

Freudling, Maximilian

Article

Awareness of intrinsic motivation in leadership

Journal of Applied Leadership and Management

Provided in Cooperation with:

Professional School of Business & Technology, Hochschule Kempten - University of Applied Sciences

Suggested Citation: Freudling, Maximilian (2020) : Awareness of intrinsic motivation in leadership, Journal of Applied Leadership and Management, ISSN 2194-9522, Hochschule Kempten - University of Applied Sciences, Professional School of Business & Technology, Kempten, Vol. 8, pp. 134-151, <https://www.journal-alm.org/article/view/21409>

This Version is available at:

<https://hdl.handle.net/10419/251930>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

Awareness of Intrinsic Motivation in Leadership

Maximilian Freudling (mfreudling@yahoo.de)

Professional School of Business and Technology, Kempten University of Applied Sciences, Germany

Summary

- Research questions:** How well do leaders know what intrinsically motivates their followers? Do they understand the mechanism of intrinsic motivation?
- Methods:** Research questions are investigated by means of primary research in the form of qualitative interviews at a German large-sized company. To analyze the interviews, a qualitative content analysis is performed on the paraphrased statements of the interviews.
- Results:** The results indicate that leaders have a partially good knowledge of the factors of intrinsic motivation, even if not fully known. In the second part of the study, an investigation of leaders' comprehension of intrinsic motivation reveals that the factors of intrinsic motivation are not fully understood.
- Structure of the article:** Introduction; Literature Review; Research Questions & Methods; Empirical results; Conclusions; About the Author; Bibliography

Introduction

Businesses are constantly forced to enhance their productivity in order to be competitive on markets. Therefore, they are constantly trying to be more effective and efficient, e.g. by generating high performance through increased pressure on employees.

This will lead to dissatisfaction, lower motivation, and less productivity on a long-term basis (Pinder, 2008). With regard to increasing the performance of an employee, Bassous (2015a) demonstrated that there is a positive correlation between motivation and the performance of individuals. Furthermore, motivation is also important to achieve good work results (Sharp et al., 2016).

Graves and Luciano tested a model linking the satisfaction of psychological need, autonomous motivation, and attitudinal outcomes (2013). From this research, they postulate that high-quality leader-member exchange fosters satisfaction of employees' needs, which in consequence enhances autonomous motivation and the level of performance. Reinforcing this argument, the findings of Deci et al should be considered, as they discovered that if employees have autonomous motivation this will foster a high level of performance with good quality as well as the wellness of employees (Deci et al., 2017).

Knowing about the relationship between motivation and performance, it turns out that leaders have to satisfy the motivational needs of their followers

to have high performances in their teams on a long-term basis. However, before leaders can satisfy the motivational needs of their employees, they have to know and understand the factors of motivation (Bloom et al., 1976). As a consequential step, they can then stimulate motivation amongst followers in daily business.

In this research, the awareness of motivational factors, especially for intrinsic motivation, in leadership will be investigated. In more detail, the cognition and comprehension of motivational factors will be obtained. As a basis for the research question, the motivational factors will be derived from a literature review.

In general, motivation can be subdivided into extrinsic and intrinsic motivation (Deci & Ryan, 1985a). Extrinsic motivation is stimulated by any external reward, whereas intrinsic motivational factors stimulate personal needs and thereby offer an internal reward. The chapter Theoretical Framework provides more detail on motivational theory, as well as deriving the factors of intrinsic motivation.

In order to establish a theoretical framework, a literature review is conducted identifying the different factors of intrinsic motivation. These factors and corresponding indicators for comprehension are subject to pre-coding. To collect data for the research, qualitative interviews with open questions are chosen. Comparing the compiled data to the theoretical framework, a qualitative content analysis is performed (Mayring, 2010). Further explanation of the methodology is provided in chapter 3.

The results of the interviews are documented in the dedicated chapter on Empirical Determination, which provides an explanation of the applied process and clarifies the applied paraphrases. Furthermore, all results are presented and summarized in appropriate graphs. In the last sub-chapter, the results are interpreted and the hypothesis verified.

As a final chapter, the Conclusion will give an executive summary with a list of limitations and, more importantly, recommendations for future research in this field.

