

No More Polarization, Please!

Towards a More Nuanced Perspective on Motivation in Organizations

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Abstract

The organizational science literature on motivation has for long been polarized into two main positions; the organizational economic position focusing on extrinsic motivation and the organizational behavior position emphasizing intrinsic motivation. With the rise of the knowledge economy and the increasing levels of demands and complexities it entails, such polarization is not fruitful in the attempt to explain motivation of organizational members. This paper claims that a more nuanced perspective on motivation, acknowledging the co-existence of intrinsic and extrinsic motivation, the possible interaction between the two as well as different types of motivations filling in the gap between the two polar types, are urgently needed in the organizational science literature as well as in practice. By drawing on the research on intrinsic and extrinsic motivation from the field of psychology and combining this with contributions from organizational science, economics, and sociology, this paper attempts to develop an emergent understanding of motivation, which is far more faceted than the one dominating the organizational science literature currently. This paper should be perceived as a call for more research attention to the increasing challenge of today's motivation management in organizations.

Key words

Work motivation, intrinsic motivation, extrinsic motivation, motivation systems, and the knowledge economy

1 Introduction

The need to explore human motivation and encourage debates about its nature has once again emerged in the field of management (Ambrose & Kulik, 1999; Osterloh, Frost & Frey, 2002; Ellemers, de Gilder & Haslam, 2004; Locke & Latham, 2004; Gagné & Deci, 2005; Latham & Pinder, 2005). An important reason arguably is the emergence of what is often called the "knowledge economy," the attendant emerging consensus that knowledge is the key source of an organization's competitive advantage (Boisot, 1998; Davenport & Prusak, 1998; Argote & Ingram, 2000; Osterloh & Frey, 2000; Cabrera & Cabrera, 2002), and that this introduces particular problems related to providing motivation in knowledge-based firms (Osterloh & Frey, 2000). It is the contention of this paper that the greater levels of uncertainty, velocity, competitive pressure, knowledge flows, and new organizational forms associated with the rise of the knowledge economy demand not only an increasing focus on human motivation, but also that the hitherto polarized discussion on human motivation, which has dominated organizational science for long (Taylor, 1914; Maslow, 1943; Herzberg, 1968; Vroom, 1964; McGregor, 1960; McClelland, 1968; McClelland & Winter, 1969; Luthans & Kreitner, 1975; Mayo, 1975; Simon, 1976; Holmström, 1979), give way to a more nuanced recognition of the complexity of human motivation. Two polar perspectives on motivation are predominant in the organizational science literature: the pure organizational economic approach and the pure organizational behavior approach.

The pure organizational economic approach is exclusively based on the idea of organizational members as "economic men" acting rationally as well as opportunistically. Incentives applied by external sources, such as a principal, will therefore per definition enhance the individual's effort and performance in accordance with the behavior desired by the principal (Holmström, 1979; Williamson, 1979; Frey, 1997; Bénabou & Tirole, 2003; Hendrikse, 2003). In the context of the canonical agency model, Hendrikse (2003, p. 97) emphasizes that: "...the behaviour the principal desires of the agent will be chosen by the agent because the rules of the contract are such that it yields the highest payment for the agent". Hence, in the economic approach the concept of extrinsic motivation is perceived to be superior in directing human behavior and as such intrinsic motivation is not recognized as an important element of inquiry.

In contrast, the pure organizational behavior approach emphasizes an inner type of motivation - intrinsic motivation - which is claimed to lead to higher satisfaction and efficiency levels of organizational members (Herzberg, 1968; McGregor, 1960; Hackman et al., 1975). As a consequence of this, topics such as job enrichment, participative management, decentralization,

development and self-actualization, argued to enhance intrinsic motivation, have attracted considerable attention in the organizational behavior literature. In a review of the literature on work motivation, Ambrose and Kulik (1999, p. 235) found that intrinsic motivation still is perceived to be extremely appealing and superior within this line of research as “[i]ndividuals consistently express preferences for intrinsic job attributes...”.

Polarizing the debate on motivation in such a way can have considerable negative consequences in terms of understanding the motivation underlying individual behavior as well as in terms of developing theories on how to manage motivation appropriately. Behaviors, which appear to be self-interest seeking and extrinsically motivated, might in fact not be so at all. Similarly, intrinsically motivated behaviors might turn out to be self-interest seeking (Hendry, 2002). In other words, things are not always as they appear and as a consequence it is rather fatal to polarize the discussion of motivation as has been done for long. We might end up with the wrong assumptions and thereby the wrong theories as well as tools to motivate behavior.

Recently, it is increasingly acknowledged that both the organizational economic approach and the organizational behavior approach to human motivation and behavior, hence both intrinsic motivation and extrinsic motivation, are needed when attempting to analyze and understand motivation and behavior in organizations (Baron & Kreps, 1999; Grandori, 2001; Osterloh, Jetta & Frey, 2002; Foss, Husted, Michailova & Pedersen, 2003). Yet, several scholars argue that the organizational economic perspective on motivation and the assumptions about human behavior underlying this perspective are prevalent in the literature and consequently in organizational practice (Ghoshal & Moran, 1996; Ferraro, Pfeffer & Sutton, 2005). It is argued that the predominance of extreme forms of extrinsic motivation functions as a self-fulfilling prophecy, instilling the motives and behaviors, which organizational members are assumed to hold: “The assumption of opportunism can become a self-fulfilling prophecy whereby opportunistic behavior will increase with sanctions and incentives imposed to curtail it, thus creating the need for even stronger and more elaborate sanctions and incentives” (Ghosal & Moran, 1996, p. 14). In other words, the focus on extrinsic motivation in the literature as well as in practice actually induces the behaviors, which initially were hoped to be eliminated.

This dominant focus on extrinsic motivation mainly stems from a belief that other individuals are more extrinsically motivated and less intrinsically motivated than themselves (Heath, 1999). This has extremely unfortunate consequences as principals might end up designing contracts and

motivation systems, which are not motivating to the agent and hence either induce the wrong kind of behavior or ineffective behaviors.

With the rise of the knowledge economy such views and polarized debates on motivation are not fruitful. Motivating organizational members has assumed a different and more nuanced character compared to earlier, making motivation a greater challenge with far more facets. This challenge is due to several factors: Firstly, organizations require different and more demanding behaviors of organizational members: “The creativity involved in knowledge-intensive processes requires knowledge workers to display a degree of individual entrepreneurship...” (Mudambi, Mudambi & Navarra, 2004, p. 3). The increasing demands put on organizational members require a revised set of motivational tools to induce the desired behaviors. Secondly, organizational members require more challenge, autonomy, and interesting tasks in their daily work leading some scholars to emphasize the importance of motivating organizational members intrinsically as this type of motivation supposedly yields considerable benefits in the form of knowledge generation and knowledge sharing (Mønsted, 2005; Osterloh & Frey, 2000; Mudambi, Mudambi & Navarra, 2004). Thirdly, organizational members tend to work in self-managed teams (Ellemers, de Gilder & Haslam, 2004) requiring different means of motivation management than earlier. Finally and linked to the latter, “...with the increasing proportion of workers involved in exchange of knowledge or provision of services instead of production of goods, it has become more difficult to define individual work performance or to assess individual productivity unambiguously” (Ellemers, de Gilder & Haslam, 2004, p. 460). Hence, defining and measuring the performance of the individual has become a more challenging task, making it more difficult for organizations to resort to extreme types of extrinsic motivation.

Thus, a more nuanced perspective on motivation corresponding with the more nuanced and complicated motivation challenge facing organizations today is needed, demanding that we go beyond the polarized positions; extrinsic versus intrinsic motivation and even beyond the acceptance of their co-existence. This paper deals with three challenges, which are in need of discussion. First, we need to come to terms with the fact that the field and practice are still heavily dominated by the assumptions of economic theories and hence extreme forms of extrinsic motivation. Intrinsic motivation needs to be considered as equally important as extrinsic motivation. Second, even if the importance of both intrinsic and extrinsic motivation is acknowledged, they are often treated as additives and thereby the positive and negative interaction, which can take place between the two, is neglected. Third, the acknowledgement of both intrinsic and extrinsic motivation still leads the debate in a dichotomous direction and fails to understand the full

complexity of human motivation and behavior. As such a softening of the sharply polarized positions realizing the complexities involved is required in order to reflect the world that organizations function in today.

These challenges can be dealt with appropriately if attention is directed to the lengthy debates on intrinsic and extrinsic motivation within the field of psychology. Not only has this field acknowledged the distinction between intrinsic and extrinsic motivation for long, the interplay between the two has also been a heated topic within the field since the end of the 60s (e.g. DeCharms, 1968; Lepper, Greene & Nisbett, 1973; Kohn, 1999; Deci & Ryan, 2000; Cameron & Pierce, 2002). Strikingly, this latter aspect is hardly considered within organizational science. Only recently has this interplay received some, although limited, attention in the organizational science literature (Frey, 1997; Osterloh & Frey, 2000; Bénabou & Tirole, 2003). Another aspect of psychological research on intrinsic and extrinsic motivation, which can address the challenges stated above, is the recent focus on different degrees of extrinsic motivation, varying in level of internalization (Vallerand & Bissonnette, 1992; Ryan, 1995; Deci & Ryan, 2000; Gagné & Deci, 2005). These give a much more nuanced perspective on extrinsic motivation and potentially on intrinsic motivation, which have not yet been adopted in debates on motivation within organizational science.

On the basis of the research within the field of psychology, this paper makes an emergent attempt to dissolve the polarization of the motivation debate within organizational theory by extending the narrow understandings, which currently are dominating the literature. The purpose of this paper is not merely to review the psychology literature on intrinsic and extrinsic motivation; it also aims at discussing the different contributions from psychology, sociology, economics, neuroeconomics, and organizational behavior in order to show how these can complement each other and thereby creating a more nuanced perspective on motivation in organizations.

With this purpose in mind, motivation in organizations will be defined with inspiration from the definition offered by Pinder: “A set of energetic forces that originate both within as well as beyond an individual’s being ... [which separately or in interaction] initiate work-related behavior, and determines its form, direction, intensity, and duration” (Pinder, 1998, p. 11, text in brackets is added by the author of this paper).

In order to create a basis for the main discussion of this paper, the different assumptions about human behavior underlying the understandings of intrinsic and extrinsic motivation as well as the

actual understandings of the two concepts within psychology will be presented. Following this, the understandings will be discussed in relation to the organizational science and sociology literature on motivation in order to take the first step towards a more nuanced perspective on motivation in organizations. Subsequently, debates and research results concerning the interplay between intrinsic and extrinsic motivation will be presented and discussed, which will further contribute to the development of a more nuanced understanding of motivation in organizational settings. Again, this will be related to the contributions of organizational science and sociology literature and in this context it is discussed whether the interplay is necessarily a bad thing, as often argued in psychology. Following this, a concluding discussion will be made and finally research challenges facing organizational science theories on motivation will be put forward.

2 The Roots of Debate: Assumptions about Human Behavior

Two streams of research are in particular important to the debates of intrinsic and extrinsic motivation within psychology: reinforcement theories and attribution theories.

With his ideas on operant conditioning, B. F. Skinner describes humans as organisms constantly in the process of operating on the environment. During this operating process, the organism encounters reinforcing stimuli, which have the effect of increasing the behavior (operant) conducted before a stimulus is experienced. In other words, consequences of behavior modify an individual's tendency to repeat the behavior in the future (Skinner, 1974). The underlying assumption about human behavior in this stream of literature is thus that individuals' behavior is shaped and maintained only by the experience of reward and punishment enforced by the external environment. Hence, motivation coming from within an individual such as intrinsic motivation is not an option.

This line of thought bears some resemblance to the economic approach to human motivation arguing that higher extrinsic rewards always lead an individual to put more effort into an activity, whereas more punishment leads an individual to do less of an activity. However, it is different from the traditional economic approach as it treats the individual as a non-reflective organism stripped of all types of rational thinking and ability to make sensible choices on its own. This is naturally in sharp contrast to traditional economic assumptions about human behavior predicting that individuals are extremely rational and opportunistic creatures (Williamson, 1979; Eisenhardt, 1989; Hendrikse, 2003).

A wide range of theories are based on the Skinnarian logic; however, some of these have been modified. Albert Bandura to mention one does, in contrast to a Skinnarian view on human behavior, not assume behavior to be a mechanistic process, which is shaped automatically and unconsciously by the immediate consequences. Instead he argues that individuals, by selecting, organizing, and transforming stimuli which impinge upon them, are not simply reactors to external stimuli (Bandura, 1977). Hence, an individual does have the opportunity to exert some control of own behavior. However, Bandura maintains that behavior is extensively regulated by its consequences and claims that individuals are not born with any repertoires of behavior except for some elementary reflexes. Behaviors must be learned through processes of direct experience or observation (Bandura, 1977). Basing a theory of human motivation on these assumptions entails that extrinsic motivation becomes the central type of motivation, though not the only type as prescribed by Skinner. Intrinsic motivation comes from learning and is thus not something an individual is born with as assumed by others: "In fact, the development of self-motivation and self-direction requires certain basic functions that are developed through the aid of external incentives [...] Many of the activities that enhance competencies are initially tiresome and uninteresting. It is not until one acquires proficiency in them that they become rewarding" (Bandura, 1977, p. 104). As such it, is assumed that extrinsic motivation can be used to develop intrinsic motivation.

