, 2018). Responsibility rationalization is an important part of a person’s personality and it does influence a person’s conduct (Moore, 2015).

Chong and Wang (2018) develop a theoretical model, pictured in figure 2, to show that an incentive-based compensation scheme can be used as a mediator between the misreporting and the delegation of decision authority (H1). In addition, the researchers suggest that the responsibility rationalization of the individual serves as a moderator, firstly between the delegation of decision rights and the managers misreporting (H2) and secondly between the misreporting and the incentive-based compensation scheme (H3). Chong and Wang (2018) furthermore anticipate “*that the indirect effect of such delegation on misreporting via these schemes is conditional on individuals’ responsibility rationalization*” (Chong and Wang, 2018: 3).

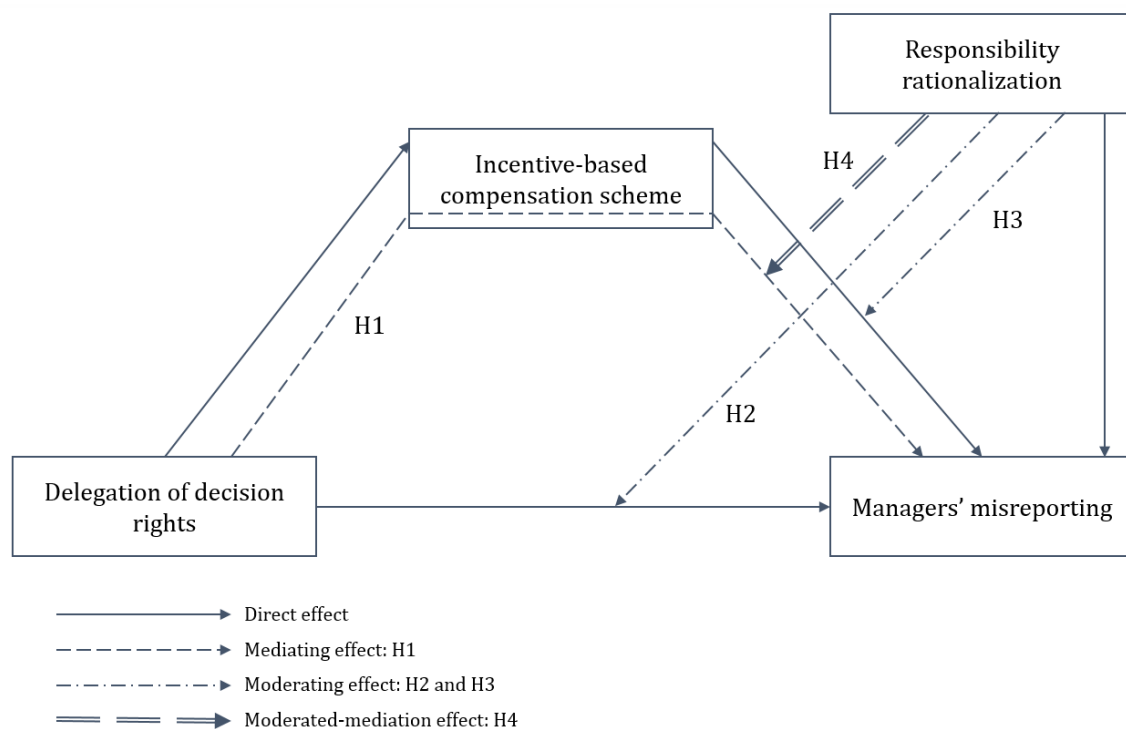


Figure 2: Theoretical model by Chong and Wang (2018:3)

To find evidence for their predictions, the researchers conducted an online survey where 129 middle-level managers participated. The subjects had to note their degree of agreement to questions related to incentive-based compensation schemes, delegation of decision rights, responsibility rationalization, and misreporting (Chong and Wang, 2018).

The evaluation of the survey leads to the following results. It is not possible to find evidence for a mediating effect of compensation schemes on the relation between delegation of decision authority and misreporting. What the study could confirm is a moderated-mediation effect (Chong and Wang, 2018). A moderated-mediation effect is present, when the mediation procedure itself is dependent on the moderator variable (Muller, Judd and Yzerbyt, 2005). The findings indicate that for subjects with higher responsibility rationalization, the impact that delegation of decision right has on misreporting is more positive than it is for managers with a lower level of responsibility rationalization (Chong and Wang, 2018). The results further show that the subjects' responsibility rationalization, hence the ability to use diffusion and displacement of responsibility as a justification for unethical conduct, strongly shapes their level of misreporting (Moore et al., 2012).

The findings are in line with the researchers' prediction. They support the moderating role of responsibility rationalization on compensation schemes and misreporting. This implies that subjects with different levels of responsibility rationalization react differently when budget-based incentive schemes are deployed. The group that misreports to a greater extent, when higher incentive-based compensation schemes are in place, are the managers with lower responsibility rationalization. This is because those individuals use the compensation schemes as a rationalization for the misreporting. Managers with a higher responsibility rationalization do not seem to be influenced by these schemes. They are prone to morally disengage to realize an opportunistic outcome, independently of an existing compensation scheme. Chong and Wang (2018) suspect that there is an indirect effect of delegation of decision authority on misreporting via compensation schemes. This effect is found to be subject to the ability to rationalize responsibility (Chong and Wang, 2018).

4.1.3. Organizational setting influencing honesty in budgeting

This subchapter considers how the organizational setting influences the usage of moral disengagement and motivated reasoning and therefore the level of reporting honesty. Research that is discussed in this chapter is Schreck (2015) who investigates rivalry and competition in the context of budgeting. The second paper discussed in this chapter is by Church et al. (2019) who scrutinize whether the measurement basis of a report and a direct or indirect benefit of slack have an influence on individuals' moral disengagement, and thus on their reporting behavior.

Schreck (2015)

Competition has a negative effect on managerial honesty, as it narrows the weight of personal honesty preferences. This effect has already been explored in several papers on managerial honesty (e.g. Brüggem and Luft, 2011; Fisher et al., 2002; Young et al., 1993). Schreck (2015) expands the literature by investigating why this effect occurs. The researcher suggests that managerial honesty in a reporting setting is affected self-sufficiently by different facets of competition. It is hypothesized that *“economic competition affects the economic benefits of lying, while rivalry diminishes the moral costs of lying”* (Schreck 2015: 177). In addition, gender-differences are taken into consideration. The preference towards honesty generally hinders individuals from behaving solely opportunistic and using their information advantage in a participative budgeting setting to the fullest (Brown et al., 2009). The reason for this is that being dishonest bears a moral cost. The wish to be honest, however, has its limits. Subjects are not willing to give up financial benefits without restrictions, just to be honest. There exists a trade-off between the costs and the benefits of being dishonest which is influenced by several personal and situational aspects. In the article, competition in an organization is understood as a situation in which one subject or group can achieve a goal while it entails at the same time that no other subjects/groups involved achieve that goal (Schreck, 2015). Those kinds of rival interactions can be found in most organizations, as they are known to increase profitability (Malone, 2004). They can be used to reinforce desirable behavior, such as motivation to reach a certain target or to increase productivity (Schreck, 2015). In the literature a common understanding of the impact that competition has on honesty remains to be found. The study by Brüggem and

Luft (2011), that Schreck (2015) is referring to, demonstrates that competition promotes inducements to lie and it lowers the emotional cost of lying. In comparison to the non-competition setting, the subjects that are confronted with a competitive environment more often choose to overstate their costs in the study. On the contrary, Fisher et al. (2002) state that competition can also lead to more honest behavior in a reporting setting. The researchers argue that if budget-based incentive schemes are used for both, allocation of resources and performance evaluation, joint effects cancel each other out. Subordinates have an incentive to underrate the budget when it is used for performance evaluation while they want to overstate the budget when it comes to the allocation of resources. Taken together this results in honest reporting behavior among the competing subordinates, as those collective effects cancel each other out (Fisher et al., 2002). Schreck (2015) deduces from those studies that the implication that competition has on the level of honesty depends on the effect it has on the incentive structure with regard to the expected payments. He proposes that competition, which raises the expected financial advantage when being dishonest, will negatively affect the manager's honesty (Schreck, 2015).

Another form of competition, but without the financial aspect, is competitive arousal, a state in which rivalry is perceived to increase. In this case subjects change their interests, from trying to accomplish a task, to wanting to beat their rivals, which can result in irrational behavior (Malhotra, 2010). Schreck (2015) argues that this type of competition, which leads to a higher perceived rivalry, will also reduce the perceived moral cost of being dishonest when the desire to beat the rivals is stronger than the dislike to lie. Moral disengagement, amongst other things, makes it possible for subjects to switch off their ethical concerns and to focus on the rivalry aspect (Schreck, 2015). This is because rivalry constitutes a moral justification for misconduct (Schwering, 2015). Schreck (2015) states that competition, which leads to an increase in rivalry, will also lead to an increase in misrepresentation.