Literature Review

Intrinsic Motivation

Intrinsic motivation is treated as one of the most important components of motivation at the

workplace these days (Deci & Ryan, 2000). Intrinsic motivation is handled as the real motivation of human beings (Clanton Harpine, 2015b).

According to Deci and Ryan (1985a), it is the most powerful tool for triggering motivation because it is that which is created by one's self to perform work for one's own sake and not for an external reward.

Furthermore, intrinsic motivation will contribute to the satisfaction of employees in an organization (Bassous, 2015a).

Oposing the statement that intrinsic motivation is seen mainly in children, Schmidhuber (2010) postulated that the need to satisfy the factors for intrinsic motivation will last through adulthood. He states that individuals continue to have the lifelong need for learning and scientific discovery.

Beyond the need to learn, intrinsic motivation also generates persistence (Cerasoli & Ford, 2014). Intrinsic motivation is positively related to persistence in work tasks, performance quality, and overall performance ratings (Oldham & Hackman, 1981; Piccolo & Colquitt, 2006; Vallerand, 1997).

In addition, intrinsic motivation is the basis for strong commitment and a high degree of effort to perform on a long-term basis (Pinder, 2008). As a further aspect in the contemporary fast-changing work environment, intrinsic motivation contributes to long-term change (Clanton Harpine, 2015a).

The concept of intrinsic motivation was originally introduced in the field of animal psychology, during the 1950s (Harlow, 1950), after which it was further developed and elaborated in human psychology (Bennis & Nanus, 1985; Deci, 1975; Deci & Ryan, 1980). Nowadays, it is being expanded across a wide field of applications in education, healthcare, sports and physical activity, psychotherapy, and virtual worlds, as well as the fields of work motivation and management (Deci et al., 2017).

In 1981, Kleinginna and Kleinginna described motivation as an internal condition, which can also be described as a need, want or desire that activates and directs behavior (Kleinginna & Kleinginna, 1981).

Deci & Ryan (1985a) proposed that interest and enjoyment are the main reasons for intrinsically motivated behavior. According to Reeve, Nix, and Hamm (2003), intrinsic motivation is behavior driven by the internal need to explore and learn. They also state

that an activity of an individual should create pleasure or a challenge.

Furthermore, intrinsic motivation is also an important aspect in building self-efficacy (Bandura & Schunk, 1981). More precisely, it fosters a sense of competence, self-determination, and self-esteem (Deci & Ryan, 2000).

According to Deci and Ryan (1985b), intrinsic motivation is driven by three basic human needs: competence, autonomy, and relatedness.

Harter (1981) suggested that intrinsic motivation contains three components: desire for challenge, curiosity, and autonomy.

Ambrose and Kulik (1999) concluded that intrinsic motivation has as its main drivers enjoyment, interest, satisfaction of curiosity, self-expression, and challenge.

In principle, there are two different types of motivational theories: content and process theories. Content theories aim at linking factors responsible for motivation. Motivation is assumed to be the personal need of an individual that is responsible for work-related behavior. On the other hand, process theories define motivation as being linked to a certain goal. It can be observed as the effort put into reaching the goal as well as how well the person is targeting it (Rheinberg, 2002).

Desjardins (2012) stated that leaders often aim at job satisfaction, which has a limited effect on increasing work performance. Therefore, he also proposed to introduce a model with leadership tasks supporting the motivation of employees, which would have a positive effect on work performance. Desjardins and Baker (2013) created the Leadership Task Model, reflecting both theories. The factors of motivation defined by Desjardins (2019) are Affiliation, Autonomy, Acknowledgement, Growth, Purpose and Achievement. These factors of intrinsic motivation correspond with the research and findings of this master's thesis. Hence, this model will be used as a structure for the following theoretical chapters as well as the basis for operationalization in the Methodology section.

Acknowledgement

Individuals strive to elevate themselves, as reflected in Maslow's hierarchy (Maslow, 1954), being one of the first to address the concept of self-esteem,

which was also represented in self-respect and recognition. In general, self-esteem was confirmed as being a basic psychological need (Locke, 1996). Based on this need, on self-respect and recognition, an employee will be satisfied by receiving recognition or appreciation for a job well done or an accomplishment. Especially when recognition is expressed by a supervisor, the employee will feel satisfied and be motivated. Furthermore, recognition gives people positive information on their self-competence (Deci, 1975) as well as self-efficacy (Bandura & Cervone, 1983). Whereas the self-esteem of a person is the stable component of self-concept, self-efficacy (Bandura, 1982) is rather related to the conviction of being able to fulfil a certain task. If there is a low degree of recognition, or even none, this will lead to a decrease in self-esteem, consequently causing negative feelings such as weakness, doubts in oneself, or, even worse, self-contempt (Locke, 1996; Maslow, 1954).