Edward Deci has developed a theory called "Self-Determination Theory", in which it is claimed that human behavior can be driven both by internal and external sources of the individual (Deci, 1972b; Deci, 1975b; Deci & Ryan, 2000). Three assumptions about human behavior presented in Deci's theory are of particular importance to understanding human motivation and behavior from his perspective. The first assumption is that all individuals have three innate psychological needs, which orient behavior in certain ways; the need for autonomy, the need for competence, and the need for social relatedness (Deci & Ryan, 2000). It is important to note that these needs are considered to be innate, organismic (psychological) necessities and are therefore not something that can be acquired through learning and socialization as suggested by Bandura. The second assumption about human behavior is that all individuals possess an a priori tendency to be active, social, as well as growth-oriented and therefore are inclined to engage in interesting activities, to exercise capacities as well as to pursue social connectedness (Deci & Ryan, 2000). As a consequence of this assumption, the third assumption is that intrinsic motivation is an inherent characteristic of all individuals. In contrast, cultural values, extrinsic motivations, and emotional regulations are not aspects of the nascent self, but can become part of the self through integrative processes in the individual's interaction with the social environment (Deci & Ryan, 2000). Having these assumptions about human behavior in mind, human motivation and behavior becomes rather

complex as it is largely based on the individual's feeling or perception of need satisfaction. Intrinsic motivation is seen as superior to extrinsic motivation because of the highly valued outcomes it is argued to entail; however, at the same time extrinsic motivation is not at all times perceived as an evil, because these might also be able to support the satisfaction of the psychological needs of the individual. As will be discussed later in this paper, different degrees of extrinsic motivation can be quite effective without compromising the satisfaction of the three innate psychological needs in regulating behavior.

3 Intrinsic and Extrinsic Motivation - Similarities *and* Discrepancies in the Literature

3.1 Intrinsic Motivation: A Controversial Concept

Intrinsic motivation originates from attribution theorists and is consequently a concept mostly used in this stream of research. Much importance has been placed on intrinsic motivation, because it is perceived as a type of motivation leading to highly valued outcomes such as creativity, quality, spontaneity, and vitality (DeCharms, 1968; Kruglanski, Friedman & Zeevi, 1971; Deci, 1978). In his early work on intrinsic motivation, Deci described this type of motivation as an individual performing an activity without receiving any apparent reward except the activity itself (Deci, 1971). As became evident in the discussion of the different types of assumptions about human behavior, Deci perceives intrinsic motivation as part of the nascent self, however he argues that an individual's interaction with the environment further develops and refines this innate type of motivation: "Children are born with a basic undifferentiated intrinsic motivation, the need for being competent and self-determining [as well as socially related] in relation to their environment...As a result of the interaction with the environment the basic undifferentiated intrinsic motivation becomes differentiated into specific intrinsic motives such as achievement, self-actualization, etc" (Deci, 1975a, p. 92, text in brackets is added by the author of this paper). In his more recent work involving intrinsic motivation, Deci's definition of intrinsic motivation has not changed much. In a recent article on work motivation he states that individuals are intrinsically motivated when they engage in activities, which they find interesting and derive spontaneous satisfaction from (Gagné & Deci, 2005). Mark Lepper et al. define the concept in a similar way, but add the word enjoyment, which is now frequently associated with intrinsic motivation (Lepper, Greene & Nisbett, 1973). To sum up, intrinsically motivated behavior, according to attribution theorists, is behavior freely engaged in, which the individual finds interesting, from which the individual experiences a feeling of autonomy, competence, and social relatedness and from which the individual derives spontaneous satisfaction and enjoyment.

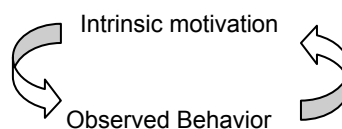
3.1.1 Some Critical Views on the Original Concept

The sociologist Siegwart Lindenberg distinguishes between two different types of intrinsic motivation; enjoyment-based intrinsic motivation and obligation-based intrinsic motivation (Lindenberg, 2001). While his enjoyment-based intrinsic motivation is in accordance with the definition offered by attribution theorists, obligation-based intrinsic motivation is an extension of the original concept. The distinction between the two types of intrinsic motivation stems from a criticism of the attribution theorists' focus on intrinsic motivation as purely self-controlling and their lack of addressing issues of moral behavior versus reward-induced behavior. Lindenberg refers to the work of Bruno Frey (1997) on motivation related to volunteer work and tax paying as good examples of obligation-based intrinsic motivation. In this sense, intrinsic motivation is also assumed to include behaviors based on the feeling that one must behave in accordance with certain rules, norms, and principles without pursuing external rewards. Obligation-based intrinsic motivation is thus explained by the wish to act appropriately in certain contexts and is acquired through socialization (Lindenberg, 2001). This type of motivation has also been considered by James March in his account of rule following, which he contrasts with pure rationality and bounded rationality. Whereas these two types of rationality involve some degree of evaluation of alternatives, i.e. their consequences for preferences, he describes rule following as "a logic of appropriateness" and states that: "When individuals and organizations fulfill identities, they follow rules or procedures that they see as appropriate to the situation in which they find themselves. Neither preferences as they are normally conceived nor expectations of future consequences enter directly into the calculus" (March, 1994, p. 57).

In contrast enjoyment-based intrinsic motivation is, according to Lindenberg, enhanced if the activity is interesting, is absent from external pressure, provides behavioral confirmation by self, provide behavioral confirmation by others, provides status, and allows for improvement of one's skills and competencies (Lindenberg, 2001).

Also scholars in favor of reinforcement theory clearly do not agree with attribution theorists' definition of intrinsic motivation – that is if they at all believe that such type of motivation exists. Consequently, the concept of intrinsic motivation has been heavily criticized by scholars within this stream of research. One of the main critiques placed on the concept is that it is defined by the absence of obvious extrinsic motivators (Bandura, 1977; Dickinson, 1989; Flora, 1990; Cameron & Pierce, 2002). By defining intrinsic motivation this way, there is the risk that behavior that in reality is motivated by external factors, which are not obvious, is mistaken for intrinsically motivated behavior. In the words of Cameron and Pierce: "...when we do not know why a person engages in

a particular activity, we infer intrinsic motivation” (Cameron & Pierce, 2002, p. 12). Hence, this supposedly intrinsically motivated behavior might just as well be engaged in because of unknown factors such as anticipated future benefits, previous interactions with the environment or physical and social contexts (Cameron & Pierce, 2002). Intrinsic motivation is thus said to be defined by default (Dickinson, 1989; Flora, 1990) and some extreme reinforcement scholars such as Flora goes as far as stating that intrinsic motivation is a hypothetical construct, which is of no scientific value (Flora, 1990). Furthermore, several reinforcement theorists argue that identifying situations without any existence of external inducements are virtually impossible (Bandura, 1977; Flora, 1990). Bandura explains this impossibility by stating that: “The physical and social structures of situations, the materials they contain, the expectations of others, and a host of other stimulus determinants all exert a substantial influence on behavior” (Bandura, 1977, p. 108). In line with this critique, reinforcement theorists are concerned with the inference of intrinsic motivation from the behavior it is supposed to cause. In other words, reinforcement theorists express concern with the fact that attribution theorists explain intrinsic motivation on the basis of circular reasoning and that the concept therefore lacks explanatory power (Bandura, 1977; Flora, 1990; Cameron & Pierce, 2002). As illustrated in the below figure intrinsic motivation supposedly causes behavior, however, at the same time intrinsic motivation is inferred on the basis of the behavior observed.



While these points of critique are fair, attribution theorists have a good point in claiming that reinforcement theories neglect everything that cannot be directly observed (e.g. cognitive and affective processes) in their accounts of human motivation and behavior and therefore do not say anything about real-world behaviors. Hence, when something is not observable or directly measurable it does not exist to them and thus is not relevant to the behavior of an individual. This reasoning might result in important factors being excluded from analysis (Ryan & Deci, 1996).

Despite the fact that the concept of intrinsic motivation has been subject to extensive criticism by reinforcement theorists, it is a concept used, though understood in a much different manner, by several reinforcement theorists. Harcones looks at the concept from a quite different angle as he explains the concept from a reinforcement point of view: “Intrinsic consequences are the natural and automatic results of responding. They are more or less inevitably produced by the structural characteristics of the physical environment and the biological organism; they are not programmed

by others to occur” (Harcnes, 1987, p. 291-292). Flora suggests that intrinsic motivation is intrinsic to the behavior-environment interaction and not to the organism indicating that intrinsic motivation as defined by attribution theorists is rejected (Flora, 1990). He explains the process like this:

“Reinforcement can come from engaging in activities without an external agent delivering reinforcers. When a puzzle is completed, or a picture drawn, events occur in the environment contingent on the behavior that produced them, that is, the completed puzzle or the picture are now in the environment. When a leaky faucet is fixed, an event is removed from the environment. If these events increase the probability of the behaviors that preceded them, then these events function as positive and negative reinforcers, respectively [...] In addition to the reinforcers that successful completion of activities themselves produce, it is the stimuli, verbal and nonverbal, associated with the activity’s probability of reinforcement that determine the probability that the activities will be engaged in” (Flora, 1990, p. 9).

Bandura’s (1977) thoughts on intrinsic motivation are somewhat similar; however, he argues that intrinsic reinforcement, as he calls it, comprises three types of arrangements between behavior and its consequences. As the two first types of intrinsic reinforcement are not relevant to organizational studies, they will not be treated in this paper. However, his third type of intrinsic reinforcement, which refers to processes of self-reinforcement, is quite interesting, both in regards to motivation in organizational settings and in comparison to the definition put forward by attribution theorists. This type of intrinsic reinforcement concerns self-evaluative processes and how they regulate and reinforce behavior. Whereas the attribution stream of literature emphasizes enjoyment and spontaneous satisfaction of the activity itself, Bandura states that it is the accomplishment of a performance and not the performance itself that is a source of self-satisfaction and intrinsic reinforcement: “Most of the things that people enjoy doing for their own sake originally had no reinforcing value. It is not the behavior itself or its feedback that is rewarding. Rather, it is people’s self-reactions to their own performances that constitute the principal source of reward” (Bandura, 1977, p. 106). This is somewhat in line with the Flora quote presented above, as it also indicates that it is the completion or accomplishment of something that can function as positive or negative reinforcers. The difference between the two positions is that Flora treats this type of reinforcement as external whereas Bandura treats it as an internal evaluation process. Hence, according to Bandura, behaviors can be self-produced, but are still perceived as reactions to something, namely own behavior as well as others’ reaction to this behavior (Bandura, 1977).

Self-reinforcement includes self-reactive capacities, which enables the individual to exert some control over own behavior (Bandura, 1977). Thus this type of intrinsic reinforcement recognizes the cognitive ability of individuals. Even with these similarities, it distinguishes from the original definition of intrinsic motivation. Apart from focusing on accomplishments and individuals' self-reaction to these as the main motivating factor, it is claimed that individuals enhance and maintain their own behavior by rewarding themselves when they obtain self-prescribed standards of behavior (Bandura, 1977). This is in sharp contrast to the understanding of intrinsic motivation from an attribution theorist point of view described above, as the reward in their definition comes from the activity itself and not from rewards separate from the activity, which according to attribution theories makes the activity instrumental to receiving the reward.

Nevertheless, self-reinforcement with its inclusion of a cognitive aspect is much more in accordance with the original concept of intrinsic motivation whereas the understanding presented by more radical reinforcement theorists such as Harcones and Flora is concordant with Skinner's assumptions about human behavior, i.e. intrinsic consequences are treated in much the same manner as extrinsic consequences and the individual is treated as a "black box".

3.2 Extrinsic Motivation: Less Controversial?

In contrast to the concept of intrinsic motivation the concept of extrinsic motivation is generally subject to fewer disputes concerning its meaning and application. As pointed out in the section on basic assumptions about human behavior, pure reinforcement theorists such as Skinner perceive all behavior as a function of its consequences (reward or punishment). This perception is close to the most common definitions of extrinsic motivation in the debate on intrinsic and extrinsic motivation. Most scholars involved in this debate use the definition of extrinsic motivation as the engagement in activities because they lead to external rewards or consequences. As such the engagement in the activity is a means to an end and is involved in, because of the external desirable consequences that follow (Deci, 1972b; Lepper, Greene & Nisbett, 1973; Bandura, 1977; Cameron & Pierce, 1994; Gagné & Deci, 2005). Attribution theorists tend to claim that "[e]xtrinsic motivation [...] requires an instrumentality between the activity and some separable consequences such as tangible or verbal rewards, so satisfaction comes not from the activity itself but rather from the extrinsic consequences to which the activity leads" (Gagné & Deci, 2005, p. 331) whereas scholars in favor of reinforcement theory often define extrinsic motivation as "...behavior controlled by stimuli external to the task" (Dickinson, 1989, p. 2). Hence, it is widely agreed that the reward of the activity is separated from the individual as well as from the activity itself.