To test his prediction, Schreck (2015) conducted a laboratory experiment where subjects were presented with a participative budgeting task. The subjects, that assumed the role of a subordinate that proposed the budget to his superior, were assigned to different groups, with differences in the types of competition. The first group dealt with commercial pressure where resources were scarce, and the subjects

had to compete for them. In the second group, where rivalry existed, participants were ranked based on their performance, with no change in economic calculus. It is important to note that the ranking only included information on the position of the subjects. No information on the subjects reported values was supplied. Therefore, the ranking per se did not offer incentives to overstate the budget. Behavioral changes in reporting can consequently be reduced to the will to beat the competitors and to be ranked better. The third group was introduced as a baseline, without any form of competition (Schreck, 2015).

The results of the experiment show that on average the subjects overstate higher in both settings involving competition, compared to a setting without embedded competition. However, the overstatement is only significant in the rivalry setting, but not in the setting that involved the competition for resources. The study is not able to provide support for the hypothesis that male subjects are strongly influenced by the effect that competition has on misreporting. Under economic pressure, male subjects misrepresent significantly higher than female subjects do. This effect could not be observed in the rivalry treatment (Schreck, 2015).

Church, Kuang and Liu (2019)

Church et al. (2019) investigate in their research paper the effects that two attributes of a budgeting system have on the managers reporting behavior. One focus lies on the kind of measurement basis used in the budget request. The manager can request budget either in financial (e.g. in Euro) or in nonfinancial (e.g. units) terms and the researchers argue that those measurement bases differently influence the managers reporting honesty. The other influence factor is whether the manager directly benefits from slack, e.g. when his remuneration increases with slack, or indirectly, when the slack results in more output of his supervised area which in turn increases his remuneration (Church et al., 2019). When individuals can self-justify their dishonesty, they can view their misconduct as being acceptable and therefore do not apply self-regulation (Bandura, 1999). Church et al. (2019) argue that if a financial measurement basis is used and if there is no direct benefit from slack, the manager's moral self-control is disabled and therefore it is more likely that he reports dishonestly. Whether subunits request budget needed in financial or in non-financial terms depends, inter

alia, on how procurement is implemented (Church et al., 2019). When purchasing is handled decentralized, the individual department is responsible for procuring the required production materials, without the involvement of a purchasing department (Joyce, 2006). As the user department is in direct contact with its suppliers, it is better at obtaining pricing information and request resource needs in financial terms, as if a dedicated purchasing department serves as an intermediary. When purchasing is centralized, the division submits their resources needed in non-financial values to the procurement department which is in contact with the suppliers, negotiates prices, and obtains cost information (Church et al., 2019). When budget proposals are made in financial terms, those financial terms remind the manager of "*the idea of money*" (Vohs et al., 2008: 208), which triggers business decision framing and furthermore leads to an increase in unethical behavior (Kouchaki et al., 2013). When managers and individuals in general are reminded of money, they tend to prioritize their own economic interest which highly influences their decision-making (Kouchaki et al., 2013; Vohs et al., 2008). This effect becomes strong enough for the manager to overcome his moral self-regulation and results in increased slack-creating reporting behavior. Church et al. (2019) argue that when the managers use a financial measurement basis in their report, they are more likely to adjust their reporting behavior to increase their own economic benefits, as if they report based on non-financial measurements. It is furthermore argued that whether managers directly or indirectly benefit from budgetary slack moderates the effect the measurement basis has on the reporting behavior (Church et al., 2019). Slack does not necessarily need to exist only in financial resources, it might also occur in the form of physical or human capital (Barney, 1991) and it can benefit the manager in several ways (Church et al., 2019). It is possible that managers benefit directly from slack, e.g. when funding is freely available and the managers receive increasing compensation (Mishina et al., 2004). The managers indirectly benefit from slack resources when they have more financial, physical, or human resources available which they can use to increase their divisions production capacity, leading to an increase in operational results. As managers often receive compensation subject to their supervised areas output, they indirectly benefit from an increase in slack resources (Church et al., 2019).

As already mentioned, when subjects can justify their self-serving conduct, they can deactivate their moral self-regulation which usually hinders them from engaging in

dishonest behavior. One of the mechanisms, that allows self-justification of immoral behavior, is misrepresenting the consequences of one's actions (Bandura, 1999). Reinterpreting and minimizing the impact or harm resulting from unethical conduct helps to eliminate the moral conflict of wanting to behave in the own interest on the one hand and trying to sustain a good self-image on the other hand. If the reinterpretation of consequences is possible for the managers, they are more likely to misrepresent their resources needed. Therefore, indirectly benefiting from slack is more dishonesty inducing, as it makes it easier for subjects to reinterpret the consequences of their dishonesty (Mazer et al., 2008). Hence, Church et al. (2019) expect an increase in dishonest reporting behavior when slack benefits the manager not directly. In case of an indirect benefit of slack, the managers feel more distanced and are less concerned about their dishonesty (Church et al., 2019). This is because an indirect benefit suggests a psychological distance to the immoral behavior, which leads to a decline of moral concerns (Naquin et al., 2010). In addition, it is argued that, when direct monetary gain is not feasible, lying feels less reprehensible (Church et al., 2019). In their study, the researchers consider the joint effect that the measurement basis and the kind of slack benefit have on managerial honesty. It is argued that the basis of measurement might as well affect the kind of resulting slack benefit. When procurement is organized decentralized, the managers request their resource needs and receive it in monetary terms, and it is more probable that the managers will directly gain from slack created. If on the other hand a centralized purchasing policy is in place and the managers submit their budgets in physical units, they benefit indirectly when they induce slack into their budget (Church et al., 2019). Based on this background the researchers expect that, if a financial measurement basis is used to report budget, the managers' level of honesty will decrease more in case they directly benefit, compared to the situation when they do not immediately benefit from slack. Moreover, if budgetary slack is not directly beneficial for the managers, their honesty will decrease to a greater degree if their budgets are stated in non-financial terms (Church et al., 2019).

The findings gathered in a laboratory experiment are consistent with the researchers' hypotheses. When budget is requested in financial units, the subjects' level of honesty decreases when they directly benefited from budgetary slack. Furthermore, when

subjects do not receive direct payoff from slack induced in the report, in comparison to the scenario where they do receive direct payoff, the participants' honesty decreases when the budget is submitted in non-monetary terms (Church et al., 2019).

4.1.4. Authorities' instruction's influencing honesty in budgeting

In the last subsection of the literature concerning managerial reporting, the paper by Mayhew and Murphy (2014) is discussed. The researchers examine if and how managers use displacement of responsibility and other moral disengagement mechanisms to justify their misreporting when a superior directs them to misreport.

Mayhew and Murphy (2014)

Inspired by numerous accounting scandals that surfaced in the 2000s and 2010s Mayhew and Murphy (2014) performed an experiment to investigate how authorities' directions to engage in misreporting influence managerial honesty in reporting. While the previously discussed studies focus only on moral disengagement, Mayhew and Murphy (2014) combine the socio-psychological concept by Albert Bandura (1991, 1999) with the "fraud triangle" in order to investigate reasoning used to justify misreporting (Mayhew and Murphy, 2014). The AICPA (American Institute for Certified Accountants, 2002) lists three factors that are generally met when frauds takes place. Taken together those factors are called the fraud-triangle. The factors are: having an incentive to engage in fraudulent behavior, having the opportunity to commit fraud and lastly having a certain attitude towards malicious behavior (American Institute of Certified Public Accountants, 2002). Mayhew and Murphy (2014) argue that more subjects will misreport if they are told to do so by an authority figure, e.g. their superior, in comparison to if they are not told to misreport. Furthermore, they hypothesize that more subjects will continue to misreport in later reporting periods if they are instructed to misreport just once in an earlier reporting period. Based on the theory of moral disengagement, the researchers moreover scrutinize the impact that the instruction of an authority figure to misreport has on the rationalization and sentiments of the subject. As discussed earlier in this thesis, individuals use the mechanism diffusion of responsibility to morally disengage and to be able to engage in

misconduct. When subjects are explicitly told to misreport, they could use the order to displace the responsibility for the misreporting to the authority. The researchers further try to investigate if the diffusion of responsibility serves as a mediator between the instruction to misreport and the active misreporting. This means that the diffusion of responsibility changes the effect that the instruction to misreport has on the conducted misreporting (Mayhew and Murphy, 2014).