Herzberg (1966), in his two-factor theory of motivators and hygienic factors, regarded recognition as a factor of intrinsic motivation. He understands that the component of intrinsic motivation satisfying self-esteem lies in not only recognizing but also appreciating the employee. For this reason, the term Acknowledgement will be used in this thesis.

For most people, Acknowledgement is a motivational factor (Kuvaas & Dysvik, 2009). It is based on the self-concept, which can be considered as fragile because it seems to be a protection mechanism in human beings.

In order to elevate themselves, individuals seek to improve their positive self-concept (Rogers, 1961). Therefore, people are interested in receiving positive feedback about themselves and their performed tasks.

Feedback is even more important when a task is challenging for the employee. Challenging tasks require people to actively expand their capabilities and probably also their comfort zone. Thus they are more dependent on feedback to cope with this situation. In that case, feedback is highly effective and increases largely work motivation (Steers et al., 2004).

Even more, Charles and Marshall (1992) revealed in a study that for some cases acknowledgement and appreciation can be the main reason for motivation at work (Simons & Enz, 1995). The positive effect of Acknowledgement on pupils'

performance was also demonstrated by previous studies (Pajares & Schunk, 2001).

When acknowledging, the leader has to acknowledge and appreciate the person, not the current performance, because the latter might not be constantly good and vary in quality (Desjardins, 2019).

In addition, performance also depends on external factors and persons, which most often cannot be controlled by the employee themselves. Hence, Acknowledgement based on performance and variable external factors, it is an unreliable source for self-esteem. Besides, the person as well as the capabilities and positive characteristics should be highlighted. Substantial Acknowledgement is based on personal and trustful relationships between leader and subordinate (Gregory, 2010).

In particular, coaching is a means of improving the competences of the employee. If leaders spend time with the subordinates to get to know the person and to listen to current issues, the leader will acknowledge the actual person, which will have a positive effect on the self-concept (Desjardins, 2019).

In case of low self-efficacy, the leader needs to support the follower by coaching, training, and acknowledging them and to convince them that they have acquired the right level of skills to tackle the task (Gregory, 2010).

In 1995, Kovach pointed out that Acknowledgement is perceived by supervisors and managers only as a minor component in work motivation, which again shows the need to address this topic and share the outcome of this qualitative research (Kovach, 1995).

Affiliation

As another factor of intrinsic motivation, Affiliation is defined in this thesis. As early as 1954, Maslow pointed out the importance of people relating to others, which was defined as social belongingness in his hierarchy of needs (Maslow, 1954). This was after Murray (1938) had first mentioned Affiliation in his taxonomy of needs, including achievement and power. A similar term, named relatedness, was used in various theories on motivation, too (Alderfer, 1972; Deci & Ryan, 1980).

The term Affiliation was popularized by McClelland (1961), which he defined as the need of individuals to work with other people. This work is

based on a positive relationship of trust (McClelland, 1961; Zimbardo & Formica, 1963). Furthermore, he described Affiliation as the need to feel a sense of involvement and to belong to a social group.

The human need to relate to other people and build trustful relationships can have a different importance to individuals (Desjardins & Baker, 2013).

Therefore, there are people with a stronger need for Affiliation, which will be reflected in a desire for friendly relationships with others as well as Acknowledgement from them. A strong connection to others will give the feeling of being part of something important with a powerful impact. If there is a high need for Affiliation, it can be expected that the person is likely to also place greater emphasis on supporting others (McClelland, 1961; Murray, 1938).

In the Leadership Task Model, Affiliation is defined as a motivational factor that can only be triggered indirectly by a leader. However, it can be expected that people are looking for work and tasks that match their Affiliation needs. A leader should be aware of this and consider the individual's need for Affiliation when staffing a project by defining a task to someone (Desjardins & Baker, 2013).

According to Deci et al. (2017), when psychological needs such as Autonomy and competency are not met for an individual, the intrinsic motivation decreases. This is true for any of the intrinsic factors (Sullivan, 2019).