3.2.1 *Filling in the Gap: A Step towards a More Nuanced Approach*

The controversies on intrinsic and extrinsic motivation have primarily been based on discussions of motivation as either intrinsic or extrinsic and as will be discussed later the interaction between the two. None of the debates have concerned different types of intrinsic or extrinsic motivation. Just as Lindenberg and Bandura propose different varieties of intrinsic motivation, Deci and Ryan have, in the acknowledgement of the fact that most activities individuals involve in are not inherently interesting and hence not driven by intrinsic motivation, increased their attention to various forms of extrinsic motivation (Ryan, 1995; Deci & Ryan, 2000; Gagné & Deci, 2005). Especially because many organizational activities engaged in are in fact not intrinsically motivating¹ (Lawler, 2000; Gagné & Deci, 2005), more focus on extrinsic motivation and in particular the emphasis on different types of extrinsic motivation is important contributions to a more nuanced understanding of motivation and behavior in organizations.

Deci and Ryan (2000) offer a framework distinguishing between four types of extrinsic motivation, representing different degrees of internalization and self-determination. They describe the internalization process as well as its connection to self-determination as:

“...an active, natural process in which individuals attempt to transform socially sanctioned mores or requests into personally endorsed values and self-regulations. It is the means through which individuals assimilate and reconstitute formerly external regulations so the individuals can be self-determined while enacting them” (Deci & Ryan, 2000, p. 235-236).

External regulation is the classic case of extrinsic motivation where the individual's behavior is a means to an end as described above (Deci & Ryan, 2000). *Introjection* occurs when an individual takes in an external regulation, but does not accept it as one's own. This kind of regulation comes from within the person, but is a relatively externally controlled form of extrinsic motivation (Deci & Ryan, 2000). *Identification* refers to an individual identifying with the value of a behavior. The behavior is more in accordance with the individual's personal goals and identity. Thus, the individual is experiencing more freedom and volition and feels that the cause of the behavior comes from within. However, as the behavior is still instrumental rather than spontaneous enjoyment, it is perceived as extrinsically motivated (Deci & Ryan, 2000; Gagné & Deci, 2005). *Integration* is the highest level of internalization of extrinsic motivation an individual can experience. In addition to fully identifying with the value of the behavior, the individual has fully integrated this identification with other aspects of the self. Hence, the individual has a full sense

¹ That is when intrinsic motivation is perceived in accordance with the definition of attribution theorists

that the behavior is part of who they are. Therefore, this type of internalization makes the individual feel truly self-determined. However, it is important to note that this type of internalization is still considered to be extrinsic motivation. It distinguishes from intrinsic motivation, as the individual is not engaged in the activity out of interest, but is engaged in the activity because it is instrumentally important for personal goals (Gagné & Deci, 2005). Whereas external regulation and introjection are perceived as external forms of regulation, identification, integration, and intrinsic motivation are perceived as internal forms of regulation. Integration and intrinsic motivation are the two types of regulation, which are considered to be truly autonomous (Deci & Ryan, 2000).

[Insert figure 1]

Generally, it is argued that the relationship between extrinsic motivation and performance is dependent on the type of extrinsic motivation involved (Vallerand & Bissonnette, 1992; Deci, Eghrari, Patrick & Leone, 1994; Ryan, 1995; Hayamizu, 1997; Deci & Ryan, 2000; Gagné & Deci, 2005). In one study it was found that "...non-determined types of extrinsic motivation, namely external and introjected regulation, were not related to persistence in behavior [...] However, self-determined types of extrinsic motivation (integration and identification) were found to be positively related to behavioral persistence" (Vallerand & Bissonnette, 1992, p. 613).

3.3 Intrinsic and Extrinsic Motivation Revised: More Intertwined and Less Polarized

The distinction between different types of extrinsic motivation also places the discussion of intrinsic motivation in a much wider perspective, as some of the nuances between the different views discussed above become more comprehensible. On the basis of the different types of extrinsic motivation, it can be argued that the obligation-based intrinsic motivation suggested by Lindenberg rather is a well-internalized form of extrinsic motivation² such as either identification or integration depending on the extent to which the norms, rules, and principles of behavior have been integrated into the individual's self. The reason for this is that the wish to act appropriately in a certain social context reflects importance rather than interest. Additionally, the individual acts in accordance with the present rules and norms, so that one's actions will be appropriate in the social context and hence there is a wish to comply with these in order to fit in. Obviously, norms and rules are imposed on the individual from the outside, which further indicates that it is a type of extrinsic motivation. However, as the compliance to the norms and rules is not perceived as an external

² Well-internalized extrinsic motivation should be understood in accordance with Self-Determination Theory, meaning that well-internalized forms of extrinsic are considered to be the autonomous types of extrinsic motivation. That is Integration and to some extent Identification (Gagné & Deci, 2005)

constraint as such but rather is felt as a truly autonomous act; obligation-based intrinsic motivation must be a well-internalized form of extrinsic regulation.

Along similar lines it can be argued that Bandura's self-reinforcement is a well-internalized type of extrinsic motivation. The fact that the individual uses rewards to enhance and maintain own behavior also makes this type motivation instrumental. Additionally, Bandura describes the individual's evaluation of own behavior as a process heavily influenced by the behaviors of others and others' reactions to own behavior (Bandura, 1977). Hence, the behavior is not carried out in certain ways for its own sake or the inherent reward of doing it, but because of certain standards that the individual feels he or she should live up to.

While the above distinctions between intrinsic motivation and well-internalized forms of extrinsic motivations is certainly true seen through the lens of attribution theory, it can be argued that the concept of intrinsic motivation can be stretched more than attribution theorists are ready to admit. Deci asserts that identification, integration, and intrinsic motivation are all internal forms of regulation and as such it can be argued that the motivation in all of these cases comes from within and therefore can be characterized as intrinsic. In that sense Lindenberg's obligation-based motivation and Bandura's self-reinforcement can both be characterized as intrinsic forms of motivation. Evidently it is all a matter of definition and only small nuances make the difference.

3.3.1 *Turning Intrinsic and Extrinsic Motivation Up-Side Down*

Other factors make the distinction between intrinsic and extrinsic motivation less clear-cut and difficult to separate completely, making the current polarization of motivation extremely disadvantageous in the attempt to unravel the mystery of human motivation. As became evident in the discussion of extrinsic motivation, this type of motivation is in general defined as the engagement in activities because they lead to desirable consequences. In the introduction it was argued that this type of motivation is traditionally the only one treated in economics. This approach builds on individual utility from consequences, which is inferred from choices made by the individual (Frey & Stutzer, 2000). As also argued earlier, the economic approach emphasizes the individual's rationality in making these choices, leading the individual to choose the alternative yielding most utility to the individual. That is the individual is utility-maximizing and is willing to act opportunistically in order to obtain the highest possible utility.

Sometimes, however, behaviors, which are assumed to be opportunistic and extremely extrinsically motivated, may not be so at all. Limited competence of the agent and the difficulty of

specifying the principal's goals to the agent might be the causes of the discrepancy between the behaviors desired by the principal and the behaviors conducted by the agent (Hendry, 2002). Thus, the discrepancy is not due to the agent's self-interest seeking mind, but rather a question of the agent feeling "...unable to determine with any confidence which of two courses of action would serve the principal better [...] In such circumstances agents may rationally opt for the course that serves their own financial interests, without sacrificing either honesty or duty" (Hendry, 2002, p. 104). In this context, the agent might not be bad-willed and might even be intrinsically motivated to serve the interests of the principal, but because of lack of competence and clarity regarding goals it is not possible for the agent to comply with the interests of the principal.

Conversely, intrinsically motivated behavior can, in some situations, be understood as self-interest seeking behavior if the agent is preoccupied with performing tasks of own interest and enjoyment at the expense of tasks, which are important to the achievement of the organization's goals. As such, viewing individuals' motivation and behavior from a utility perspective as done in economics, doesn't necessarily exclude the phenomenon intrinsic motivation as was suggested earlier.³ The individual engages in an activity because it is found interesting to the individual and yields the feeling of spontaneous satisfaction, self-actualization, achievement, and enjoyment. Choosing to engage in such an activity can be claimed to be as much a matter of individual outcome and utility as in the case of extrinsic rewards, depending on the individual's goals and preferences. If an individual chooses to repeat or sustain an intrinsically motivating activity, which the psychology literature argues that intrinsically motivated individuals do, the individual must somehow choose to engage in the activity again, because it yields him some kind of outcome and utility. Hence, it can be argued that an individual engages in intrinsically motivating activities, because these lead to desirable outcomes such as enjoyment, satisfaction, happiness etc. and it can therefore be claimed that intrinsic motivation, just as extreme types of extrinsic motivation, is driving self-interest seeking behavior.

The risk of intrinsic motivation leading to selfish behaviors in organizations, i.e. behaviors which are not engaged in for the common good but rather for own purposes, makes the different levels of motivation between extreme intrinsic and extreme extrinsic motivation even more appealing to organizational research and practice. As these types of motivation are based on socialization and learning, they might be more beneficial when seeking to enhance coordinated behavior in order to achieve organizational goals. This has in fact been discussed by Lindenberg, who argues that:

³ The reason why it is often disregarded anyway, however, is that it is difficult to pin down and therefore hard to measure (Hendrikse, 2003)

“Within organizations and work contexts it would be undesirable to have people in a (weak or strong) hedonic frame because that would lead to cumulative incompatibility with the less enjoyable aspects of the task [...]. For the context of work, obligation-based intrinsic motivation is more important than enjoyment-based intrinsic motivation” (Lindenberg, 2001, p. 337). On the other hand, however, enjoyment-based intrinsic motivation, which might be considered as undesirable in this context, might have valuable outcomes such as innovation, which would not have come about if the “undesired” intrinsic motivation had not been unleashed. Hence, “[a]lso a strong normative frame would be undesirable because people’s behavior would be very inflexible” (Lindenberg, 2001, p. 337). I will return to the risk of undesired intrinsic motivation and the possible self-interest seeking behavior stemming from this later in the paper.

3.3.2 Intrinsic Motivation: Also About Outcomes and Utility

An emerging trend within economics is to distinguish between the traditional economic decision-making utility and the notion of procedural utility (Frey & Stutzer, 2000; Benz, 2005). Whereas standard economics assume that human utility only consists of outcome, procedural utility includes the utility individuals obtain in the process leading to the outcome: “The general concept of procedural utility means that people do not only care about outcomes, but also value the process and conditions leading to the outcomes. People often do not only care about the ‘what’, but also about the ‘how’, or yet in other words, they value the ‘means’ beyond the ‘ends’” (Benz, 2005, p. 2). Hence, like intrinsic motivation as described in attribution theories, procedural utility yields the individual a direct utility, meaning that the utility derives from doing an activity and not from extrinsic outcomes separate from the activity.

Again, however, it can be discussed whether the notion of procedural utility as well as intrinsic motivation are valued by the individual because the involvement in an activity leads to desirable outcomes. In an article by Frey and Stutzer on procedural utility it is for instance emphasized that “[f]or most people, happiness is the main, if not the only, *ultimate objective* of life” (Ng, 1996, quoted in Frey & Stutzer, 2000, p. 148. Italics added by the author of this paper). Furthermore, Benz states that procedural utility emphasizes utility as well-being (Benz, 2005). He argues that this well-being is obtained through the satisfaction of the three innate psychological needs described by Deci and Ryan; the need for autonomy, competence, and relatedness: “For instance [...] procedures providing individuals with autonomy are not valued so much because they lead to better outcomes, but because having control over one’s actions satisfies a basic psychological need of human beings” (Benz, 2005, p. 6). As such it can be argued that procedural utility as well as intrinsic motivation also lead to some kind of outcome; satisfaction of needs, happiness and

well-being, contributing to an individual's overall utility. The outcome is simply just different in form than the outcomes traditionally treated in economics. Instead of being tangible, separate from the activity and indirect⁴, it is intangible and direct. Or in other words, intrinsic motivation leads to an outcome that is affective and unobservable, and is mainly based on affective processes whereas extrinsic motivation leads to an outcome that is most often tangible, observable, and primarily based on cognitive processes.⁵

3.3.3 The Importance of Affect in Understanding Motivation and Behavior

Recent research within the emergent field of neuroeconomics⁶ supports that both affective and cognitive processes influence individuals' decision making in economic and social contexts (Camerer, Loewenstein & Prelec, 2005; Cohen, 2005; Fehr, Fischbacher & Kosfeld, 2005; Singer & Fehr, 2005). In fact, this type of research has provided evidence indicating that affective and automatic processes can be accounted for a crucial part of human behavior, which is not considered in conventional economic models of behavior:

“In contrast to the intuitive view of human behavior as driven by deliberations about costs and benefits, it does not do a terrible injustice to the field of psychology to say that a growing consensus has developed around the view that affect is *primary* in the sense that it is “first on the scene” [...] The conscious brain often erroneously interprets behavior that emerges from automatic, affective processes as the outcome of cognitive deliberations” (Camerer, Loewenstein & Prelec, 2005, p. 26).