When it comes to misconduct, subjects are confronted with negative affects. Mayhew and Murphy (2014) refer to other researchers (e.g. Greene et al., 2001; Hotz, 2007) who found that those parts of the brain, which are connected to negative feelings, are also responsible for ethical judgements. Based on those results, the researchers suggest that the expectation of negative affects has a great impact on the choice of behavior. As suggested by Murphy (2012), subjects who violate ethical standards by misreporting feel guilt and discomfort after their action. Mayhew and Murphy (2014) argue that Bandura et al. (1990, 1996, 2002) never observed negative affects that occur after the misconduct takes place. Bandura's concept of moral disengagement states that subjects either act according to their moral standards or use moral disengagement mechanisms to engage in misconduct while there is no difference in negative emotions after their action, regardless of their behavior. Mayhew and Murphy (2014) predict that individuals make the decision to behave ethically or not conditional on the degree of negative emotions they will have if they engage in misconduct. This means that even if subjects morally disengage, they will experience negative emotions, but not to the extent as they would if they were not able to morally disengage. Applied to an accounting framework, the researchers propose that participants, who are told to misreport and do so, will feel guilty and discomforting to a greater extent than those subjects, who report honestly. Furthermore, subjects who are told to misreport and do misreport, feel less guilt and discomfort than misreporting subjects who were not explicitly told to misreport by an authority (Mayhew and Murphy, 2014).

By conducting a laboratory experiment, Mayhew and Murphy (2014) tried to find evidence for their proposed hypotheses. In the experiment, the subjects were told to follow the instructions of an authority. In two experimental settings, the authority figure either told the subjects to misreport, or provided no instruction to misreport. In the end of the experiment, the subjects were further asked to reason their

misreporting. The most used reasoning for misreporting is rationalization, followed by motivation and opportunity (=the fraud triangle). Displacing responsibility (e.g. “the authority told me to misreport”) is the most frequently used rationalization, followed by moral justification (e.g. “I wanted to help the authority”) (Mayhew and Murphy, 2014), which is likewise a rationalization related to authority (Murphy, 2012). The latter justification is used also when the authority did not instruct to misreport. This could have strong implications for the practice when employees are very loyal to their superior (Mayhew and Murphy, 2014).

The results provide support for the assumptions made by the researchers. They are able to find evidence for a positive correlation between the instructions to misreport and the actual misreporting. Furthermore, subjects who are told to misreport in the first round are found more likely to misreport also in the second round. In addition, the results illustrate that receiving the instruction to misreport significantly diminishes the feeling of guilt and discomfort. However, using rationalization as a justification strategy does not prevent the subjects from having negative affects which is inconsistent with the findings by Murphy (2012) (Mayhew and Murphy, 2014). Mayhew and Murphy (2014) can extend Banduras concept of moral disengagement, as they show that subjects suffer from negative affects after the misreporting, even when they rationalize their decision.

4.2. Accounting Estimates and Forecasting

In the following subsection, a paper and a dissertation related to accounting estimates and forecasting influenced by the manager’s motivated reasoning, are discussed. Boiney et al. (1997) conducted an experiment including the forecasting of sales figures, to observe whether managers bias their forecasting, in case they are motivated to favor certain outcomes. The dissertation by Hayes (2016) examines motivated reasoning in connection with accounting figures.

Boiney, Kennedy and Nye (1997)

When making a decision people most of the time have a motivation to arrive at a certain conclusion. If this is the case for managers, one would assume that they consider all

accessible information, before they make a business decision. However, remaining objective and taking no account of the own preferences can be challenging (Boiney et al., 1997). Subjects examine information, which is in line with their favored conclusion, less skeptical than information, which contradicts the conclusion the subject wants to reach (Ditto and Lopez, 1992). Moreover, subjects alter their information processing strategies, so that they serve their desired conclusion (Kunda, 1990). In an accounting context, such motivational effects can be observed in the fields of forecasting, accounting estimates, performance evaluation. Nevertheless, this behavior has its limitations. It is restricted, as the information processing needs to be somehow justified, in case there is conflicting evidence (Boiney et al., 1997).

Boiney et al. (1997) contribute to the motivated reasoning literature, as they add new aspects to the concept. Firstly, they find that motivated reasoning is instrumental, meaning that subjects will align the level of bias of their judging with the need of supporting a favorable outcome. The researchers secondly investigate if subjects do question their motivated judgement or if they adapt their confidence in the biased judgement. Decision makers can be motivated to reach a desired result. However, their decision-making process still has to be defensible. Even the most biased decision maker will not consider information that is strongly distorted. Boiney et al. (1997) argue that reasonableness constraints the possibility of motivated reasoning. Individuals must be able to justify the plausibility of the process and the conclusion, when engaging in motivated reasoning. In addition, the researchers propose that, in accordance with their paper's title "more when more is needed", the judgement will be stronger biased, when it has to be more biased, in order to reach the conclusion that is desired (Boiney et al., 1997). The researchers introduce the term "confidence bolstering", which describes the mechanism that makes individuals, who make motivated decisions, maintain confident in their ruling. This results from the need of convincing oneself that a biased judgement is valid, when one is motivated to attain a certain conclusion, although there is external evidence that this might not be the case. From those arguments, the researchers deduce the hypothesis that motivated deciders are in their judgement at least as confident as the individuals that are not biased (Boiney et al., 1997).

The authors of this paper examine their hypotheses in two studies. In the first study, the task of the participants was to anticipate the market entry of two new products. The subjects had to assume the role of a manager and estimated the sales of two unrelated products. They should consider the sales-forecasts of four industry experts that were manipulated, so that three of them laid closely together, while one was two or four standard deviations above the clustered forecasts. The subjects, that are motivated to estimate high sales figures to push the market entry, could possibly put more weight on the higher estimation, as a justification for an optimistic forecast. The researchers tested for reasonableness by manipulating the distance of the one diverging sales estimation. In the case the discrepant sales forecast is four standard deviations above the clustered estimation, it might be challenging to justify a disproportional incorporation of this high estimation (Boiney et al., 1997).

In the experiment, the researchers manipulated the subjects' motivation to come to a positive forecast (between-subject), by stating that the new product launches could yield to a competitive advantage, and the distance between the far diverging forecast and the other, clustered forecasts (within-subject). It is argued, that participants whose motivation is manipulated justify the decision to introduce the products into the market, by putting more weight on the discrepant expert forecast. They therefore state a higher positive sales-forecast, than the neutral participants do. Furthermore, it is expected that the motivated subjects propose a market entry more often than the neutral participants. However, in case the discrepant forecast is far diverging, the motivated subjects are expected to put less weight on the diverging forecast compared to when it is not far diverging. This is, because it is less reasonable and justifiable to incorporate the far diverging forecast to a large extent (Boiney et al., 1997). Resulting from this argument Boiney et al. (1997) state that motivated participants will less often recommend a market entry, when the diverging forecast is four standard deviations above the clustered forecasts, as if it is closer. The researchers do not expect that neutral subjects are strongly influenced by this distance effect, as they are not motivated to favor the decision towards a market entry. To test the proposition of confidence bolstering Boiney et al. (1997) hypothesize that participants, motivated to favor a market entry-decision, will have more confidence in their judgement, as well as in their decision, than neutral participants (Boiney et al., 1997).

The results of the first experiment provide support for their hypotheses. However, it can be argued that even neutral subjects have at least a weak motivation to suggest a market-introduction decision. Participants, motivated as well as neutral, put less weight on the far discrepant expert forecast and hence make fewer market-introduction decisions when the diverging expert forecast is four standard deviations away from the cluster (Boiney et al., 1997).

In a second experiment, Boiney et al. (1997) further scrutinize the conflict between motivated reasoning to decide in favor of a market entry and the required reasonableness of the assumed process. The researchers argue that motivated subjects will bias their assessment to come to a market-entry decision, however they will not be unnecessarily biased. This means, that the subjects will adjust the weight they put on the far discrepant expert forecast, depending on how much weight is needed to arrive at the favored market introduction conclusion. Boiney et al. (1997) test their confidence bolstering prediction. The researchers examine, if motivated subjects could build up enough confidence in their judgement, that they are willing to apply their estimations to other decision areas. In the second study, the subject's motivation was manipulated as follows: The unbiased subjects were told to estimate as accurately as possible, while the motivated subjects were told that they hope that the product will be introduced into the market. In addition, the weight that needs to be allocated to the diverging forecast, in order to recommend the market entry, was manipulated (15% vs. 25%). The subjects had to estimate the first-year sales of a product and afterwards rate with how much confidence they would apply their estimates to other business decisions (e.g. applying for bank loans) (Boiney et al., 1997).

The results of the second experiment indicate that motivated participants put more weight on the diverging expert forecast, when the weight necessary, for a market entry is high, compared to when it is low. In the case that the deciders are motivated to reach the conclusion to enter the market, the average weight put on the diverging forecast is very close to the exact weight required for a market entry decision. When it is required to put more weight on the far diverging and unreasonable forecast, only the motivated subjects do so. Lastly, the query, used to observe the participants confidence, shows that motivated participants are confident in their estimates, even if they have to incorporate the unreasonable, far diverging expert forecast to a great extent.

Altogether, the motivated subjects are more confident, when it comes to applying their estimates to other business decisions (Boiney et al., 1997).