Furthermore, intrinsic motivation is enhanced by the social aspect of Affiliation (belongingness or relatedness). Hence the intrinsic motivation factor Affiliation plays a major role in intrinsic motivation (Deci et al., 1996).

Brunel's research (1999) has shown that the motivation of employees is increased when the climate can be described as emphasizing. This positive effect of motivational climate can even be considered as more important than goal orientation because it helps people to be more self-determined.

On the other hand, Affiliation can also have an increased importance in situations of fear and insecurity (Kassin et al., 2007).

Changes in the business environment often cause a feeling of insecurity amongst the employees. For example, downsizing can lead to fear of losing one's job and trigger a higher need for Affiliation. A good and trustful relationship with employees will be of

special importance when other aspects of intrinsic motivation are constrained by a situation of change. The need for Affiliation increases with other people experiencing the same situation. The relationship with other persons will help to get through stressful situations of anxiety (Baker, 1979).

Autonomy

Autonomy is also an important factor in intrinsic motivation. It can be considered to be a fundamental need of employee satisfaction and therefore motivation (Baldassarre, 2013).

The principle of Autonomy has been defined by McClelland (1961) and in the SDT of Deci & Ryan (1980). Moreover, Herzberg (1966) has named it responsibility. Further authors who include the principle of Autonomy in their motivational theories are Hackman & Oldham (1976) and Maslow (1954).

As already mentioned in a previous chapter, Deci and Ryan (1980) handled Autonomy in the SDT as a core concept, differentiating between autonomous motivation and controlled motivation. Moreover, Autonomy is also of particular importance for the Growth and wellness of an employee (Ryan & Deci, 1985). Additionally, Autonomy (autonomous motivation) has a positive effect on wellbeing and work performance (Gagné & Deci, 2005). It is also a fundamental need and mandatory for human psychological health (Deci & Ryan, 2000; Gagné & Deci, 2005).

Graves and Luciano revealed in their study linking employees' leadership exchange with psychological needs that a good leader-employee exchange establishes the satisfaction of basic psychological needs, which will result in enhanced autonomous motivation and outcomes (Graves & Luciano, 2013). Other studies have demonstrated the positive correlation between perceived Autonomy and job performance (Ganster & Fusilier, 1989) as well as organizational productivity (Wall et al., 1986).

A recent study on the Leadership Task Model identified a high significance of Autonomy, which associated various motivational factors, but is also a motivational factor on its own. (Geiselhardt, 2018).

Autonomy is connected with Growth because one can only be autonomous in fields where one has the required competencies. It is therefore limited to the

level of competencies of an individual (Desjardins, 2019).

In addition to pure Autonomy, McClelland (1961) defined power as the second component together with Autonomy in motivation. Whereas Autonomy is defined as the need for independence, power is defined as the desire of employees to control their environment. In the Leadership Task Model, Autonomy is defined as the need to control one's work environment and make independent decisions (Desjardins & Baker, 2013).

When employees' need for Autonomy is satisfied, there will be a highly positive impact on the flexibility of the work process. Where employees are responsible for how they proceed with their work on their own, they are able to react quickly and freely to new customer demands (Desjardins, 2001).

In realizing Autonomy at a workplace, the concept of empowerment as defined in the LTM and other theories should be applied (Conger & Kanungo, 1988; Desjardins & Baker, 2013). Empowerment is defined as a task for the leader to create an autonomous work process for the follower. It consists of giving Autonomy itself, but also accepting the process and result of a follower. Process acceptance and results acceptance are achieved by an appropriate job design that creates control over the job for the employees (Hackman & Oldham, 1976).

A further possibility for creating Autonomy at the workplace is to consider different areas of the work environment. These areas of work Autonomy are the work goal, control of the work area, the work method, and the working time. Most likely the areas of work method, working time, and the start and end of the work can be left to employees to give them more Autonomy (Desjardins, 2001).

Growth

The motivational need for Growth is defined by several theories of motivation. Growth has been defined as a need for personal challenges and accomplishment as well as for learning and professional development (Graen et al., 1986). In the upper two levels of Maslow's pyramid (1954), the need for Growth is reflected ("Esteem Needs" and "Self-Actualization Need"). The same naming of Growth was used by Alderfer (1972) in his motivational theory, including existence and relatedness. Herzberg (1966) applied the same principle of Growth, but using the

term advancement & growth. He described it as the internal desire for personal development. In the SDT of Deci & Ryan (1980), it is called competence. However, all lead to the same principle.