While affective and automatic processes might have a strong impact on motivation and behavior, it is not denied that deliberation is part of decision making processes. In fact, results from neuroscience show that behavior emerges from an interaction between controlled and automatic processes as well as between cognitive and affective processes and thus often behavior cannot be ascribed to one or the other type of process. However, often it is primarily steered by for instance either cognitive or affective processes, which are constantly competing for control of behavior (Camerer, Loewenstein & Prelec, 2005). Interestingly, some research results indicate that individuals, who only have minimal cognitive and major affective deficits, show poor decision making skills both in terms of being able to make decisions as well as the quality of the decisions

⁴ The distinction between direct and indirect utilities provided by intrinsic and extrinsic motivation respectively is challenged by the emerging field of neuroeconomics. Experimental findings dissolve this distinction as they show that extrinsic motivators such as money is a primary reinforcer and hence confer a direct utility rather than just being valued for the things it can buy. For the sake of simplicity, however, this early finding will not be treated any further in this paper

⁵ This is somewhat in accordance with Kehr (2004), who distinguishes between motives associated with affective or cognitive preferences. He argues that affective motives are closely related to intrinsic motivation.

⁶ Neuroeconomics merges methods from neuroscience and economics in order to better understand how the brain influences decision making in economic and social contexts.

made. This implies that affective processes are extremely important when “choosing” between different behaviors and it is argued that “[t]he affective system provides inputs in the form of affective evaluation of behavioral options [...] It is not enough to “know” what should be done; it is also necessary to “feel” it” (Camerer, Loewenstein & Prelec, 2005, p. 29). Even though emotions may be transitory and obviously influence short-run behavior mostly, they can have substantial long-run effects if they are stored in memory and kept alive by social reminders (Camerer, Loewenstein & Prelec, 2005).

Considering affective outcomes in addition to the traditional tangible outcomes as suggested earlier indeed seems pertinent in this perspective. Deci in fact illustrated this point in his early work: “Since the basis of intrinsic motivation is one’s need to feel competent and self-determining, we see that the desired end-state for intrinsically motivated behavior is an affective state...” (Deci 1975b, p. 133). One might speculate where the significance of affect on human motivation and behavior leaves the economic concept of utility maximization, which is traditionally associated with pure cognition, deliberation, and consciousness. How does the impact of affective processes and outcomes influence an individual’s utility maximization? One possible explanation is that utility maximization involves affective processes where the individual might not always be deliberate and conscious in his or her choices of conduct. Sometimes one might feel instead of think that something is the best thing to do in a certain situation, i.e. the individual has a feeling that one action is better to choose for the individual than another alternative action – it might give the individual an affective outcome, which yields more utility. Deci explains the process of “weighting” different alternatives and emphasizes that the alternatives might not be conscious:

“...people are motivated by what I’ve called awareness of potential satisfaction, and out of that awareness they make choices about what behaviors to engage in based on their expectations of end-states to which the behaviors will lead. The awareness encompasses what in other places have been called intrinsic motives, affective motives, drives, and real time needs. I should reemphasize that these awarenesses *need not be conscious* in the usual sense...” (Deci 1975b, p. 134, italics added by the author of this paper).

Claiming that utility maximization at times involves affective processes, and challenging the traditional idea that an individual’s maximization is always a deliberate and conscious process, is of course highly controversial and apart from the early findings from neuroscience and Deci’s work, it is, at this point, only speculation on my part that utility maximization might not always be a conscious and deliberate process. However, with the evidence available from neuroscience, it

cannot be denied that affective processes play a more significant role than assumed in conventional economic models.

3.3.4 *Different Types of Preferences and Outcomes, Different Types of Motivation*

Based on the above discussions, three overall types of outcomes associated with different types of motivation can be proposed; Affective, social, and tangible. Whereas the affective outcome is related to intrinsic motivation and the most internalized forms of extrinsic regulation, the tangible outcome is related to the most extrinsic type of motivation. The social outcome, on the other hand, is related to several of the in-betweens such as introjection as this type of motivation stems from wanting to feel worthy as well as avoiding feelings of shame and guilt in the specific social contexts, identification as this type of motivation involves doing something because it is important to the success of a specific task and because it is the right thing to do, and to some extent obligation-based motivation as this triggers certain behaviors in the wish to act appropriately in a certain context. It is important to emphasize that behaviors often lead to a combination of different outcomes. It is for instance easy to imagine that pecuniary rewards apart from yielding money, also entails some sort of social recognition and feeling of being competent. Hence, a combination of affective, social, and tangible outcomes, which to different degrees yields the individual utility depending on the individual's preferences, is involved.

In contrast to the canonical economic model of human motivation and behavior, it can be claimed that pursuing social and affective outcomes instead of seeking material self-interest, in the form of tangible outcomes, is not an irrational act. In fact, it can be understood as rational behavior if the individual has corresponding social or affective preferences. Fehr et al. (2005) for instance argue that mutual cooperation taking place in social dilemma games, despite strong incentives to free-ride, is not necessarily a matter of irrationality but can rather be characterized as rational if the individuals involved in the game have social preferences. Evidence also indicates that "...people derive more utility from interactions with cooperative people not just because they can earn more money in these interactions, but because these interactions are rewarding per se" (Fehr, Fischbacher, & Kosfeld, 2005, p. 349). Hence, to individuals with social preferences mutual cooperation is rewarding in itself and therefore yields more utility than defection. Presumably, the same is the case with individuals, who have affective preferences when it comes to activities, which yield them a positive affective outcome, e.g. spontaneous satisfaction or self-actualization.

Some behavioral economic research suggests that three important types of social preferences exist; reciprocity, equity, and altruism⁷. All three types yield the individual some sort of social outcome, which is different in form. A preference for reciprocity involves that the individual responds to another individual's action in a similar manner as the other's action is perceived (Fehr & Fischbacher, 2002), e.g. kind actions are reciprocated with kind actions toward the other. The outcome is a mutual relationship, which is not characterized by expected future material benefits but rather by what Blau (1964) has called social benefits like courtesies, advice, assistance, compliance etc. or, as Fehr et al. (2002) have suggested, by cooperation. A preference for equity, on the other hand, entails the wish to obtain an equitable distribution of material resources, even if this means reducing one's own share of the material resources (Fehr & Fischbacher, 2002). It can be argued that having a preference for equity not only includes equitable distribution of material resources, i.e. distributive justice, but also what some scholars call procedural justice (e.g. McFarlin & Sweeney 1992). The third type of social preference, Altruism, is best described as an unconditional kindness leading individuals to value the happiness and success of others as well as material resources allocated to another individual positively (Fehr & Fischbacher, 2002). The outcome and utility stemming from altruistic behaviors is highly affective, as it yields the individual satisfaction or a positive feeling when their actions help others.

From the above discussions on motivation, preferences, outcomes, and utility ten different types of motivation, which vary in degree of being extrinsic/intrinsic, can be proposed: Externally-based, Introjection-based, Identification-based, Reciprocity-based, Equity-based, Obligation-based, Self-regulation-based, Integration-based, Selfish Enjoyment-based, and Altruistic Enjoyment-based. Although this list of motivation types is far from an exhaustive one, it provides some nuances, which have not yet been introduced and considered within organizational science. These nuances blur the sharp distinction between what is intrinsic and what is extrinsic motivation and hence can help dissolve the strongly polarized positions.

[Insert table 1 here]

3.3.5 *Same, Same, but Different*

Although extrinsic and intrinsic motivation have been argued to be far more similar than assumed in terms of both being concerned with outcome and utility, these arguments should not be confused with equalizing the two forms of motivation. There still exist important differences

⁷ These three types of social preferences are mentioned in Fehr & Fischbacher (2002). However, in their article the second type is called inequity aversion, which I have chosen to call preference for equity instead.

between the two, which require that they are treated differently. The satisfaction obtained through intrinsic and extrinsic motivation is rather different as the former type of motivation yields outcomes and utility during the activity whereas the latter yields outcomes and utility separate from the activity performed. As also argued, the preferences as well as the outcome and utility obtained through the different types of motivation is quite different in form; affective, social, or tangible among which the most extrinsic forms primarily involve cognitive processes and the more intrinsic types mainly involves affective processes. Another reason not to equate intrinsic and extrinsic motivation is the substantial amount of data claiming that extrinsic rewards have detrimental effects on intrinsic motivation, indicating that they do in fact affect the individual differently and that the two interact and affect each other and thereby the individual's performance.

Even though, most studies, referred to in the subsequent section discussing this relation, sharply distinguishes between intrinsic and extrinsic motivation, several studies have found that well-internalized forms of extrinsic motivation such as identification and integration are positively related to persistence in performance and that poorly internalized forms of extrinsic motivation such as external regulation and introjection are not related to persistence in performance (Vallerand & Bissonnette, 1992; Deci, Eghrari, Patrick & Leone, 1994; Ryan, 1995; Hayamizu, 1997). This indicates that well-internalized forms of extrinsic motivation are closely related to and have positive effects on intrinsic motivation whereas the poorly integrated forms have negative or no effect on intrinsic motivation. According to Gagné and Deci (2005, p. 337 and 352) it further indicates that conditions affecting an individual's intrinsic motivation positively also promote an individual's internalization of extrinsic motivation: "...work climates that promote satisfaction of the three basic psychological needs will enhance employees' intrinsic motivation and promote full integration of extrinsic motivation and [...] this will in turn yield important work outcomes...". In other words "...when job conditions prompt autonomous motivation for work there will be a strong positive relation between performance and satisfaction, but when they prompt controlled motivation this relation will be absent".

Hence, the discussion of the effects of extrinsic rewards on intrinsic motivation in the next section is of high relevance to the discussion in this section, i.e. to the development of a more nuanced perspective on motivation, even though primarily extreme types of intrinsic and extrinsic motivation have been in focus in the studies included.

4 The Effect of Extrinsic Rewards on Intrinsic Motivation Agreements *and* Discrepancies in the Literature

DeCharms (1968) was one of the first scholars to point out that extrinsic and intrinsic motivation are not merely additives and that the two types of motivation interact with each other. He suggested that there might be a negative relation between the receipt of extrinsic rewards and individuals' intrinsic motivation. As such he was one of the first psychologists to declare that extrinsic rewards can have detrimental effects on intrinsic motivation. DeCharms' claim was the beginning of a new focus of debate in motivation research, which evoked enormous confusion as the relationship between rewards and motivation hitherto had been considered one of the clearest links in the social sciences (Rummel & Feinberg, 1988). In the early 1970s, Deci was the first to conduct investigations to test this relation and found considerable evidence supporting the negative relationship between extrinsic rewards and intrinsic motivation (Cameron & Pierce, 2002).

4.1 The First Empirical Investigations

In the first empirical study, Deci attempted to support two main hypotheses. Firstly, it was hypothesized that "[i]f a person is engaged in some activity for reasons of intrinsic motivation, and if he begins to receive the external reward, money, for performing the activity, the degree to which he is intrinsically motivated to perform the activity decreases" (Deci, 1971, p. 108). Secondly, the purpose of the study was to test the hypothesis that "[i]f a person is engaged in some activity for reasons of intrinsic motivation, and if he begins to receive external rewards in the form of verbal reinforcement and positive feedback for performing the activity, the degree to which he is intrinsically motivated to perform the activity is enhanced" (Deci, 1971, p. 108). The two hypotheses were tested by three experiments of which two were conducted in a laboratory and one was conducted in the field.

A similar general paradigm was used in all three experiments. They all consisted of three different session/periods. In the first session/period the subjects were performing for no apparent external reward. In the second session/period, the experimental subjects were rewarded for their performance whereas the control group were neither promised nor received a reward. In the third session/period, the subjects were performing the activity without being promised or receiving a reward. Throughout all three sessions/periods the subjects as well as the controls were being

carefully observed. Below the three experiments and their results are described in order to illustrate how this stream of research came about and was developed (Deci, 1971).

Experiment I

In the first laboratory experiment (Deci, 1971), the subjects were recruited among introductory psychology students. In total 24 students participated and their participation counted as a course requirement. The 24 subjects were divided into two groups; an experimental group and a control group. During the three sessions of the experiment, which were conducted on three different days, the subjects were working on a puzzle called Soma, which was considered to be intrinsically motivating to most college students. The task was to complete different possible configurations of the puzzle.

The time to complete the configurations was measured and at the end of each configuration, the subject was told how long it had taken him to complete it. The experimental subjects and the controls were exposed to the same procedure during the first session; they were seated in the experimental room with the Soma puzzle, three drawings of configurations, and the latest issue of the New Yorker, Time, and Playboy at the table in front of them. None of them were offered or received rewards.

During the second session, the experimental subjects were paid \$1 for each configuration, which they were able to complete within 13 minutes whereas the control group was given the same instructions without the promise or receipt of a reward. During the third session both groups were given more configurations, but none of the groups were promised or received any rewards. The experimental group was directly told that they would not receive any payment this time, because there only was enough money to pay them for the one session (the second session).