Hayes (2016)

This dissertation, filed at Arizona State University, is concerned with a manager's use of motivated reasoning, when tasked with calculating and approving accounting estimates, in particular, when valuing inventory. A manager might be motivated to overstate inventory, because in case the inventory decreases, an adjustment of value is necessary. This, in turn, reduces the earnings of the period. The motivation will be even stronger, if the actual performance of the department does not meet the expected performance. The researcher argues that accounting estimates could be arbitrary and often leave room for interpretation and judgement (Hayes, 2016). In his dissertation, the researcher introduces anchoring to the concept of motivated reasoning. The anchoring heuristic states that the anchor (e.g. a number) highly influences estimations. If an anchor is preferred, it is assessed less skeptically. In case the anchor is inconsistent with the manager's incentives, the manager spends resources on finding arguments for ignoring the anchor. When accounting estimates are reported, the manager's incentives lead to the preference of a certain estimate. When the manager is pressured to fulfil an earnings target, he is motivated to minimize the expenses and maximize the revenue estimates. This pressure fuels the manager's motivated reasoning (Hayes, 2016).

Hayes (2016) conducted an experiment, where subjects assumed the role of a division manager who was concerned with approving estimates regarding inventory values, which needed to be written down due to damage. In the experiment, the estimates of the subordinate subjects were manipulated to be or not to be in line with the manager's incentives. In one group, the high valuation group, the lower-level manager submits the write down of a small value. In this case, the division is able to accomplish the earning target. In the other group, the lower-level manager submits the write down of a larger value, which implies that the earnings target could not be attained by the division (Hayes, 2016).

The results of the experiments are able to provide evidence for managers using motivated reasoning and for the influence of the anchor. When the lower level manager

states a lower estimate (the anchor), the manager's evaluations are lower, in comparison to the evaluations by the manager that autonomously estimates a sum to write down. In case of a higher subordinate's evaluation, the manager's estimate is higher as well. Hayes (2016) further finds that the influence of the subordinate's anchor is smaller, when it is inconsistent with the manager's incentive. The managers in the experiment selectively incorporate the subordinate's anchor, when it is in line with their reporting incentive. But they do anchor to a smaller extent, when the subordinate's accounting estimate is not in conforming with their incentives. Those results suggest that the managers use motivated reasoning to justify a modification of accounting estimates to fit their reporting incentives (Hayes, 2016).

4.3. Performance Evaluation

In this subchapter, empirical research related to performance evaluation via balanced scorecards is assembled. Tayler (2010) investigates if drafting a balanced scorecard as a causal-chain has a positive effect on managers motivated reasoning and therefore on their biased perception. The researcher further considers the involvement of the managers in choosing measurement criteria for the scorecard. Luft et al. (2015) examine whether using only one item of accounting information for performance evaluation via a balanced scorecard can have benefits for an organization. It is argued that it can limit the costs that arise from performance evaluation uncertainty.

Tayler (2010)

The researcher argues in this paper, whether a scorecard, which is drafted as a casual chain and not solely as a balanced bundle of measures, and the involvement in the realization of a scorecard, can diminish the manager's motivated reasoning. A balanced scorecard directs the focus away from merely quantifying performance in financial dimensions and puts emphasis on the three other performance categories which are: customer, internal processes and learning and growth (Tayler, 2010). Besides the classical format, that focuses on the four perspectives, it is possible to frame the scorecard as a causal-chain, highlighting the causality between the performance drivers and the targets (Kaplan and Norton, 2007). The scorecard functions as an

instrument to determine and communicate the organization's strategic ambitions, to establish action plans that aim to achieve those ambitions and measure the achievement of objectives (e.g. Kaplan and Norton 2000; Niven, 2008). When a scorecard is implemented, the involved persons, e.g. division managers and the senior management, are responsible for selecting the measures, assessing the necessary data, formatting the report itself and distributing the scorecard details (Tayler, 2010). The findings in the field of motivated reasoning indicate that managers assess and interpret information in line with their preferences, so that it is likely that a favored conclusion is the outcome (Kunda, 1990). What individuals believe is not directly influenced by their motivation, but their motivation can guide which pieces of information they consider and what information they disregard (Eply and Gilovich, 2016). When individuals come across an unsuitable proposition, they tend to strive for additional information that disproves or doubts the accuracy of the opposing information. The subjects will gather more information and will be strict when evaluating evidence, which increases the likelihood that they are able to find information that refutes the opposing outcome. On the other hand, when subjects detect tolerable propositions, they will trace information that is able to validate their tolerable proposition (Ditto et al., 1998 and Ditto et al., 2003). This results in an only superficial search for evidence, biased collection of information and a generally only brief search for information (Tayler, 2010). Still the comprehension of such favorable information is limited by its reasonability (Kunda, 1990).

Tayler (2010: 1100) argues that the properties of a balanced scorecard "*produce fertile ground for motivated reasoning processes*", as it mainly comprises non-monetary measures. Those measures are naturally more subjective and ambiguous, than financial dimensions, and therefore leave more room for interpretation, biasedness and the application of motivated reasoning (Ittner and Larcker, 2003; see also Church et al., 2019). Moreover, a performance-measurement-system, such as a balanced scorecard, provides by definition feedback on the performance. As argued before, subjects tend to search for data that is consistent with their preference. If the manager gathers enough supportive information, he will presumably end his search for information and disconfirm, ignore, or reinterpret opposing evidence. A manager that uses the feedback from balanced-scorecards to assess the outcome of an implemented strategy, that he was involved in introducing, would like to receive a positive

evaluation of this strategy. Hence, managers that differ in preferences will also differ in their conclusions, if the information in the scorecard enables different evaluations of the strategy's outcome. This is the case if the information is sufficiently ambiguous, noisy or complex (Tayler 2010).

Based on those arguments, Tayler (2010) predicts that managers, who evaluate the success of a strategic action based on a balanced scorecard, will rate the action as more successful, if they are tasked with choosing the respective strategic action. The researcher states that the implementation of the scorecard as a causal-chain could mitigate motivated reasoning. If the scorecard is framed as a causal chain, the manager must evaluate the relation between the elements of the scorecard to judge the success of the measured strategy. This reduces the possibility that the manager perceives only the information that is in line with his preferences. Further, if the manager is able to comprehend all expected connections between cause and effect that result from the implementation of the strategy it might not be possible to solely focus on information that implies success, when this is not supported by the following hypothesized effects (Tayler 2010). Tayler's (2010) second hypothesis states, that when a scorecard is designed as a causal chain, the subjects involved with the selection of the measured actions are less likely to perceive their action as being successful. In the paper, Tayler (2010) further investigates that not only the managers that participate in picking a strategic action are motivated to see their action being a success. Also, the managers, that are involved in choosing the performance measurements in the balanced scorecard, might be motivated to see their selected measurements work well. When the scorecard is framed as a causal-chain, it is essential that a measure can be applied to predict the outcome in the further cause of the causal chain. Therefore, a manager that is involved in choosing the measures should put emphasis on those interdependencies. The researcher predicts that managers will less probable see a questionable strategic action, that they implemented, as being a success. This is the case, when the scorecard is designed as a causal-chain and they are simultaneously tasked with choosing the measurements (Tayler 2010).

Tayler (2010) tests his predictions, by executing an experiment where he manipulated the design of the scorecard and the involvement in the scorecard implementation. In the experiment, subjects acted as managers of a pizza chain and had to evaluate a

strategic action. For this evaluation, the subjects used information from the framed balanced-scorecard (Tayler, 2010).

Consistent with his predictions, the results are able to confirm that subjects, that participate in the selection of the strategy, more often advice to implement the strategy firm wide, while the performance of the strategy is kept constant. However, designing the scorecard as a causal-chain alone does not sufficiently reduce motivated reasoning. Only when in addition to a causal-chain framed scorecard, the subjects are involved in selecting the measurements, the over-optimistic assessment of the strategy is diminished (Tayler 2010).