Houkes et al. (2003) found that the need for Growth has a positive relationship with intrinsic motivation. The value of actions that are intrinsically motivated is the accumulation of knowledge and skills that are used at a later point in time to enhance capabilities for accomplishing goals (Baldassarre, 2011).

According to Rogers' personality theory (1961), people follow the need for self-actualization, meaning to develop their potential to the highest possible level. The SDT of Deci and Ryan (1980) follows the same principle, with competence being a fundamental component of their theory. However, they also highlight that an individual's inherent potential is not revealed automatically, but depends on the social environment to create positive effects and foster development (Deci & Ryan, 1985a).

From a socio-biological point of view, Growth motivation stems from the greater probability of surviving with a higher level of competences (Desjardins, 2019).

Following the SDT, an increased competence level of an individual will lead to a higher intrinsic motivation (Deci & Ryan, 1980). The underlying process is that a positive experience affects an employee's feeling and enhances the perceived competence level. This improvement in the competence level will be intrinsically motivating.

As already highlighted in the previous chapter on Autonomy, the motivation of Growth is strongly related to Autonomy, as it is necessary to gain additional competence besides the current level of skills (Chandler, 1969; Hackman & Oldham, 1976). The job characteristics model by Hackman and Oldham describes the relationship between the core job dimensions (skill variety, task identity, task significance, combined with Autonomy and feedback) and the critical psychological states (experienced meaningfulness of the work, experienced responsibility for outcomes of the work, and knowledge of the actual results of the work). Furthermore, they link positive outcome with high internal motivation, high quality of work performance, and high satisfaction with the work. It is important to mention that this model is based on the

moderators of knowledge and skills as well as contextual satisfaction.

The desire for Growth together with positive acknowledgement has a significant effect on motivation (Pajares & Schunk, 2001). Especially younger people with a high educational level can be strongly motivated by personal Growth (Wunderer & Mittmann, 1995).

In the context of developing industries, the relationship found by Shalley et al. (2009) can be important, as he found that Growth has a positive effect on creativity, if not even the biggest effect.

When organizations help employees to identify and learn new skills and competences, it likely makes the organizational effectiveness better, but, more importantly, it will potentially prepare employees to meet developing job demands. Furthermore, this will also have a positive effect on employees' motivation and their commitment to their work (Rothwell & Kazanas, 1989).

In the flow theory of Csikszentmihályi (1997), individuals experience personal Growth while being in a "flow". In such a state, employees master the tasks with which they are confronted. In this way, employees will grow with the challenges that arise, as they increase their skills and abilities.

Purpose

Ryff (1989) states from his research that Purpose is necessary to have a goal as a sense of direction, which will also create a meaning in individuals' lives. With respect to work life, Thomas and Velthouse (1990) defined that the sense of Purpose, also reflected as a feeling of meaningfulness, has to be clear in order that work is intrinsically motivative.

The origin of Purpose as a motivational factor can be described from a socio-biological point of view (Desjardins, 2019). In order to trigger an action by a human being, a Purpose has to be necessary. This serves as a mechanism saving energy if there is no cognition of the value for the individual. The roots of this behavior go back to former times when human beings had to collect and hunt for food, thereby gaining energy. Wasting energy on a behavior without Purpose was risking the survival of a human being. Applying this principle to the current situation, companies ask individuals to fulfil actions and tasks that have a value for the organization but not necessarily directly for the individual (Desjardins, 2019).

Therefore, it is important for leaders to connect the Purpose of a task not only to the needs of a cooperation but also to what is valuable for the individual. This awareness of work is not only for the company's benefit, but also for the value of oneself and will be a strong motivation (Desjardins, 2012, 2019).

For Hackman and Oldham (1980), meaningfulness is a critical psychological state arising from the core job dimensions. In their job characteristics model, it is mandatory that employees perceive their job and effort as being important and valuable. When the employees' work seems meaningful to them, this has an impact on their motivation (Hackman & Oldham, 1980; Pinder, 2008). The concept of Hackman and Oldham was empirically confirmed by the work of Gagné et al. (1997), revealing a significant positive correlation between intrinsic motivation and feeling meaningful at work.