In order to measure intrinsic motivation, the experimenter left the room for eight minutes in the middle of each of the three sessions. The subjects were given a valid explanation connected to the experiment as for why the experimenter needed to leave the room. Before leaving the room, the experimenter told the subject that he had to leave for a few minutes and that the subject could do whatever he wanted meanwhile.

During this free-choice period the subjects were observed through a one-way window without the subjects being aware of it, and the primary measure of intrinsic motivation was the amount of time the subjects spent on the puzzle during this time. A second measure of intrinsic motivation was collected by having subjects rate the degree to which they found the activity interesting and enjoyable on a 9-point scale after each session. 9 indicated that the activity is found extremely interesting and enjoyable, 5 represented neutral, and 1 indicated that the activity is found extremely uninteresting and unenjoyable.

In the below table the results of the experiment, in the form of mean number of seconds spent working on the puzzle during the free-choice periods, is shown:

Group	Session 1	Session 2	Session 3	Session 3 - Session 1
Experimental	248.2	313.9	198.5	-49.7
Control	213.9	205.7	241.8	27.9
$E(S3 - S1) - C(S3 - S1)$				-77.6 sec.

It was argued that the results of the first experiment offered some support for the first hypothesis and as predicted by Deci, the introduction of the reward to the experimental subjects lead to more time spent on the activity during Session two whereas the removal of the reward in Session three resulted in much less time spent working on the puzzle during the free-choice period, indicating that intrinsic motivation had decreased considerably. The subjects in the control group on the other hand spent more time working on the puzzle in Session three compared to Session one and the experimental group. The second measure of intrinsic motivation presumably confirmed that the activity was in fact intrinsically motivating. The subjects' rating of the activity as interesting and enjoyable after each session resulted in an average between 7.25 and 8.00 on a 9-point scale. Although this indicates that the activity was found intrinsically motivating, it does not show a decrease in intrinsic motivation after the removal of the reward in the experimental group.

Experiment II

The second experiment (Deci, 1971) was conducted over a five months period in the field and focused on eight students' work at the college newspaper. One group of four worked for the Tuesday edition (experimental group) whereas the other group worked for the Friday edition (control group), which made it possible to keep the two groups completely separate. Throughout the five months of the experiment, the two groups were not aware of their role as subjects.

The target task under investigation involved writing headlines according to prescribed rules. During all three periods of the experiment, the time it took the subjects to write each headline was recorded by the experimenter. To the subjects, the experimenter was part of the staff as he functioned as the supervisor, to whom they reported. The performance on the headlines was used to measure intrinsic motivation. It was assumed that the faster a subject performed, the more motivated the person was to do the task. Absenteeism was also recorded and used as a measure of attitude.

The only difference between the experimental and control group was that the students in the former group were paid 50 cents per headline written during the second period of the experiment. As an explanation for the limited period of reward, the experimental subjects were told that the paper's budget was divided into funds and that one of the funds had money in it, which had to be spent by the end of the semester. They were also told that the editor had decided to spend the fund's money to pay the production staff. The experimental subjects were told not to tell anyone else about the arrangement, as other groups were not paid extra. The experimental subjects received this extra pay for three weeks after which they were told that there was no more money left in the fund and that they therefore would no longer receive the extra payment.

The experimental design was identical to experiment I, however, it differed as intrinsic motivation was measured by performance scores in the second experiment. Another difference was that the second experiment included a period four in order to measure the stability of the found effect. As this fourth period was conducted during a different semester than the first three periods and as the subjects' schedules had changed, the measure of attitude (absence) was not used. Hence, only the measure of intrinsic motivation was available in period four.

In the below table the mean number of minutes spent working on writing each headline is shown:

Group	Period 1	Period 2	Period 3	Period 4	Period 3 – Period 1	Period 4 – Period 1
Experimental	22.39	20.34	21.35	20.05	-1.04	-2.34
Control	22.19	20.97	12.60	13.79	-9.59	-8.40
E - C					8.55 min.	6.06 min.

In the below table the percentage of subjects absent from head-line writing sessions is shown:

Group	Period 1	Period 2	Period 3	Period 3 – Period 1
Experimental	15	30	75	60
Control	20	44	33	13
$E(P3 - P1) - C(P3 - P1)$				47

Also the results of experiment two were argued to support the first hypothesis as number of minutes spent on each headline decreased considerably in the control group whereas the time spent by the experimental was largely unchanged. By the introduction of the reward in Period two, the experimental group spent less time per headline, however, this trend did not continue after the removal of the reward. Hence, relative to the control group, intrinsic motivation decreased in the experimental group. Additionally, the measurement of attitude (absence) was claimed to support the first hypothesis. Contrary to what might have been expected, the absence of the experimental subjects increased during the Period where the extra payment was introduced. Furthermore, absence increased considerably after the removal of the reward in the experimental group whereas

it slightly decreased in the control group. This was claimed to show that the introduction of payment had a negative impact on the subjects' attitude towards a task.

Experiment III

The third experiment (Deci, 1971) was designed virtually as the first laboratory experiment. In total 24 students from an introductory psychology class were recruited. They were divided into an experimental and a control group with 12 subjects in each group. The only difference between the two experiments was that the rewards in the third experiment were verbal rather than monetary.

In the beginning of the second session, the experimental subjects were told that they had done well on the puzzles during the first session. Moreover, the experimental subjects received verbal reinforcement and positive feedback such as "that's very good" and "that's much better than the average for this configuration" after each puzzle solved. In case a subject did not manage to solve a configuration, he was told that it was the most difficult one and that most people were unable to solve it. As such the subject was told that he had not done badly.

During the third session neither the experimental nor the control group received any kind of reinforcement or feedback. Intrinsic motivation was measured in terms of number of seconds the subject spent working on the puzzle during the eight minute free-choice period. Additionally, intrinsic motivation was measured by the subjects rating the degree to which they found the activity interesting and enjoyable on a 9-point scale.

In the below table the results of the experiment, in the form of mean number of seconds spent working on the puzzle during the free-choice periods, is shown:

Group	Session 1	Session 2	Session 3	Session 3 - Session 1
Experimental	134.0	147.7	129.3	-4.7
Control	246.8	146.1	64.7	-182.1
$E(S3 - S1) - C(S3 - S1)$				177.4 sec.

It was concluded that the findings in the third experiment somewhat supported the second hypothesis predicting that individuals' intrinsic motivation to do a certain activity would be maintained or enhanced by external rewards in the form of verbal reinforcement and positive feedback. While the performance of the control group steadily decreased throughout the three sessions, the performance of the experimental group remained quite stable, although it was enhanced some during the second session where the verbal rewards and positive feedback were given. As in the first experiment, the subjects' rating of the activity as interesting and enjoyable showed that the activity was found to be intrinsically motivating as there were no significant differences among the different periods or between the two different groups.

At an overall level, it was claimed that the first three experiments showed that there is a negative effect of monetary rewards and a positive effect of verbal rewards on intrinsic motivation. Yet many aspects still needed to be further clarified. Therefore Deci has since then continued to conduct experiments as well as meta-analyses in refined and more nuanced forms, which have confirmed the results of these early experiments.

4.2 Neither Always Good, nor Always Bad

Since the first studies conducted by Deci, many other studies have been conducted and consequently fierce criticism has been voiced. Hence, a clear-cut rhetorical polarization has also taken place in the debate on the effects of extrinsic rewards on intrinsic motivation within psychology⁸. On the one side, scholars inspired by the reinforcement tradition claim that extrinsic rewards are not harmful to individuals' intrinsic motivation (Reiss & Sushinsky, 1975; Scott, 1975; Calder & Staw, 1976; Bandura, 1977; Dickinson, 1989; Harackiewicz, Manderlink & Sansone, 1984; Flora, 1990; Cameron & Pierce, 1994; Carton, 1996; Cameron & Pierce, 2002) and if intrinsic motivation does decline, it is only a transitory effect (Dickinson, 1989; Cameron & Pierce, 2002). On the other hand, scholars within the attribution paradigm propose that extrinsic rewards have detrimental effects on intrinsic motivation and that this effect is permanent (DeCharms, 1968; Deci, 1971; Lepper, Greene & Nisbett, 1973; Deci, Cascio & Krusell, 1975; Lepper & Greene, 1978; Rummel & Feinberg, 1988; Wiersma, 1992; Tang & Hall, 1995; Deci, Koestner & Ryan, 1999; Kohn, 1999; Deci & Ryan, 2000; Gagné & Deci, 2005). Most of the scholars involved in the debate, however, discuss how different characteristics of extrinsic rewards lead to different effects on intrinsic motivation. Thus, different types of rewards are claimed to affect intrinsic motivation differently. This is not considered much in the organizational science literature, so research in this area yield an important contribution in the development of a more nuanced understanding of motivation in organizational settings.

4.2.1 Intangible Rewards: A Quite Effective Tool^P

As became evident in the presentation of Deci's early studies, it was reported that verbal rewards such as positive feedback would increase rather than decrease an individual's intrinsic motivation (Deci, 1971). This result was confirmed by the first meta-analysis conducted in this area by Rummel and Feinberg (Rummel & Feinberg, 1988). Deci explains that the reason why verbal rewards have different effects on performance compared to other types of rewards is that this type of reward supports the individual's feeling of competence (Deci, 1972a).

⁸ It is important to emphasize that this negative effect on intrinsic motivation is predicted to occur when the reward is introduced; however, the negative effect on performance does not occur until the reward has been removed. Hence, intrinsic motivation is decreased, but as long as the reward is present, it maintains performance at the same level (at least in terms of quantity, as will be discussed in this section) as when intrinsic motivation was present.

⁹ When the effect of intangible rewards on intrinsic motivation has been investigated, verbal rewards have been the type in question. The verbal rewards researched are mainly positive feedback and praise.

In a study conducted by Ryan et al. it is shown that positive feedback can be given in either an informational or controlling manner and that the two types of positive feedback have different effects on intrinsic motivation: "...informationally administered positive feedback enhances intrinsic motivation, whereas positive feedback administered controllingly does not result in a significant increase" (Ryan, Mims & Koestner, 1983, p. 747).

Tang and Hall distinguishes between two types of verbal rewards; information from which the individual himself concludes whether he is good at the task and positive feedback where the individual is directly told that he did well on a task. Tang and Hall argue that the former type of verbal reward has no effect on the individual's intrinsic motivation whereas the latter type has a significant positive effect (Tang & Hall, 1995). As such, this is in line with the conclusion of Deci.

Along similar lines Cameron and Pierce's first meta-analysis concludes that verbal rewards, in the form of verbal praise or positive feedback, significantly increases an individual's intrinsic motivation compared to individuals, who do not receive a reward at all. The two scholars argue that the more positive effect of verbal rewards compared to an expected tangible reward might be due to the fact that verbal rewards are unexpected and therefore have the advantages of unexpected rewards (Cameron & Pierce, 1994) as opposed to many tangible rewards, which are often more mechanistic as they are part of a formalized reward system and therefore are often expected. The benefits and drawbacks concerning expected and unexpected rewards will be dealt with in further detail later in the paper. Consequently, the more positive effect obtained by the use of verbal rewards might be a reflection of the reward being unexpected rather than a reflection of the reward being verbal. As such they agree with attribution scholars that verbal rewards lead to higher levels of intrinsic motivation, however, the explanation of this effect differ.

Harackiewicz et al. somewhat support the explanation made by Cameron and Pierce as they found evidence that individuals anticipating performance evaluation show lower levels of intrinsic motivation relative to individuals receiving unexpected positive feedback after conducting the target activity (Harackiewicz, Manderlink & Sansone, 1984). Hence, the expectancy aspect might be an important factor regarding the effect of verbal rewards. Interestingly, the Harackiewicz et al. study shows that anticipated performance evaluation constrains behavior and exerts performance pressure on the individual and therefore lead to a decrease in intrinsic motivation (Harackiewicz, Manderlink & Sansone, 1984). This conclusion is rather interesting seen from an organizational point of view, as it can have important implication for management practices such as performance appraisals conducted in many organizations.

According to some scholars feedback can also produce unfortunate consequences. If for instance positive feedback is exaggerated, the individual can become dependent on it and then it can lead to negative effects on intrinsic motivation (Deci, 1972a; Kohn, 1999). Additionally, too much positive feedback can lead the individual to believe that he or she is being ingratiated, which might also result in lower levels of intrinsic motivation (Deci, 1972a). Kohn, who is very skeptical of the use of rewards in general, argues that verbal rewards have much of the same unfortunate consequences as other types of rewards. To him verbal rewards such as praise are patronizing and are most frequently used for the sake of the giver rather than the receiver (Kohn, 1999). Hence, positive feedback can both lead to positive and negative effects on intrinsic motivation, depending on the individual's perception of the feedback provided. Finding the right balance is thus extremely important.

Although there exist different nuances in the arguments of the effects of verbal rewards on intrinsic motivation, there is an overall agreement that positive feedback and praise can strengthen an individual's intrinsic motivation. This is in accordance with most organizational behavior literature, in which feedback on performance is strongly emphasized as crucial for work motivation (Hackman, Oldham, Janson & Purdy, 1975; Pinder, 1998) whereas organizational economics hardly consider this type of reward.