Luft, Shields and Thomas (2015)

The researchers' experimental task in this paper is based on the previously discussed study by Tayler (2010). Luft et al. (2015) broaden Tayler's (2010) research, by introducing the role of a superior. This person evaluates and honors the manager's performance in subjective terms, after both receive the accounting records, that contain the results from the manager's strategic decision. The researchers debate that it can be beneficial to consider only profit, rather than profit and additional information, in performance evaluation. This benefit can even comprehend the costs, resulting from incomplete information. Considering only one accounting item is expected to result in less coordination failings in strategic management decisions and in addition reduces the negative surprises of the manager about his performance evaluation (Luft et al., 2015). Luft et al. (2015) argue, that those negative surprises are caused by diverging biased expectations concerning the performance evaluation, due to motivated reasoning. This is in particular the case when performance evaluation is subjective, rather than based on pre-defined measurement criteria. Since there is greater uncertainty regarding the performance expectation and consequences of the manager's strategic decisions (Luft et al., 2015). When subjective performance evaluation is used, potential costs incur, as, under the assumption of a risk- and effort-averse manager, the manager will reduce his effort (Bol, 2008). Luft et al. (2015) identify further costly effects resulting from subjective performance evaluation. Even if the interests of superior and subordinate are aligned via incentives or the culture in the organization, there might be coordination failure that diminishes the performance

evaluation's effectiveness. This coordination failure is a consequence of the subordinate managers missing out on making a decision, which the superior will actually evaluate as good, due to ex ante uncertainty. The lower-level managers might as well fail to develop valid expectations about their performance evaluation. They eventually will be negatively surprised, when their expected performance evaluation is falling behind their actual received performance evaluation. It is argued, that this negative divergence between expected and received performance evaluation adversely affects the effectivity of performance evaluation in general. The managers are stronger motivated to think that their performance is good, than the superior is (Luft et al., 2015). Studies could establish experimental evidence for an on average higher performance rating by the managers themselves, in comparison to the superior's evaluation. The managers might be partially conscious of their biased perceptions (Heidemeier and Moser, 2009). However, it is argued that this awareness is underestimated for two reasons (Luft et al., 2015). On the one hand, the managers might not be able to realize the extent of the bias influencing judgement (Kunda, 1990). On the other hand, persons often assume that the preferences and beliefs of others are more similar to their own, than they are in fact (Brenner and Bilgin, 2011). This will lead to the expectation, that the superior will evaluate the manager's performance similar to the evaluation of the manager himself. The expectation, in turn, is motivated and biased by the wish to retain self-esteem and which will create misconceptions on top (Luft et al., 2015). Reducing uncertainty regarding performance evaluation is wanted by the organization but has its limitations. On the one hand, some uncertainty is the result of natural circumstances. While on the other hand, it might be too costly, if not eliminating performance evaluation uncertainty incurs lower costs, than eliminating it. Reducing performance evaluation uncertainty can be done in numerous ways. For example, by implementing ex ante performance evaluation guidelines, by ex post revision of performance evaluation or by a clear communication regarding the performance evaluation expectation. However, if all ex ante uncertainty is eliminated, there is no longer a subjective, but rather a formulaic performance evaluation system in place. This is not the research subjective of this paper (Luft et al., 2015).

The researchers argue that the manager's uncertainty regarding performance evaluation and the thereof resulting costs fluctuate, subject to the information issued in the reports. Luft et al. (2015) predict that, under certain assumptions, adding

information to the accounting reports increases uncertainty regarding performance evaluation and its previously discussed negative consequences. The assumptions are that performance evaluation is made subjectively, and that there exists causal ambiguity and differences in the interpretation of information.

The experimental setting by Luft et al. (2015) is illustrated in figure 3 below. It visualizes the independent and dependent variables (both in bold) in this paper's experimental setting.

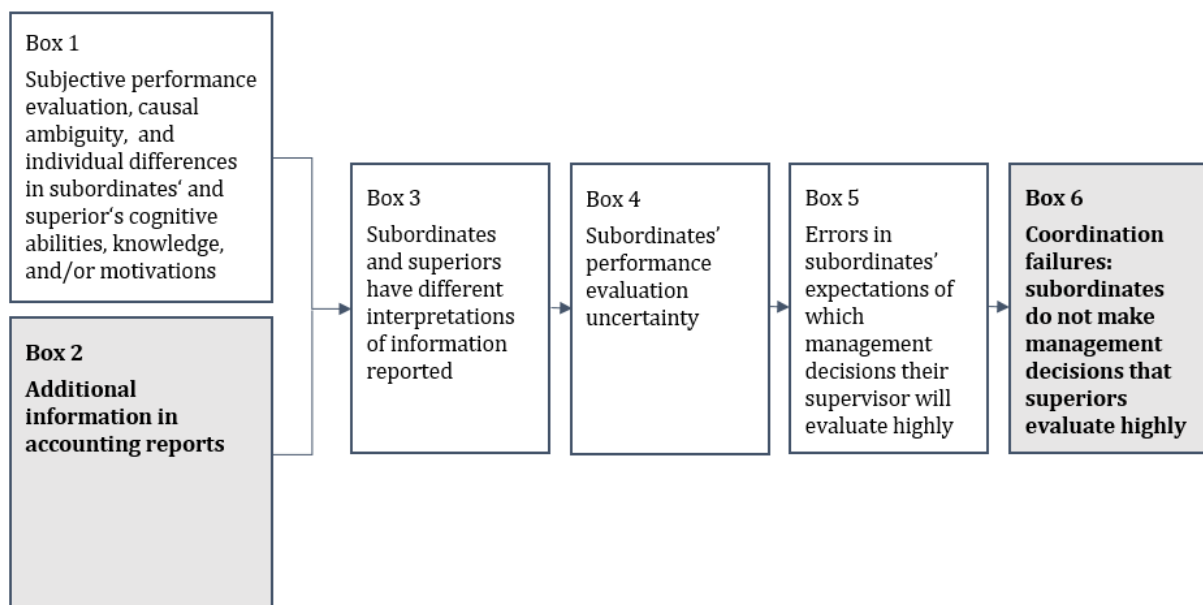


Figure 3: Experimental setting by Luft et al. (2015: 532)

Evidence from psychological research indicates, that when people have ex ante different motivations or knowledge, which leads to different persuasions and preferences, there are also differences in the interpretation of information. In case there is room for diverging interpretation (Thompson and Loewenstein, 1992). Consequently, the diverging prior knowledge and thus the different interpretation of new information can even widen information asymmetry after the new information is received. Based on those findings Luft et al. (2015) provide evidence for an increase of the likelihood of coordination failure. This is, when in addition to profit also additional information is reported, in comparison to when profit is the only information considered (Luft et al., 2015).

The researchers additionally anticipate that, under the previously discussed assumptions, adding information to the accounting reports will increase the bias the subordinate has regarding the superior's evaluation of his performance (Luft et al.,

2015). This results from the biased information processing and interpretation due to motivated reasoning (Tayler, 2010). Information, that can be interpreted in multiple ways, is prone to the previously discussed effects of motivated reasoning. Therefore, the researchers state that, when profit and in addition further information is reported, the tendency of the superior to expect a higher performance evaluation increases. In other words, the surprise regarding performance evaluations is more negative, when not only profit, but also additional information, is reported. The experiment provides evidence for this argument (Luft et al., 2015). The paper by Luft et al. (2015) helps to understand why some organizations use only one piece of information (e.g. profit) for performance evaluation. However, the researchers did not manipulate the level of costs resulting from performance evaluation uncertainty. Moreover, they did not evaluate how trade-offs between the costs and benefits of added information are managed in an organizational setting (Luft et al., 2015).

5. Practical Implications

In chapter 5 practical implications are constituted and discussed, derived from the literature overview in section 4. Organizations can utilize the findings of the moral disengagement and motivated reasoning literature to apply changes to their design of budgeting, control or compensation systems. They can moreover use them to implement rules and guidelines that help overcome costly misreporting or biased information perception, resulting from moral disengagement and motivated reasoning in management accounting. Further, it can be beneficial to incorporate the research findings into the hiring process and into the leadership and organizational culture.

5.1. Design of managerial reporting and budgeting systems, accounting information and forecasting

The study by Paz et al. (2013) and later the research by Brunner and Ostermaier (2017) and Schwering (2017) provide evidence for the negative effects that the disclosure of peer behavior can have on the level of managerial reporting honesty. Especially in the case of partial disclosure. For a firm it is important to consider that more transparency does not necessarily animate more honesty, but possibly even the opposite. The

findings suggest that specifically partial disclosure, when only the cost of peers is learned by managers, provides increasing room for moral disengagement, resulting in slack building behavior. Organizations, that have a transparent reporting environment, should be at least aware of these effects. Generally, it is not beneficial for a firm to implement an open budgeting system, for example as mentioned by Evans et al. (2015), in which all or some budgeting information can be accessed openly (Schwering, 2017). However, the research by Brunner and Ostermaier (2017) also indicates that the effect that slack has on the outcome of the firm is relatively small.

Rasmußen and Leopold-Wildburger (2014) examine the impact that the communication medium of a report has on the honesty of the reporting manager. The findings of the researchers are in summary that managers' report more honestly, when their reports are submitted via hard copy, rather than in digital form. It is argued that digital reports are perceived as being more anonymous and less personal and permanent. Therefore, they more likely lead to misreporting, as if the report is submitted pen-and-paper based. These findings imply that changing the medium of communicating reports can significantly improve honesty in reporting (Rasmußen and Leopold-Wildburger, 2014). However, it is questionable whether taking a few steps back to paper-and-pencil based communication is generally feasible and meaningful. The realization of a hard-copy reporting system certainly also depends on the size of the organization and its hierarchy levels. Nevertheless, if it can be attained to keep or introduce a reporting system, where reports are submitted as hard-copies, organizations can benefit from the positive effects on managers' honesty.