There are theories proposing to increase intrinsic motivation by horizontally enlarging the job, which can be realized by extending the activities employees are involved in or the task configurations they take part in (Csikszentmihályi, 1975; Deci, 1975; Gagné & Deci, 2005). In this manner, work will be more interesting, and furthermore it creates a greater sense of what the work is for. It will serve a better understanding of the big picture.

For employees with no sense of Purpose or clear vision of the direction the work will lead in, intrinsic motivation cannot be fully developed. This relates to the work of Maslow (1971), in which he explains that employees' professional potential cannot be fully used as long as work is not experienced as Purposeful or meaningful. In order to link work-related goals to Purpose, the value of the goal should be derived from a higher level, which will create a meaning with respect to society and its members (Leontjew, 1977).

Creating Purpose is directly linked to the goal-setting theory of Locke and Latham (1990), also being a motivational theory, too. It is stated that the prerequisite for most human actions is to be Purposeful. In order to be Purposeful, the action has to be linked to the goal.

From the perspective of Thomas (2009), the model of Deci mainly focuses on task activities as a source of intrinsic rewards. As a consequence, Purpose is excluded. The model of Thomas is built on Deci's model but adding rewards derived from meaningfulness and progress.

However, Ryan and Deci (2000a) linked the value an action has for a person to their intrinsic motivation. In case an activity is not valued by an individual, it will result in amotivation. Therefore, an employee can only be completely intrinsically motivated by their job when the work corresponds with their values.

If there is an absence of Purpose, the work can lead to dissatisfaction, what could end up in a turnover intention as shown by Rosse & Miller (1984). Leaders have to be aware of such consequences and be conscious of providing Purpose and value to employees.

Achievement

People like Achievement. This was first mentioned by Murray (1938), who expounded the need for Achievement for the first time. The actions have to be intense and something difficult should be accomplished. The goal of the task has to feel like a win for the person performing it, therefore it has to be distanced.

In the concept "need for Achievement", popularized by McClelland (1961), Achievement is defined as a motivational factor. He sees Achievement Motivation as a competitive behavior towards reaching a certain goal. In addition, Herzberg (1966) defined Achievement as a motivational factor, too.

Achievement is defined as a need for reaching a goal or a task leading to satisfaction. This was also claimed by Porter & Lawler (1968) in their motivation theory that performance Achievement is the reason for satisfaction; however, satisfaction does not lead to Performance / Achievement.

According to Bandura (1982), self-efficacy is related to achievement. He also states that Achievement is of major importance for Achievement Motivation. Locke and Latham (1990) related self-efficacy to Achievement Motivation. The achievement of a goal can also be expressed as an internal reward. Locke and Latham even postulate that there is a relation between self-efficacy and the challenge of a task. As stated by them: the higher the self-efficacy, the higher the targeted goal can be. This is also in line with the theory of McClelland (1961), as individuals tend to avoid high- and low-risk situations. In order to reach an appropriate achievement, the goal should not be too easy as this would not be challenging enough to satisfy the need of Achievement. Consequentially, it would not evaluate

the self-efficacy of the individual. On the other hand, the goal should not too high-risk, meaning that the Achievement might be from luck rather than due to one's personal capabilities.

The psychologist Vroom (1964) has dealt with Achievement Motivation, linking his concept to three components. The invested effort in reaching a goal depends on the value the outcome has for the individual. Secondly, it depends on the assumption that the performance will lead to a reward. And, eventually, intrinsically motivated for Achievement, there has to be a positive likelihood that the spent effort will lead to the desired reward. When all three factors are positively satisfied, it is motivating for the person.

In addition to the elevating effect of a goal, the goal itself shall be specific. As highlighted by Locke and Latham (1990), the challenge of a goal needs to be in accordance with the capabilities and competence of the individual. Even more studies concur that the right challenging goals can increase performances of employees (Locke & Latham, 1984).

This is also known as the high-performance cycle (Locke & Latham, 1990, 2002). It links goals, rewards, and performances. After a specified goal is achieved by the follower's performance, it will have two effects – the satisfaction when the goal is reached, being a valuable reward, and the enhancement of the self-efficacy, since a challenging goal has been reached. Both together will lead to setting higher goals for the next tasks.