4.2.2 Tangible Rewards: Multiple Effects

4.2.2.1 Unexpected Rewards¹⁰:

Most of the scholars involved in the debate on the effects of extrinsic rewards on intrinsic motivation claim that the use of unexpected rewards does not have a significant effect on an individual's intrinsic motivation (Deci, Cascio & Krusell, 1975; Cameron & Pierce, 1994; Tang & Hall, 1995). Lepper et al., however, demonstrate that unexpected rewards produce a slight increase in intrinsic motivation. Interestingly, these scholars found that whereas individual's who have a high initial interest in a certain activity show a trivial decrease in intrinsic motivation after receiving an unexpected reward, individual's with a low initial interest in the activity showed a significant increase in intrinsic motivation after the receipt of an unexpected reward (Lepper, Greene & Nisbett, 1973).

¹⁰ Unexpected rewards are rewards, which are delivered to the individuals without being promised beforehand. Hence, when engaging in a certain activity the individual has not been promised any reward for engaging in the activity, achieving a certain performance level, or completing the activity etc. (Cameron & Pierce, 2002).

The non-significant effect of unexpected rewards can be explained on the basis of perceived locus of causality (Deci, Cascio & Krusell, 1975). It is argued that an individual, who expects a reward during the engagement in an activity is likely to believe that he is doing the activity for the reward rather than for internal reasons such as interest. Hence, in the words of DeCharms (1968) a change in perceived locus of causality from the internal to the external is taking place. Further, it is argued that this change in perceived locus of causality is not likely to occur when the individual receives an unexpected reward after the engagement in the activity, as the individual did not expect to receive a reward while doing the activity and hence does not believe that the reason for doing the activity was an external source (Deci, Cascio & Krusell, 1975). Calder and Staw challenge the explanation of the non-significant effect of unexpected rewards compared to expected rewards on intrinsic motivation. They claim that expected rewards are more likely to result in a decrease in intrinsic motivation because the reward is perceived as a bribe or as conveying information that the activity is not worth or enjoyable enough engaging in without the availability of a reward. They further argue that it is the reaction to the offer of the reward rather than a decrease in intrinsic motivation, which leads to a decline in performance (Calder & Staw, 1975).

Although there are some differences regarding the explanation of the effect of unexpected rewards, there seems to be an overall agreement that these types of rewards do not harm intrinsic motivation to a noteworthy degree.

4.2.2.2 *Expected Tangible Rewards*¹¹:

Expected tangible rewards can take different forms and as will become evident in the following discussion the different forms of expected tangible rewards can have different effects on an individual's intrinsic motivation depending on the specific nature of the reward.

4.2.2.2.1 Task Non-Contingent Rewards¹²

As with verbal and unexpected rewards, there is more or less agreement in the field that task non-contingent rewards do not have significant effects on an individual's intrinsic motivation (Deci,

¹¹ Expected tangible rewards are offered to the individual before engaging in the target activity and as such the individual knows that he or she will be rewarded for carrying out the activity if certain demands are met.

¹² This type of reward is an expected tangible reward offered to individuals participating in an activity, independent of what they actually do. That is the individuals are rewarded for their presence without taking completion or quality of the performance into account. This type of reward is comparable to hourly payments or monthly salaries in work organizations (Ryan, Mims & Koestner, 1983).

1972a; Dickinson, 1989; Cameron & Pierce, 1994; Tang & Hall, 1995; Deci, Koestner & Ryan, 1999). The reason why there is no negative effect on intrinsic motivation is that this type of reward is not perceived as a means to an end and is thus not experienced as controlling by the individual (Ryan, Mims & Koestner, 1983).

Deci and Kohn argue, in line with the research of Frederick Herzberg (Hertzberg, 1968), that task non-contingent rewards serve as good tools in attracting and retaining organizational members, but that they do not serve as efficient motivators. Hence, these types of rewards are merely hygiene factors, which create dissatisfaction and lower levels of motivation if they are not adequate, but do neither decrease or increase intrinsic motivation (Deci, 1972a; Kohn, 1999).

In contrast, an early study conducted by Kruglanski et al., found that rewards offered for simply participating in an experiment interfered with individual's intrinsic motivation, as individuals who were not offered a reward exhibited a substantial higher level of motivation, enjoyment, creativity, and quality performance than individuals, who were offered the reward (Kruglanski, Friedman & Zeevi, 1971).

As this type of reward has no significant effect on an individual's motivation to perform a task, it can be argued that it is of no particular interest when studying motivation in organizations. Nevertheless, it is important to make sure that organizational members are paid adequately, so that dissatisfaction in general is avoided. Furthermore, the Kruglanski results encourage one to pay attention to the risk of lower quality levels, enjoyment, creativity, and motivation if rewards are offered for simply participating in an activity. In organizational settings, however, this effect does not seem relevant as paying organizational members simply for participating, in the form of salaries, is the norm and therefore does not have a negative effect on intrinsic motivation (Staw, Calder, Hess & Sandelands, 1980).

4.2.2.2.2 Task-Contingent Rewards¹³

Even though scholars such as Cameron and Pierce fiercely argue that rewards at an overall level do not lead to lower levels of intrinsic motivation, they admit that tangible rewards, which are offered for doing, completing, or solving a task and which are expected by the recipient, have a

¹³ Task-contingent rewards are traditionally the most common ones used in attribution experiments (Tang & Hall, 1995). They are rewards offered for doing an activity, which means they are offered for completing an activity, however, without considering the quality of performance. This type of reward is comparable to piece-rate payment systems in work organizations (Ryan, Mims & Koestner, 1983).

significant negative effect on intrinsic motivation when measured in the free-choice period whereas the same type of rewards, according to them, are shown to have only a slightly negative and insignificant effect on intrinsic motivation when measured on the basis of self-reports (Cameron & Pierce, 1994).

Other scholars unanimously proclaim that task-contingent rewards, which are expected by the individual, have substantial detrimental effects on the individual's subsequent intrinsic motivation for engaging in the activity (Deci, 1972a; Lepper, Greene & Nisbett, 1973; Dickinson, 1989; Tang & Hall, 1995). In addition to concluding that task-contingent rewards produce a decrement in intrinsic motivation, Lepper et al. proclaim that the introduction of this type of rewards not only reduces frequency but also the quality of performance (Lepper, Greene & Nisbett, 1973).

The negative effect of tangible rewards is heavily questioned by Carton, who proposes that it may be due to factors such as delivering tangible rewards long after the rewarded behavior is conducted whereas e.g. verbal rewards are delivered immediately and the fact that tangible rewards are only given once whereas e.g. verbal rewards typically are provided several times during the session (Carton, 1996). Similarly, other reinforcement scholars criticize the timing of the reward as well as reward expectancy used to show the negative effect of rewards in attribution theory studies (Calder & Staw, 1975; Scott, 1975). The widely agreed upon negative effect of task-contingent rewards can thus be argued to be due to the design of the experiments conducted rather than the reward itself. In addition Reiss and Sushinsky suggest that lower levels of performance following the offer of this type of reward might as well be due to the "competing response hypothesis" meaning that the engagement in an activity is "...disrupted by perceptual distraction, cognitive distraction, excitement in anticipation of reward, or frustration resulting from delay or withdrawal of reward" (Reiss & Sushinsky, 1975, p. 1118) rather than a decrease in intrinsic motivation.

Scholars within the attribution theoretical tradition propose that task-contingent rewards combined with verbal rewards tend to leave no effect on intrinsic motivation. In other words, when an individual is verbally rewarded during an activity and rewarded with money for the completion of the activity, there is not produced a significant effect on intrinsic motivation. Presumably, this is due to the two types of rewards pulling in opposite directions; while the task-contingent reward tends to decrease intrinsic motivation because it moves the causality of locus to the external, the verbal reward tends to increase intrinsic motivation by strengthening the individual's sense of competence. That is when both types of rewards are present they counteract each other and leave

intrinsic motivation at the same level, at least in the short run (Deci, 1972b; Ryan, Mims & Koestner, 1983).

As task-contingent rewards are the most common ones used in experiments conducted by attribution theorists, at least traditionally (Tang & Hall, 1995), it can be argued that the extensive use of exactly this kind of reward is one of the reasons why their research at an overall level emphasizes the negative effect of rewards on intrinsic motivation. Whatever the reason for the negative effect of this type of reward, it should, according to the discussions in the literature, be used with caution in the attempt to enhance performance.

It can be argued that problems experienced with task-contingent rewards are due to the difficulty of measuring performance, as often emphasized in organizational theories (Katz, 1964; Eisenhardt, 1989; Lawler, 2000; Hendrikse, 2003). Although Lawler believes in pay-for-performance systems, he explains that they are often resisted because it is observed that "...many organizations would be better off if they didn't try to relate pay and promotion to performance and relied on other systems to motivate performance. The logic for this statement stems from the difficulty of specifying what kind of performance is desired and then determining whether it has been demonstrated" (Lawler, 2000, p. 43). Problems like the multi-tasking problem and incomplete contracts as emphasized in principal-agent theory, underlie this difficulty of performance measurement (Eisenhardt, 1989; Hendrikse, 2003). The fear of measurement problems might lead organizations to resort to task-contingent rewards rather than performance-contingent rewards, as they thereby can avoid measuring performance. However, the danger in making use of such rewards is that the wrong type of performance, i.e. lower quality performance, is often rewarded. Thus, unwanted behavior is encouraged rather than behavior increasing productivity (Kerr, 1975).

4.2.2.2.3 Performance-Contingent Rewards¹⁴

As a response to the demonstration of the negative effects of extrinsic rewards, Harackiewicz et al. conducted an experiment with the purpose of showing that a main reason for the effect was the use of rewards for simply participating in or completing an activity (Harackiewicz, Manderlink & Sansone, 1984). They argue that the negative effects of these types of rewards are due to the minimal information on competence provided by them and the likelihood that individuals will

¹⁴ Performance-contingent rewards are tied to an individual's performance regarding a certain activity. As such the individual has to reach a specified level of performance; that is meeting a set of criterion, norm, or level of competence. Hence, the focus is on the performance of the individual relative to a specified type of standard. Such a reward is equivalent to certain types of bonuses and incentives in work organizations (Ryan, Mims & Koestner, 1983).

perceive this type of rewards as controlling. Consequently, their experiment focus on rewards offered for exhibited competent behavior, that is performance-contingent rewards.

According to several other scholars, performance-contingent rewards can both enhance intrinsic motivation by providing positive feedback regarding the individual's competence and reduce intrinsic motivation by constraining behavior (Ryan, Mims & Koestner, 1983; Harackiewicz, Manderlink & Sansone, 1984; Deci, Ryan & Koestner, 1999). Harackiewicz et al., however, claim that there is more to performance-contingent rewards than that. They argue that performance-contingent rewards have a unique aspect relative to evaluative situations, e.g. verbal rewards, as the individual receives something tangible as a consequence of a positive performance evaluation. It is argued that this tangibility influences the recipient's intrinsic motivation in a quite different way: "The meaning, or symbolic cue value, of that reward may influence [intrinsic motivation] independently of evaluation and feedback [...] Symbolic rewards may foster task involvement and interest by sensitizing individuals to the competence information available in the situation, and by making competent behavior more important" (Harackiewicz, Manderlink & Sansone, 1984, p. 288, the text in brackets is added by the author of this paper). As such, performance-contingent rewards provide the individual with a tangible evidence of excellence, which can increase the affective significance of the information on competence provided (Harackiewicz, Manderlink & Sansone, 1984).

Contrary to this position, evidence shows that performance-contingent rewards measured in a free-choice period significantly undermine intrinsic motivation whereas when measured by self-reports this type of rewards have no effect on intrinsic motivation. Nevertheless, the overall conclusion proposed by several scholars on this matter, is that the most detrimental type of rewards is the type of performance-contingent reward, which is administered as a direct function of the individual's performance (Rummel & Feinberg, 1988; Kohn, 1999; Deci, Ryan & Koestner, 1999).

Interestingly, the negative effect of performance-contingent rewards on intrinsic motivation is even supported by some economists (Frey, 1997; Bénabou & Tirole, 2003), which goes against traditional economic wisdom. Bénabou and Tirole for instance state that "the principal selects a reward for a well-defined effort or performance before the agent's decision [on how much effort to put into the task]. The agent then rationally interprets the reward scheme as a signal of distrust or of a boring task" (Bénabou & Tirole, 2003, p. 504, the text in brackets is added).

Different results, however, were introduced by Cameron and Pierce, who argue that performance-contingent rewards have no significant effect on intrinsic motivation when measured in the free-choice period. On the contrary, they claim that this type of reward leads to positive effects on intrinsic motivation when measured on the basis of self-report (Cameron & Pierce, 1994). This conclusion is also voiced by Dickinson, who states that "...the use of performance-contingent rewards should not be discouraged, but rather the development of objective, attainable performance standards upon which rewards are based should be encouraged" (Dickinson, 1989, p. 9).