The paper by Church et al. (2019) addresses how characteristics of a budgeting system, such as the measurement basis used in the report and how slack benefits the manager, do affect the honesty of the reporting manager. It is argued that in an organization, where purchasing is coordinated decentralized, budget requests are submitted in financial terms and managers can therefore directly benefit from slack. The results of the study suggest that such a setup of purchasing can facilitate dishonest reporting behavior. Therefore, it might be of interest for an organization to initiate using a non-monetary measurement basis in budgeting, as this evidently patronizes honesty. Alternatively, in organizations with a centralized purchasing policy, managers standardly report budget in non-financial terms and might benefit indirectly from

slack. In such a case, honesty can be increased when managers are granted more discretion for using resources, making direct benefit from slack possible, within a certain frame (Church et al., 2019).

Boiney et al. (1997) investigate biased forecasting, with the outcome that managers incorporate unreasonable expert forecasts, when it is necessary to favor a motivated market-entry decision. Those results suggest that organizations should be careful and diligent, when selecting experts that provide sales forecasts. The four-eye principle, meaning that forecasting figures are additionally reviewed by a second person, can further be beneficial in such cases (Boiney et al., 1997).

5.2. Design of control systems

The research by Cardinaels and Jia (2016) on the effect that the use of audits has on descriptive peer norms, incentives and therefore on misreporting, propose practical implications for the enforcement of control systems. The researchers find that using audits to discover misreporting has a positive effect on the level of managerial reporting behavior. Moreover, the impact that descriptive peer norms have on the reporting behavior does depend on whether audits are used. In case no audits are used, descriptive peer norms do not have a considerable impact and the conduct of managers is primarily influenced by their incentives. The presence of audits, internal and external ones, does signal that misreporting will not be accepted in the organization and is therefore highly recommended (Cardinaels and Jia, 2016).

5.3. Design of managerial performance evaluation

Tayler (2010) scrutinizes whether the perception of the success of a measured strategic activity is more positive, if the manager is involved in the preparation of the balanced scorecard measuring the respective strategic activity. A causal-chain formulated scorecard in connection to the manager's involvement in selecting measures for the scorecard is most fruitful. Both have positive effects on the managers perception biased by motivated reasoning, which would otherwise narrow the effectivity of the scorecard. Therefore, it can be recommended to organizations to

involve managers, who implement strategies, in choosing scorecard measures. This can reduce a biased and over-optimistic perception of the manager regarding his strategic action (Tayler, 2010).

The researchers Luft et al. (2015) examine when relying on a single element of accounting information for performance evaluation has its benefits, despite of the data incompleteness. They found that, under certain assumptions (subjectivity and causal ambiguity), relying only on profit can have positive effects on the costs resulting from performance evaluation uncertainty. On the one hand, it improves the likelihood that the subordinate manager makes decisions in line with what superiors will positively evaluate, further leading to less failure in task coordination. On the other hand, it can reduce manager's negative surprises about their performance evaluation outcomes. This empirical research provides evidence that organizations benefit when they evaluate managers solely based on one item of accounting information, e.g. profit. Even if this means that the evaluation might be incomplete (Luft et al., 2015).

5.4. Design of compensation systems, delegation of decision rights and coordination

Chong and Wang (2018) suggest that expanded delegation of decision rights can lead to unethical behavior of managers. Moreover, the researchers find that managers with low responsibility rationalization, so more honest individuals, misreport more, if the incentive-based compensation scheme rises. This is of practical importance, as it shows that relying solely on compensation schemes has no effect on the conduct of such managers. Further, the researchers find that delegating decision rights has a more positive effect on misreporting of the less honest manager type. Chong and Wang (2018) state that a well-penned handbook, which determines policies, procedures and guidelines for the higher-level managers on how to convey responsibility and authority to the lower level of managers, should be implemented (Chong and Wang, 2018). The results by Cardinaels and Jia (2016) suggest that increasing incentive compensation rates negatively affects the level of honesty and the consideration of consequences. Church et al. (2014) consider the honesty preferences of their subjects and predicted their reporting behavior based on this typing. The researchers' findings further

highlight the impact that such preferences have on information consideration, decision making and especially reporting honesty. The honesty preferences must therefore be considered, when deciding whom to allocate which decision rights.

Schwering (2017), who based her research i.a. on the work of Paz et al. (2013) and Brunner and Ostermaier (2017), further investigates the influence of peer's honesty on the reporting honesty of managers. Her findings imply that honesty, in a reporting context, strongly depends on financial incentives. Moreover, the level of honesty decreases over time, when managers receive information about their peer's level of honesty. In practice accountants, which are concerned with the elaboration of budget-based incentive schemes, should consider if it is possible for managers to deduce the level of honesty of peers, based on budget information. In case it is easy for managers to receive information regarding their peer's behavior, alternative incentive schemes might be considered to avoid a decrease in manager's honesty (Schwering, 2017).

5.5. Codes of Conduct, organizational culture, leadership and governance

Cardinaels and Jia (2016) state that descriptive peer norms and audits complement each other, in case managers can observe the level of reporting honesty of their peers. It is argued that, in the absence of audits, incentives drive the level of honesty in a reporting setting, rather than descriptive peer norms. When audits are conducted, and individuals follow their peer's behavior, implementing codes of conduct, corporate governance codes, and generally emphasizing honesty as part of corporate culture, can strengthen desirable conduct in the organization. If those actions positively influence individuals to be motivated to act honestly, then the level of honesty in a reporting setting might increase, as honesty is considered the descriptive peer norm. However, it has to be kept in mind that this is also the case if more individuals act dishonestly.

The findings by Paz et al. (2013) propose that it is important for an organization to not at all tolerate norm-violating conduct. It can easily be considered as being the prevailing norm and has a highly negative impact on the long-term conduct of employees. Implementing and highlighting an organizational culture that puts great emphasis on honesty and accountability positively affects the behavior of all

employees. Even the conduct of those, who would normally have a preference towards wealth-maximizing, rather than honest, behavior. This approach erodes the possibility of using norm-violating behavior of peers to justify the own dishonest behaviors. It is especially important as the examples of norm-violating behavior stimulate more norm-violating behavior, than norm-complying example inspires compliant conduct (Paz et al., 2013). Church et al. (2012) also stress the importance of an organizational environment that emphasizes ethical conduct. That is because it is difficult for managers, who intend to behave unethical, to justify their misconduct, if all other employees follow ethical principles. The researchers argue that this kind of ex ante behavioral control is a more effective way to increase honesty, than the traditional approach to sanction misconduct in retrospect (Church et al., 2012). By establishing an Ethics and Compliance Office or a subject matter expert dedicated to compliance, an organization signals internally and externally that honest and compliant behavior is an important part of the corporate identity. Such a dedicated group/person could further serve as point of contact for compliance questions and can be responsible for implementing codes of conducts. In addition, these responsible might perform regular compliance audits in the business areas to detect compliance risks and regularly communicate compliance topics, e.g. via newsletters, to all employees to further emphasize the importance of ethical conduct.

Mayhew and Murphy (2014) examine the effect that an authority's instruction has on the reporting behavior of the manager. The findings summarized are that authorities order to misreport influence rationalization, leading to a displacement of responsibility of the manager and further to increased misreporting. Those findings imply that instructions to misreport by an authority figure enables the manager to misreport, while feeling fewer negative emotions. However, it is possible to intervene in the process of moral disengagement. What determines the conduct of a person is more often the circumstances one is confronted with, rather than the kind of person someone is. Therefore, the organizational culture and leadership can have a great impact on the behavior of the employees (Mayhew and Murphy, 2014). Mayhew and Murphy (2014) highlight the significance of a "tone at the top". Schwering (2017:1170) argues that also a "*tone from the middle*" needs be considered, due to her findings, which illustrate that subjects imitate their peers' behavior concerning managerial honesty. Hence, the

peers' behavior plays an important role for the acceptance of codes of conducts or guidelines within an organization and should be considered as well (Schwering, 2017). Competition within an organization can have positive economic effects for the organization, e.g. enhanced motivation or a more efficient resource and capital allocation. However, as the findings by Schreck (2015) imply, there might be potential negative impacts on the level of misreporting. Financial pressure and rivalry can lead to an increase in misreporting, in particular such kind of competition that increases the incentive to lie, e.g. when financial benefits increase with dishonesty (Schreck, 2015). An organization that promotes team spirit across all divisions and departments and does not further encourage rival and competitive behavior can benefit from more honest reporting behavior.