Leadership and the Awareness of Intrinsic Motivation

The concept of leadership can be understood very differently because it strongly depends on the point of view (Behrendt et al., 2017; Winston & Patterson, 2006). Stogdill (1974) concluded that the variety of leadership definitions might be as high as the number of persons creating a definition of the concept leadership. Yukl reviewed several major theories of leadership in his paper on "Managerial leadership: A review of theory and research" (Yukl, 1989). Up to now, still no singular definition of leadership has emerged, but it is assumed that there are about 1,400 different definitions of leaders and leadership (Volkman, 2012).

Yukl et al. (2013) affirmed the diversity of possible leadership definitions and stated that leadership can be defined in various perspectives such as behavior,

interaction patterns, traits, role in relationships, influence, and fulfilment of an administrative position. According to Bass and Riggio (2006), Stogdill (1990) as well as Yukl (1989), there is no single correct definition of leadership, as it always depends on the researcher's interest and purpose of the study. Bass and Stogdill (1990) stated that effective leadership is the interaction between group members that causes enhanced expectations as well as improving the group's competence to solve problems or achieve goals.

From a review of transformational and charismatic leadership, Yukl (1999) states that both theories provide valuable information on effective leadership. Nevertheless, both theories demonstrate weaknesses in fully defining effective leadership. He further proposes some refinements in order to advance the theory. In addition, he points out that there is a difference between leadership and management addressing major topics. Kotter (1990) highlighted the differences between leadership and management. Until then, the distinction between managers and leaders had been stated as follows: "Managers are people who do things right and leaders are people who do the right thing" (Bennis & Nanus, 1985).

In Kotter's definition, management is the organization of processes, planning, budgeting controlling, and problem-solving; whereas leadership aligns, inspires, and motivates people to follow the established direction. In a similar manner, Zaleznik (1977) differentiated leaders from managers. Managers are task-oriented, support stability, foster authority, comply with role responsibilities, and are concerned about progress. On the other hand, leaders are human-oriented, promote change, introduce new approaches, and are concerned about the commitments, beliefs, and motivation of followers (Zaleznik, 1977).

Desjardins (2012) combines both aspects of managers and leaders when he defines good leadership as the fulfilment of the role of achieving organizational goals, but also creating intrinsic motivation at the same time. As can be deducted from the theoretical framework of motivation (previous chapters), especially intrinsic motivation is a key component and essential foundation for managers as well as leaders fulfilling their roles.

Based on the assumption that intrinsic motivation is essential to fulfilling the role of a good leader, the question arises, what is leaders' awareness of intrinsic motivation?

In general, there are many studies into how leadership behavior or styles can influence employees' intrinsic motivation, performance, creativity, and so on. Tu and Lu (2016) investigated the cognitive mechanism between ethical leadership and followers' extra-role performance. Furthermore, they figured out that intrinsic motivation also moderates the connection between ethical leadership and the self-efficacy of subordinates. How ethical leadership influences the innovative work behavior of leaders through intrinsic motivation was the subject of Yidong and Xinxin's study (2013).

Sperber and Linder (2018) continued the research into the influence that the top management team has on innovativeness. They conducted qualitative interviews with 44 top management members of 24 multinational companies. For the investigations, they used a qualitative comparative analysis. Sperber and Linder used for their research the definitions by Bass (1990) and Avolio (1999) of transformational leadership, as reflected in terms of charisma, idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.

Looking at the given example, none of the studies addresses the awareness of intrinsic motivation in leadership. Therefore, the research question for this paper will aim at progressing research in this direction.

Research Questions & Methods

As mentioned in the introduction, the goal of this research is to investigate if leaders are aware of intrinsic motivation, as it is part of the role of a leader (Desjardins, 2012). In addition, intrinsic motivation also increases the level of performance, supports good-quality work, as well as contributing to the wellness of employees. (Deci et al., 2017). Compared to extrinsic motivation, the effect of intrinsic motivation lasts longer and is more effective (Pinder, 2008).

Before leaders can apply the principles of intrinsic motivation, they need to know about it and understand the concept. The steps of knowledge, comprehension, and application follow the taxonomy of learning (Bloom et al., 1976). Therefore, it is an important question whether leaders know and understand the concept of intrinsic motivation. To answer this question, the factors of intrinsic motivation,

derived in the theoretical framework, will be used. From this question and the theory, the following two assumptions or research questions have to be derived:

First: The factors of intrinsic motivation are fully known by leaders.