In a more recent study, Cameron and Pierce even proclaim that individuals, who are rewarded for meeting progressively more demanding performance standards, show an increase in intrinsic motivation in terms of time spent in a free-choice period compared to individuals, who are rewarded for obtaining a constant level of performance (Pierce, Cameron, Banko & So, 2003). Hence, according to Cameron and Pierce, rewards tied to increasingly challenging levels of performance increase rather than decrease an individual's intrinsic motivation (Pierce, Cameron, Banko & So, 2003).

This assertion is highly criticized by Kohn, who notes that the use of performance-contingent rewards will not lead to a positive effect on intrinsic motivation at an organizational level. The reason for this is that when a certain standard for performance is present, a substantial number of individuals will fail to meet stated criteria. In this sense, this type of motivation systems result in only a few winners whereas the remaining individuals will carry with them the feeling of having lost or not being competent enough as they did not meet the criteria necessary to receive the reward. Hence, even if rewards do work for the individuals, who actually receive the reward, a reward system will, at the overall level, have a negative effect on motivation (Kohn, 1999; Kohn, 1996). However, Dickinson argues that in cases where a substantial number of individuals do not meet the criteria and do not receive the reward, the fault should not be placed on the performance-contingent reward but rather on the performance standards upon which the reward is based (Dickinson, 1989).

Other negative side effects of performance-contingent rewards are emphasized by several scholars within the attribution theoretical tradition. They for instance argue that this type of rewards typically result in individuals doing the minimum required just in order to meet the criteria for obtaining the reward (Deci, 1978; Lepper, Keavney & Drake, 1996; Kohn, 1999). Thus, it is often argued that performance-contingent rewards not only lead to the undermining of intrinsic

motivation, but also lead to lower levels of quality, poorer problem-solving, and inhibit creativity (Lepper, Keavney & Drake, 1996; Kohn, 1999).

As has become evident from this discussion, the results of the effect produced by performance-contingent rewards on intrinsic motivation are rather mixed and are probably the source of most ambiguity in the debate on the effect of extrinsic rewards on intrinsic motivation. In general, it can be argued that performance-contingent rewards can have two opposing effects on intrinsic motivation; an increase due to its competence informational aspect or a decrease due to its controlling aspect. Whether the effect is positive or negative must then depend on the relative salience and importance of the two competing effects (Lepper & Greene, 1978; Frey, 1997). In order to obtain the wanted effect, organizations that choose to use this type of rewards should therefore pay considerable attention to the design of the rewards as well as the performance standards tied to these.

According to a wide array of contributions within the field of organizational behavior, employee involvement in decision making and goal-setting can have positive effects on motivation and attitudes (Latham & Locke, 1979; Schein, 1990; Armstrong & Murlis, 1998; Pfeffer, 1998; Pinder, 1998; Lawler, 2000). Lawler argues that “[f]or example, employees have been involved in designing their own bonus system, and the results have been generally favorable” (Lawler, 2000, p. 58). As such, resorting to employee involvement in designing motivation systems and setting performance standards tied to specific performance-contingent rewards might enhance the competence informational aspect and reduce the controlling aspect of the reward compared to management making such decisions on its own. In this sense, the likelihood of a positive effect on intrinsic motivation is increased and perhaps by designing the motivation system in such a way that it enhances the feeling of competence and autonomy as well as creating a sense of responsibility might be desirable. To the best of my knowledge, experiments including involvement of organizational members in setting performance standards have not been conducted by psychologists involved in the debate on intrinsic and extrinsic motivation. It is highly likely that such experiments would lead to results quite different from the ones currently available.

[Insert table 2 here]

4.3 Untraditional Economic Accounts: Explanations for the Negative Effect

Although one of the main assumptions within economics is that individuals are self-interest seeking and that incentives therefore are needed to align the agent’s interests with the ones of the principal

to obtain the desired behavior from agents (Eisenhardt, 1989; Hendrikse, 2003), the negative effect that extrinsic rewards can have on intrinsic motivation and performance has recently gained footing within some spheres of economics (Frey, 1997; Frey & Jegen, 2001; Bénabou & Tirole, 2003).

4.3.1 Change in Preferences

Bruno Frey has contributed with the Motivation Crowding Theory, which explains why extrinsic rewards sometimes “crowd out” an individual’s intrinsic motivation to engage in an activity (Frey, 1997). This theory can naturally be considered a major anomaly in regards to traditional economic theory as it predicts that the individual will react opposite to what is expected by the relative price effect; instead of rewards increasing performance by enhancing the marginal benefit of performing, it leads to a decrease in performance (Frey & Jegen, 2001). In contrast to traditional economic theory, in which intrinsic motivation is held constant or is absent, Frey argues that the amount of an individual’s intrinsic motivation might be altered by external intervention and he claims that this change is due to a change in the individual’s preference: “This line of theorizing concentrates on the observation that an agent’s behaviour may reveal an altered amount of intrinsic motivation due to an external intervention. The reason for the change in behaviour is attributed to a change in preference” (Frey & Jegen, 2001, p. 592). That is, initially the individual engages in the activity because it is found to be inherently interesting and as giving rise to enjoyment, however, the introduction of an extrinsic reward changes the preference for doing the activity so that the preference subsequently is the reward rather than interest in the activity itself. Frey explains this process in much the same way as attribution theorists:

“When individuals perceive an external intervention as reducing their self-determination, intrinsic motivation is substituted by extrinsic control [...]. The locus of control shifts from inside to outside of the person affected. [...] When outside intervention carries the notion that the actor’s motivation is not acknowledged, his or her motivation is effectively rejected. The person affected feels that his or her involvement and competence is not appreciated, which debases its value” (Frey & Jegen, 2001, p. 594).

Frey thereby claims that external interventions such as extrinsic rewards, which are perceived as controlling by the individual, undermine an individual’s feeling of autonomy and competence and hence the individual’s intrinsic motivation. Relating this to the earlier outcome/utility discussion in this paper, it can be argued that the experience of being controlled by an external source has a negative affective effect resulting in a decline in the affective outcome an individual will gain from continuously engaging in the activity while the tangible outcome increases. In this way, the overall utility might not be lowered as such. Although different in form, the sustained utility obtained by the individual explains why the performance does not decline until after the removal of the reward as

suggested by the psychology research. After the removal, the individual will neither achieve an affective nor a tangible outcome from engaging in the activity as both the intrinsic motivation and the extrinsic reward have been eliminated. Hence, the utility of engaging in the activity decreases, which in turn results in a decrease in performance. The negative effect of extrinsic rewards on intrinsic motivation will thus, *ceteris paribus*, only lead to decreases in performance when the individual's overall utility is lowered. Nevertheless, if its level is maintained by other forms of outcomes, e.g. social or tangible, performance will not decrease when intrinsic motivation is affected negatively. In this connection, however, it should be considered whether the lower level of intrinsic motivation leads to lower levels of creativity, quality, and complex problem-solving as suggested by attribution theorists. The risk of this occurring of course leads us back to the idea that motivation systems should be designed in such a way that they are not experienced as controlling and hence do not reduce the individual's feeling of self-determination. As has been discussed, this can be done without abandoning extrinsic motivators such as tangible rewards completely.

4.3.2 Information Signaling and Information Processing

Bénabou and Tirole have also attempted to explain the undermining effect of extrinsic rewards on an individual's intrinsic motivation from an economical perspective. Whereas Frey ascribes the negative effect on intrinsic motivation to the feeling of external control and a shift in the individual's preferences, Bénabou and Tirole explain the effect on the basis of the informational content of the reward (Bénabou & Tirole, 2003). They argue that the principal holds superior information about the agent's abilities to perform a certain task as well as information about the specific characteristics of the task, e.g. whether it is attractive or not. The agent does not hold this information, but attempts to understand it by inferring its meaning through the principal's decisions about policies such as rewards, delegation, monitoring etc. This inference process tells the agent something about the principal's perception of the agent's ability and the cost of involving in the task. Additionally, it reveals to the agent whether or not the principal perceives the agent as intrinsically motivated and can be trusted in performing the task. The main point in Bénabou and Tirole's model is that: "...by offering low-powered incentives, the principal signals that she trusts the agent. Conversely, rewards (extrinsic motivations) have a limited impact on the current performance, and reduce the agent's motivation to undertake similar tasks in the future. We use the same logic to show that empowering the agent is likely to increase his intrinsic motivation" (Bénabou & Tirole, 2003, p. 492). Bénabou and Tirole claim that the agent associates a higher reward with a less attractive task and that the principal does not have sufficient trust in the agent's ability and intrinsic motivation. As a result, the principal's offering of an extrinsic reward leads to a decrease in the agent's self-confidence and thereby also in intrinsic motivation.

As such Bénabou and Tirole's model supports the results of Deci and other attribution theorists' findings. The two economists even claim: "Our results are also consistent with the Etzioni's (1971) claim that workers find control of their behaviour via incentives 'alienating' and 'dehumanizing', with Kohn's (1993) argument that incentive schemes make people less enthusiastic about their behaviour, and with Deci and Ryan's 1985 view that rewards change the locus of causality from internal to external, making employees bored, alienated and reactive rather than proactive" (Bénabou & Tirole, 2003, p. 504).

4.3.3 Extending the Explanations: The Consideration of Goals and Framing

The ideas of information signaling and processing as well as motivation crowding-out as an explanation of the negative effect of extrinsic rewards on intrinsic motivation can be further elaborated on by linking it to Framing Theory¹⁵. Depending on the individual's foreground and background goals as well as the frame triggered in a specific context, the agent will process the information signaled by the principal differently (Lindenberg, 2001). If the foreground goal of the agent is to earn as much money as possible triggering a gain frame and the background goal of let's say enjoyment is compatible with the main goal, the introduction of a reward will be less likely to have a negative impact on the agent's intrinsic motivation. The possibility to receive a reward will in fact be seen as something positive as it can help the agent achieve his goal of making money while having fun in the process, i.e. the agent obtains both the tangible and the affective outcome tied to his foreground and background goal. In connection to Bénabou and Tirole's model, it can be argued that the information signaled by the principal's offering of a reward will not be perceived as negative in regards to trust, competence, or the nature of the task, because the agent's gain frame will direct his attention towards those informational aspects of the activity, which have to do with making money and secondary to having fun (Lindenberg, 2001). In regards to the Motivation Crowding Theory by Frey, the reward is not likely to be perceived as controlling or as decreasing the agent's self-determination as it does not lead to a change in frame and hence does not lead to a change in preferences. In line with this, Deci and Ryan argue that autonomous reasons for pursuing the goal to make more money is not related to decreases in intrinsic motivation: "Analyses indicated that autonomous reasons for pursuing wealth were positively related to self-actualization and that controlled reasons for pursuing wealth were negatively related to self-actualization..." (Deci & Ryan, 2000, p. 245).

¹⁵ For reasons of space and the risk of making this paper too complex, Framing Theory will not be treated in-depth in this paper. However, main ideas relevant to understanding the effect of extrinsic rewards on intrinsic motivation will be used. For a more thorough account of Framing Theory in regards to motivation see Lindenberg (2001) and Lindenberg (2005).

Conversely, if the agent's main goal is to have fun, the introduction of a reward will have a far more devastating effect on the agent's intrinsic motivation if the impact of the reward is strong enough to win over the goal to have fun. This will result in a shift in frame from a hedonic to a gain frame and the "...gain frame will curtail attention aspects of enjoyment and focus attention on aspects of gain, so the given activity looks less enjoyable when seen from a gain frame than from a hedonic frame" (Lindenberg, 2001, p. 333). Because the original main goal was to have fun and the involvement in the activity was intrinsically motivated (enjoyment-based) to begin with, the introduction of a reward is more likely to be experienced as the principal not having faith in the agent's intrinsic motivation and his ability to perform the task competently. As explained by Bénabou and Tirole this results in a decrease in the agent's self-confidence and hence in intrinsic motivation. In contrast, the logic of Frey's Motivation Crowding Theory explains that the shift to a gain frame entails a change in the agent's preferences and hence the feeling of diminished self-determination, leading the agent to be more prone to engage in behaviors yielding tangible outcomes instead of affective outcomes. Again, however, compatibility between the goals of having fun and making money would reduce the negative effect of the reward (Lindenberg, 2001).

If the agent has a normative frame there is a wish to act appropriately in a certain context without any expectation of receiving a reward. Hence, acting appropriately and doing the right thing is a value of its own (Lindenberg, 2001). As such, rewards are not needed when an individual acts upon a normative frame. As in the above example, the introduction of a reward is likely to result in a shift in frame – from a normative frame to a gain frame meaning that more attention will be given to aspects of making money. A negative effect on the agent's obligation-based intrinsic motivation will be more likely to occur if the compatibility between the goal to act appropriately and the goal to make money is low. In this case, the agent will perceive the principal's offer of a reward as controlling as well as a signal of lack of trust in the agent's ability and wish to act appropriately. If the normative frame is supported by many compatible hedonic and/or gain-related goals, the shift in frame will not take place and the agent's intrinsic motivation to act normatively will not be harmed. In this sense, obligation-based intrinsic motivation can be stabilized by extrinsic rewards (Lindenberg, 2005).