5.6. Recruitment practices

Individuals use responsibility rationalization to different extents to justify their unethical behavior. This has a strong impact on the honesty of managers. Therefore, it is important for an organization to hire "*the 'right' people*" (Chong and Wang, 2018: 25). The researchers suggest that organizations implement strategies for recruiting and promoting, which map out policies and procedures for promoting and employment (Chong and Wang, 2018). Chong and Wang (2018) question the importance of pre-employment screening tests. Although, such screening can reveal the level of responsibility rationalization of the candidates. The ones that are found to be more honest still engage in dishonest reporting behavior, when incentive-based compensation schemes are in place. Rasmussen and Leopold-Wildenburger (2014) incorporate subjects' social preferences in their research and are able to demonstrate that individualistic agents report less honestly, than cooperative agents do. Those results indicate that pre-employment screening tests can be considered to learn a candidate's social preferences and responsibility rationalization. However, organizations should not rely too heavily on those pre-screening methods (Chong and Wang, 2018).

6. Discussion and conclusion

The purpose of this master's thesis is to offer a solid overview of the literature that observes the psychological concepts motivated reasoning and moral disengagement in a management accounting context. It examines how contextual factors and personal preferences affect the reporting behavior of managers. Further, it scrutinizes how managers bias their assessment and interpretation of information in different areas of management accounting. For a better overview, I assembled the literature within the management accounting fields managerial reporting, accounting estimates & forecasting and performance evaluation. The necessity to investigate moral disengagement and motivated reasoning in an accounting context results from its impact on business decisions of managers and its influence on managerial honesty. Those negative influences can become very costly for the firm.

Managers can easily get into situations, where it is beneficial for them to violate moral standards, for example when they financially benefit from misreporting. To act unethically, while having less or no negative feelings, can be attained by applying moral disengagement mechanisms. Those mechanisms allow individuals to disengage morally from detrimental conduct (Bandura et al., 1996). Whether those mechanisms are applied does depend on certain influence factors. The factors, that are considered in the literature, are social influences, character traits of a person, the organizational setting, and instructions to behave unethically. A key finding of this thesis is that social influences and peer behavior highly direct and influence managers' conduct. This is because they determine what behavior is socially acceptable and can serve as a moral justification for misconduct, for example misreporting (Schwering, 2017). For organizations, those findings imply that it is important to highlight an environment emphasizing ethical conduct in the organization. This could be done, for example, by introducing a role or team dedicated to compliance.

Several studies come to the conclusion that an open budgeting system does negatively affect honesty in budgeting (see Paz et al., 2013; Brunner and Ostermaier, 2017 and Schwering, 2017). According to motivated reasoning theory, individuals obtain information in such a way that it is in line with the conclusion they want to reach. Therefore, if managers wish to create slack, they will focus on the norm-violating behavior of their peers. This results in a decrease of honesty, when peers' reporting

behavior can be observed by the manager (Paz et al., 2013). Those findings indicate for the practice that an open budgeting system, where the budgeting data of all managers can be accessed openly, is not beneficial (Schering, 2017). What intensifies the individual's adaption of their peers' behavior are audits. Audits generally signal that dishonesty is an unaccepted behavior in the organization. However, it needs to be noted, that this increased adaption of peer behavior exists also when more peers report dishonestly (Cardinaels and Jia, 2016).

Another influencing factor, that affects the utilization of moral disengagement mechanisms, are the character traits of a person (Liessem et al., 2015). The study findings, discussed in the literature review (Church et al., 2014; Rasmussen and Leopold-Wildburger, 2014 and Chong and Wang, 2018), collectively indicate that character traits significantly influence the reporting behavior of managers and should be considered in the hiring process. Managers, that prefer a low (high) level of honesty act according to their preferences dishonestly (honestly). These results make it clear that organizations should consider preferences for honesty, when deciding whom to allocate which decision rights (Church et al., 2014). Another variable, that leads to moral disengagement and therefore results in less honest reporting behavior, is the type of transmission medium used in reporting. The key finding of the study by Rasmussen and Leopold-Wildburger (2014) is, that subjects are more honest, when they submit the budget report as a hard copy, rather than digitally. Whether if it is feasible to implement such a reporting system, certainly does depend on the organizational structure and the size of the organization. Important implications for the practice have the findings by Schreck (2015). The researcher provides evidence that rivalry in an organization increases manager's utilization of moral disengagement mechanisms. For organizations, these results suggest that rather than promoting rivalry, they should encourage team spirit across all divisions and functions.

Not only dishonest reporting behavior can be costly for a firm, but also managers making biased decisions, resulting from information acquisition and procession being influenced by the managers motivations and goals. Motivated reasoning makes individuals observe information that is in line with their favored conclusion less skeptical, than the information that contradicts the conclusion (Ditto and Lopez, 1992). In the literature, researchers investigate motivated reasoning when managers review

accounting estimates (Hayes, 2016) and generate forecasts (Boiney et al., 1997), or in connection to performance evaluation via balanced scorecards (Luft et al., 2016 and Tayler, 2010). The key findings are that managers heavily bias their perception, when they are motivated to do so. In addition, those biased managers are at least as confident in their influenced predictions, as unbiased managers (Boiney et al., 1997). For organizations, the findings imply that experts for forecasts should be selected diligently. Moreover, applying the four-eye principle might mitigate biased decisions to a certain extent.

The last management accounting area, that is examined in the motivated reasoning research, is performance evaluation via balanced scorecards. Essential findings by Tayler (2010) are, that managers are severely biased, when they evaluate a strategic action, they were tasked to implement, via a balanced scorecard. Those motivated managers evaluate their activity as being more successful, than someone who was not involved in implementing the strategy would. This over-optimistic assessment of implemented strategies is mitigated, when the managers are involved in selecting the measures, that are applied in the scorecard and in addition, the scorecard is framed as a causal chain. Lastly Luft et al. (2015) debate and find evidence for the benefit of considering only profit, rather than more than one measurement, when evaluating performance. When only one accounting item is considered, coordination failings in strategic management decisions can be mitigated. In addition, the negative surprises about the subordinate's performance evaluation results can be reduced. Those results can explain why some firms only use profit as an indicator for evaluating performance (Luft et al., 2015).

All those findings provide practical implications that can be used by management accountants to construct reporting and budgeting systems, control systems, performance evaluation, compensation systems or coordination. Generally, moral disengagement can explain why some managers create budgetary slack, without feeling guilty or having other negative emotions. The motivated reasoning literature provides explanations for why managers do not always act rationally, but are biased in their information acquisition, assessment and interpretation.

This master thesis contributes to the management accounting literature observing psychological concepts. It provides a well-founded and extensive overview of the

current empirical literature and investigating how moral disengagement and motivated reasoning mechanisms are used in a management accounting context. Further, it presents implications for organizations that can be applied, for example, for designing their budgeting and performance evaluation systems, for recruitment, coordination or compensation systems. Therefore, this thesis might not only be of interest for economists and social scientists, but for practitioners as well.

There is a limitation to this thesis. Due to its restrictions to managerial accounting, this thesis does not consider literature related to financial accounting. This limitation is, at the same time, an option for further research. There is currently a lot of literature observing moral disengagement and motivated reasoning from a financial accounting perspective, especially concerning financial audits. This would be an interesting research topic, particularly since financial accounting is legally regulated. Moral disengagement in financial accounting could therefore even lead to legal risks. As Hayes (2016) observes, the personality of subordinates plays a key role and can highly influence the decision making of managers. It would therefore be also interesting to further investigate the influences that subordinates have on a manager's moral disengagement and motivated reasoning in an accounting context. Future research could moreover investigate cultural and societal aspects, that might differently affect moral disengagement and motivated reasoning in an accounting context.

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Appendix

Table 1: Research method and sample size of reviewed literature

Paper	Journal	Method	Sample
<i>Boiney, L. G., Kennedy, J., & Nye, P. (1997)</i>	Organizational Behavior and Human Decision Processes	Experiment	65 undergraduate business students (study 1) 122 undergraduate business students (study 2)
<i>Brunner, M. & Ostermaier, A. (2017)</i>	Journal of Business Ethics	Experiment	174 students
<i>Cardinaels, E., & Jia, Y. (2016)</i>	European Accounting Review	Experiment	152 students
<i>Church, B. K., Hannan, R. L., & Kuang, X. J. (2012)</i>	Accounting, Organizations and Society	Experiment	174 undergraduate students
<i>Church, B. K., Hannan, R. L., & Kuang, X. (2014)</i>	Contemporary Accounting Research	Experiment	180 undergraduate students
<i>Church, B. K., Kuang, X. J., & Liu, Y. S. (2019)</i>	Accounting, Organizations and Society	Experiment	81 undergraduate students
<i>Chong, V. K., & Wang, I. Z. (2018)</i>	European Accounting Review	Online survey	129 Middle-level managers from manufacturing sector
<i>Diekmann, K. A. (1997)</i>	The International Journal of Industrial, Occupational and Organizational Psychology and Behavior	Experiment	122 MBA students
<i>Hayes, M. (2016)</i>	n.a. (Dissertation at Arizona State University)	Experiment	184 MBA Students
<i>Luft, J., Shields M. D. & Thomas, T.F. (2015)</i>	Contemporary Accounting Research	Experiment	94 MBA students
<i>Mayhew, B. W., & Murphy, P. R. (2014)</i>	Contemporary Accounting Research	Experiment	88 students
<i>Paz, M., Reichert, B. E., & Woods, A. (2013)</i>	n.a. (Book: Advances in accounting behavioral research)	Experiment	109 undergraduate students
<i>Rasmussen, A., & Leopold-Wildburger, U. (2014)</i>	Journal of Business Economics	Experiment	147 participants
<i>Schreck, P. (2015)</i>	Critical Perspectives on Accounting	Experiment	60 Students
<i>Schwering, A. (2017)</i>	Journal of Business Economics	Experiment	108 students