Whether the reward will in fact have a negative impact on intrinsic motivation also depends on the type of reward as well as the individual's perception of it, as discussed in the section "The Effect of Extrinsic Rewards on Intrinsic Motivation". The important point made here, however, is that the

individual's perception of the reward will be affected by his goals and the frame triggered in the particular situation.

According to Kehr (2004), extrinsic rewards only have a negative effect on intrinsic motivation if they activate new goal representations *and* at the same time deactivate the original affective motives. This is not likely to occur when the new goal representation is compatible with the original affective motive. In this sense: "...even externally imposed goals can be intrinsically motivating, providing they are congruent with the person's actually aroused motives" (Kehr, 2004, p. 492). Reverting to the arguments for the negative effect voiced by attribution theorists as well as the economic accounts, it can be claimed that e.g. the feeling of an external intervention as controlling depends on whether or not the principal is able to design motivation systems, which support the agents' pursuit of goals and through this the satisfaction of their basic needs. In other words, it depends on the compatibility between the motivation system and the individual's goals.

4.3.4 Intrinsic Motivation: God's Gift to Organizations?

Arguments and evidence from psychology presented in the previous section as well as the above-presented economic accounts indicate that extrinsic rewards can harm intrinsic motivation and it is assumed that intrinsic motivation always is a positive thing, which should be preserved. However, does this mean that protection of organizational members' intrinsic motivation is always desirable or the most effective route to maximizing performance? Depending on the individual's affective goals and preferences as well as whether or not they are in accordance with the organizational goals, intrinsic motivation can both be advantageous and disadvantageous to the organization (Frey, 1997; Osterloh & Frey, 2000; Frey & Jegen, 2001). If there exists consistency between the two, the organizational member can be intrinsically motivated and the organization can effectively obtain its goals at the same time. In fact, the organization can benefit from the higher levels of performance and innovation exhibited by the organizational member when intrinsically motivated (Osterloh & Frey, 2000)

However, if intrinsic motivation of the organizational member and the goals of the organization are not consistent, a classic principal-agent problem, i.e. conflict of interests, emerges (Eisenhardt, 1989; Hendrikse, 2003). In complex situations where information asymmetry exists, e.g. the agent has information about own effort, which is not available to the principal, the organization might even experience a decline in performance, meaning a decline in desired performance. This is because valuable attention and time might be diverted from crucial tasks to tasks, which are considered to be interesting to the organizational members, but are of relatively little or no value to

the organization (Hendrikse, 2003). In other words, self-interest seeking behavior, where selfish affection outcome-maximization is in focus, prevails.

The point is that intrinsic motivation is not always desirable (Osterloh & Frey, 2000), and in fact sometimes a decrease in intrinsic motivation might even increase “the right” performance and productivity in the organization. Hence, protecting organizational members’ intrinsic motivation should not be done at any cost – only the right kind of intrinsic motivation supporting the organization’s goals should be promoted and therefore external interventions, like rewards and regulations, are still needed “To discipline the effects of undesirable intrinsic motivation. Management makes unwanted outcomes of intrinsic motivation on coworkers, superiors, and customers costly and therefore less attractive” (Osterloh & Frey, 2000, p. 540).

External interventions should, however, be carefully considered as they, besides producing decrements in valuable intrinsic motivation, might end up being too costly for the principal. Whether it is beneficial for the principal to intervene depends on the relative size of the Price Effect ($C_{PE} < 0$) and the Crowding-Out Effect ($B_{PE} < 0$)¹⁶ (Frey, 1997). The principal should refrain from changing the reward or regulations if $\Delta P^*/\Delta E = 0$, which indicates that the change does not have an affect on the agent’s optimal performance level. However, if $\Delta P^*/\Delta E > 0$, the principal should intervene more as the intervention leads to higher levels of effort and performance by the agent. If $\Delta P^*/\Delta E < 0$, it is beneficial for the principal to decrease the level of external intervention as it crowds out intrinsic motivation, which is valuable to organizational performance.¹⁷ The optimal level of intervention is, according to Frey, reached when:

$$X^P \frac{dP^*}{dE} = K_E$$

This indicates that the principal’s marginal benefit equals his marginal cost of intervening.¹⁸ As such, it can be argued that in situations where the costs of measuring and monitoring performance are lower compared to the cost of decreasing intrinsic motivation, external interventions are more beneficial to the principal relative to preserving the agent’s intrinsic motivation. In this sense, external intervention, e.g. in the form of extrinsic rewards, does not always have a negative effect on organizational performance and should therefore not at all times be avoided as suggested by

¹⁶ C = cost of the agent, P = performance of the agent, E = external intervention by the principal, and B = Benefit of the agent

¹⁷ ΔP^* = change in agent’s optimal performance and ΔE = change in external intervention by principal

¹⁸ X = output and K = marginal cost of the principal related to monitoring, rewards, regulation etc.

some attribution scholars (Kohn, 1999). However, as a counterargument it can be proposed that intrinsically motivated tasks in nature are complex as they often involve creativity and complex problem-solving (DeCharms, 1968; Kruglanski, Friedman & Zeevi, 1971; Deci, 1978), which makes the cost of monitoring and measuring such tasks complicated and hence it can be argued that traditional economic theories, such as principal-agent models, are too simplistic to give a complete understanding of intrinsic motivational processes. However, its contributions are not without merits to the debate on motivation. This is exactly why these models should be combined with the contributions from organizational behavior, psychology, and sociology.

5 Concluding Discussion

The overall contribution of this paper has been to show how nuanced motivation in organizations really is as well as call attention to the importance of integrating such nuanced perspectives into the research agenda of organizational science with the purpose of dissolving the polarization evident in the current literature. The pursuit of this purpose implied drawing attention to the considerable amount of research on intrinsic and extrinsic motivation conducted in the field of psychology and combining this research with sociological, untraditional economical as well as organizational science research on motivation. Such combination would yield a far greater and a multi-faceted understanding of motivation and the motivation challenge facing organizations in today's knowledge economy. This paper's attempt to develop a more nuanced perspective on motivation as well as the calling of attention to its application in organizational science is merely an emergent contribution with the purpose of directing more research attention to the theme.

The view presented in this paper not only acknowledges that both intrinsic and extrinsic motivation is important in the motivation debate. It also calls attention to types of motivations, which fill in the gap between these two extreme and polarized types of motivation. Ten types of motivation, varying in degree of being intrinsic and extrinsic, were identified in the paper: External motivation, Introjection, Identification, Reciprocity-based, Equity-based, Obligation-based intrinsic motivation, Self-regulation, Integration, Selfish Enjoyment-based intrinsic motivation, and Altruistic Enjoyment-based Intrinsic Motivation. In this discussion it became evident how the distinction between intrinsic and extrinsic motivation is quite blurred and that the two polar types of motivation are more alike than assumed in the literature. It was argued that both polar types as well as the in-betweens involve some sort of outcome, although much different in kind: affective, social, and tangible. In this sense, enjoyment-based intrinsic motivation does not exclude the involvement of outcomes, as is often argued. Further, this implies that all types of motivations, in some form, have to do with utility

maximization, which perhaps a little provokingly was suggested to involve both cognitive and affective processes. It was also argued that both polar types of motivation can result in self-interest seeking behavior making the in-betweens an attractive alternative for organizations. As such, intrinsic motivation is not always desirable, as often proclaimed in both the organizational behavior literature and in some streams of the psychology literature.

Rather, the well-internalized types of extrinsic motivation or the more moderated intrinsic motivations based on norms and socialization might often be more desirable than enjoyment-based intrinsic motivation in terms of promoting effective and orchestrated performance in organizations. In order to sustain these types of motivation without sacrificing efficient performance, activities which yield the individual enjoyment as a compatible background goal, would be advantageous for the achievement of organizational goals (Lindenberg, 2001). The enjoyment aspect along with the feeling of being relatively self-determined (because the regulations are internalized) would ensure that the organizational member's intrinsic motivation and hence performance as well as organizational goals are not jeopardized as some streams of psychology research argue that the use of extreme types of extrinsic motivation does.

This does not mean that extreme types of intrinsic and extrinsic motivation are not important, though. Enjoyment-based intrinsic motivation is vital for facilitating creative behaviors such as knowledge generation and sharing (Osterloh & Frey, 2000). However, efforts to avoid selfish enjoyment-based intrinsic motivation leading to incoherent behaviors, which are not in accordance with organizational goals, must be made by the use of rewards and regulations, i.e. extreme extrinsic motivation (Osterloh & Frey, 2000). The challenge then is to balance the different types of motivations in such a way that orchestrated behaviors are enhanced without harming valuable enjoyment-based intrinsic motivation entailing innovative outcomes, which are highly important to the competitiveness of the organization.

As such, "One can argue that whether one takes intrinsic motivation to be enjoyment-based or obligation-based, it would be undesirable to have people be intrinsically motivated all the time" (Lindenberg, 2001, p. 337). Additionally, it would be undesirable to have people in a strong gain frame because this would have a negative effect on cooperation. In fact, it would be "...a disaster for modern societies to have people stuck in any one frame. Different contexts need different frames or mixes of frames" (Lindenberg, 2001, p. 337). Hence, for organizations to function optimally neither intrinsic nor extrinsic motivation, whatever the form of it, should be the only focus of attention. Rather organizations should facilitate a combination of different types of motivations

appropriate to enhance “the right” types of behaviors in different situations without compromising other types of valuable motivations.

In this connection, important insights from research on the effect of extrinsic rewards on intrinsic motivation from psychology must be considered. Even though this research at first seemed inconsistent as a result of its rhetoric, a closer look clearly tells us that verbal rewards can effectively be used whereas tangible rewards should be used with caution. Instead of focusing on extrinsic motivation as either good or bad at all times, it is time to start looking at the types of rewards, how the motivation system should be developed, and under what conditions different types of motivation systems, with different combinations of rewards, are required to obtain the desired effect.

5.1 Future Research Challenges

This paper is far from a comprehensive review and analysis of all relevant aspects of motivation in organizations. It has focused on the contributions from psychology and how these in combination with some insights mainly from organizational economics as well as from organizational behavior, sociology and untraditional economics, can contribute to a far more nuanced perspective on motivation than the ones currently dominating the organizational science literature. This paper should be perceived as a call for further theoretical elaboration on and refinement of different types of motivation in-between the two polar types of motivation and their interactions in order to create a more complete and full-fledged understanding of motivation in organizations. Such research would undoubtedly yield considerable benefits to the research field as well as practice.

One of the main limitations of this paper is the lack of attention given to specific contextual conditions influencing the effects of different types of rewards as well as under what conditions organizations should primarily rely on either affective, social, or tangible outcomes/rewards in order to optimize performance. Deci et al. offer some insights on the effect of specific contextual factors by arguing that the less controlling the contextual conditions, the better in terms of motivation and performance (Deci, Ryan & Koestner, 1999). They argue that factors such as a meaningful rationale for engaging in a certain activity, the acknowledgement of the individual’s perspective, and providing choice rather than control are extremely important in enhancing individuals’ feeling of self-determination and hence in promoting the integration of extrinsic regulations as well as maintaining intrinsic motivation (Deci, Eghrari, Patrick & Leone, 1994; Gagné & Deci, 2005). In organizational settings, job content and leadership style are stressed as pivotal for organizational members’ motivation and performance (Deci, Connell & Ryan, 1989; Baard, Deci & Ryan, 2004;

Gagné & Deci, 2005), which is in accordance with the views of most organizational behavior literature. Although attempts to pin down the specific contextual factors have been made, a more specific understanding of them and their influence on motivation and performance yet remains to be unraveled. Theoretical extensions of this research within organizational science are needed in order to produce more in-depth knowledge about the organizational mechanisms affecting motivation and performance.

Instead of continuing the battle between different views on motivation, it is time to acknowledge that the different theories treating motivation are not contradictory and hence are not competing theories. Rather they represent different pieces of the puzzle focusing on different aspects of motivational processes. Combining these, putting the pieces together, will most likely reveal a more complete view on motivation and behavior. As such, there is a need for the development of a coherent overall framework including the different aspects: Needs, goals, frames, preferences, cognition, affect, outcomes, intrinsic and extrinsic motivation as well as the motivation types in-between the two extremes. This is probably one of the main challenges of the research on motivation, which it is hoped that this paper has encouraged.

Empirical work validating the theoretical contributions in the field is still limited. Studies on intrinsic and extrinsic motivation as well as the interaction between the two remain to be conducted. Furthermore, studies on various types and levels of motivation are needed in order to get a better understanding of the multi-faceted character of motivation. In this connection, it would be valuable to empirically study how these different types of motivation are connected to knowledge processes such as knowledge sharing and generation in order to gain an understanding of motivation in the knowledge economy.

With the increasing intensity of the knowledge economy and the demands it inflicts on organizations and their struggle for competitive advantages, the development of a more complete and nuanced understanding of motivation should become one of the main areas of future research.

6 References

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