<i>Taylor, W. B. (2010)</i>	The Accounting Review	Experiment	132 MBA Students
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Table 2: Overview of reviewed literature

Paper	Variables			Study findings
	Dependent	Moderator	Independent	
<i>Boiney, L. G., Kennedy, J., & Nye, P. (1997)</i>	sales forecast		motivation (motivated vs unbiased); distance of diverging expert forecast (near vs far)	Motivated subjects put more weight on an expert forecast that diverges far from other expert forecast, when this is required in order to favor a market-entry decision of a product.
<i>Brunner, M. & Ostermaier, A. (2017)</i>	managerial honesty		peer influence via transparency (partial vs full transparency)	Managers mimic their peers' level of honesty and thus their level of slack. This effect is asymmetric. Peers' dishonesty greater influences the manager's level of honesty than peers' honesty does.
<i>Cardinaels, E., & Jia, Y. (2016)</i>	honest reporting	audits	incentives, peer behavior	Audits positively affect the level of managerial honesty. When audits are used, honesty is perceived as the descriptive peer norm, which lowers misrepresentation.
<i>Church, B. K., Hannan, R. L., & Kuang, X. J. (2012)</i>	honest reporting, budgetary slack	non-reporting employee's awareness of misreporting and honest preference	shared interest (sharing with non-reporting employee vs not sharing with non-reporting employee)	Managers' report less honestly when they share their slack with a non-reporting employee.
<i>Church, B. K., Lynn Hannan, R., & Kuang, X. (2014)</i>	opportunistic reporting	honesty preferences	discretion in information acquisition	Managers with a moderate preference for honesty are affected by discretion in information acquisition, meaning that they do not consider all relevant

				information and therefore report more opportunistically.
<i>Church, B. K., Kuang, X. J., & Liu, Y. S. (2019)</i>	managerial honesty		measurement basis of report (financial vs. non-financial); slack benefit (direct vs. Indirect benefit from slack)	When budget is requested in financial units, the subjects' level of honesty decreased when they directly benefit from budgetary slack. When subjects do not receive direct payoff from slack induced in the report, the participants' honesty decreased, when the budget was submitted in non-monetary terms.
<i>Chong, V. K., & Wang, I. Z. (2018)</i>	misreporting	responsibility rationalization	delegation of decision rights (measured by 7-item Likert-type scale) Incentive based compensation schemes (2-item Likert-type scale)	Subjects with higher responsibility rationalization misreport to a greater extent, when higher incentive-based compensation schemes are used, as the compensation schemes serve as a legitimization for the misconduct.
<i>Diekmann, K. A. (1997)</i>	percentage of resources allocated to themselves and/or the group		recipient of allocation (single person vs group) privacy of allocation (public vs private)	Individuals allocate more to themselves when in a group setting, than to only themselves. They allocated less to themselves if the allocation is made in public.
<i>Hayes, M. (2016)</i>	amount approved to write down		subordinates estimate (consistent with manager's reporting incentives vs. Not consistent with manager's reporting incentives)	When subordinates state a lower (higher) estimate, the manager's estimates are lower (higher) in comparison to those of managers that autonomously estimated a sum to write down. The anchor's influence is smaller when it is inconsistent with the manager's incentive.

<i>Luft, J., Shields M. D. & Thomas, T.F. (2015)</i>	surprise in subjective performance evaluation; coordination failure		information reported (profit-only vs. profit-plus additional information); implementation firm-wide; coordination failure	Under causal ambiguity, adding information (besides profit) when evaluating the performance of a manager can increase costs resulting from the manager's uncertainty regarding performance evaluation.
<i>Mayhew, B. W., & Murphy, P. R. (2014)</i>	misreporting	rationalization (mediator)	misreporting instruction	Managers, that are told to misreport by an authority, will more likely misreport. This is also the case in later reporting periods, when they are told to misreport only in the first period.
<i>Paz, M., Reichert, B. E., & Woods, A. (2013)</i>	honest reporting		disclosure of peers' reports (partial disclosure (20% highest reports) vs. full disclosure (all reports))	Honesty decreases over time in case peer reports are disclosed to the manager and even more when only the least honest reports are disclosed. When no peer report is disclosed the manager's, honesty stays steady.
<i>Rasmussen, A., & Leopold-Wildburger, U. (2014)</i>	managerial honesty	agents' type (cooperative vs individualistic)	type of transmission of budget reports (computerized treatment vs. Paper-and-pencil treatment)	Hand-written reporting leads to less misrepresentation than computer-based reporting. However, this is only the case for individualistic agents. No significant difference in the level of honesty was found for cooperative agents.
<i>Schreck, P. (2015)</i>	honesty in managerial reporting	gender	competition (economic pressure vs. rivalry)	Rivalry and competition lead to more misrepresentation, as it is used as justification for misconduct.
<i>Schwering, A. (2017)</i>	managerial honesty		level of disclosure (anonymous vs. non-anonymous disclosure vs. no disclosure)	The level of honesty of a manager declines over time when peer honesty is disclosed, but not when peer honesty is kept private.

<i>Taylor, W. B. (2010)</i>	rollout judgement	financial perspective emphasis	scorecard framing (four groups vs causal-chain); initiative selection involvement; measurement selection involvement	Solely framing a balanced scorecard as a causal-chain does not mitigate motivated reasoning. Involvement in selecting measurements and framing the scorecard as causal-chain limits over-optimistic assessment of the implemented strategic action.
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Abstract

This master's thesis investigates the socio-psychological concepts moral disengagement and motivated reasoning in the context of management accounting. The aim of this thesis is to provide a literature overview and derive practical implications for organizations. Moral disengagement means a separation of the misconduct from moral standards by using specific mechanisms. In management accounting, managers might have incentives to act unethically e.g. to create budgetary slack. By using moral disengagement mechanisms, such as moral justification or displacement of responsibility, they are able to act unethically, while not suffering from negative emotions. The second concept, that is examined in the course of this thesis, is motivated reasoning. Managers can be motivated to arrive at certain conclusions, e.g. to approve the market entry of a product. This motivation influences the information gathering, information processing, and decision making of the manager. The decisions, made by the manager, are not rational anymore, but could potentially be disadvantageous or even costly for the organization. Practical implication for organizations, to mitigate negative effects resulting from moral disengagement and motivated reasoning, are derived from the empirical literature. Therefore, this thesis might be interesting for practitioners, as well as for economists and social scientists.

Zusammenfassung

Diese Masterarbeit untersucht die sozialpsychologischen Konzepte Moralische Abkoppelung und Motivierte Wahrnehmung im Kontext des Management Accounting anhand eines Literaturüberblicks und leitet daraus Handlungsempfehlungen für die Praxis ab. Mit Moralischer Abkoppelung ist die Trennung des unethischen Handelns von moralischen Standards, mithilfe verschiedener Mechanismen, gemeint. Im Management Accounting können Bereichsleiter Anreize haben unehrlich zu handeln, beispielweise budgetary slack zu kreieren. Durch Moralische Abkoppelung ist es ihnen möglich, z.B. durch moralische Rechtfertigung oder der Verlagerung der Verantwortung auf andere, unmoralisch zu handeln, ohne negative Gefühle fürchten zu müssen. Das zweite Konzept, welches in dieser Masterarbeit behandelt wird, ist Motivierte Wahrnehmung. Manager sind oft motiviert zu einer bestimmten Schlussfolgerung zu gelangen, beispielweise der Einführung eines Produkts zuzustimmen. Diese Motivationen beeinflussen die Informationsbeschaffung, -verarbeitung und Entscheidungsfindung des Managers. Die vom Manager getroffenen Entscheidungen sind dann nicht mehr rational, sondern für das Unternehmen tendenziell nachteilig oder sogar kostspielig. Im Zuge der Masterarbeit werden aus der empirischen Literatur Handlungsempfehlungen für die Praxis abgeleitet. Diese können helfen, die durch Motivierte Wahrnehmung und Moralische Abkoppelung hervorgerufenen negative Auswirkungen auf Unternehmen einzudämmen oder abzuschwächen. Aus diesem Grund ist diese Arbeit sowohl für Praktiker, als auch für Wirtschafts- und Sozialwissenschaftler interessant.