Second: The factors of intrinsic motivation are fully understood by leaders.

In order to verify these assumptions, the leaders' knowledge and understanding of the six factors of intrinsic motivation will be determined in qualitative research. Furthermore, it could also be of interest whether the difference between extrinsic and intrinsic motivation is known, as it is essential that leaders also use the right factors of motivation and do not to confuse extrinsic with intrinsic aspects. However, a verification of such a hypothesis would be beyond the scope of this thesis. Therefore, only observations from the interviews in this direction will be stated in the interpretation. It is not intended in this research but shall simply provide impetus for future studies.

Methodology

This research has the goal of collecting primary data based on qualitative interviews. The interviews will be conducted face-to-face.

For this research, a qualitative content analysis will be applied (Mayring, 2002). This method is strongly structured and supports an objective evaluation. In the following section, the procedure of the applied content analysis will be described (Mayring, 2010). The literature review on motivation, especially intrinsic motivation, and the awareness of leadership is used as a starting point. From this basis, the research questions are defined. The following step is the description of the sample and methodology. It will be a deductive content analysis, as it is most appropriate to compare the theory with the resulting content of the analysis. Before the empirical determination, an operationalization of the theory will be established creating a pre-coding with categories and codes that will be used for the coding. In addition, it is validated that the categories from the pre-coding adequately represent the spectrum of answers.

Data Sample

For this qualitative research, the sampling is based on the principle of saturation, such that the

researcher becomes empirically confident, which is based on well-founded theory. Whether or not additional data collection is necessary depends on the researcher's decision (Saunders et al., 2018). There are also hybrid forms of saturations defined by Drisko (1997), who defines saturation as comprehensiveness of data collection and data analysis. A similar definition of saturation is given in a way that no new codes occur or are already considered by other codes (Birks & Mills, 2015). The approach of saturation is also considered as the "gold standard" for determining sampling sizes (Morse, 2015). In cases where a study is continued for a long time, there will always be the potential for some "new" codes to emerge. However, Strauss and Corbin (1998) suggest that saturation is the point where nothing really new occurs and a continuation of data collection can even be "counter-productive".

In some studies, the point of saturation is claimed (Otmar et al., 2011), but the data collection is continued to "confirm" (Jassim & Whitford, 2014) or validate (Vandecasteele et al., 2015) this.

To start qualitative research, an initial estimation of the sample size is necessary to plan the survey. During the research process, this sample size will be continuously evaluated. For the conclusion of this paper, the first estimation will also be discussed against the actual number of interviews (Malterud et al., 2016). In order to ascertain the initial number of interviews, there are several sources in literature. Namey et al. (2016) found that the median number of interviews to reach 80% to 90% saturation is eight, repetitively 16 interviews. The result of the research conducted by Guest et al. (2017) revealed that 70% of all codes are found in the first six interviews and 92% are determined within the first twelve interviews. Galvin (2015) states that saturation is largely achieved after twelve interviews but definitely after 30. For this research, the initial number of interviews is set at ten interviews, as this is expected to reach a sufficient level of saturation.

The sample is from an engineering company (about 1,500 employees) in the high-technology sector located in Germany. All participants in the interviews are German and have a background in natural science or engineering.

Determining the sample, the interviewer creates a list of all leaders in the company he knows. The list represents 22 leaders, five females (23%) and 17 males (77%). Additionally, the total number is

divided into two groups: twelve leaders of employees (55%) and ten leaders of leaders (45%). From each group, five people will be chosen randomly by drawing lots. This will result in a distribution of the questioned leaders of 50% to 50%. The experience as a leader varies from six months to more than 20 years. Furthermore, the representativity can be checked by using the gender information. In the whole company, only 17% of leaders are female, whereas 33% of the interviewed people are women (three). This is a fair representativeness with respect to gender; however, there is no evidence in literature that the awareness of motivation depends on gender. Due to this fact, the selected sample is considered to be representative for this qualitative research. Since no interviewee declined to take part, no additional candidate was selected by a lot.

Operationalization

In order to follow a structured process to compare the results from qualitative research with existing literature, a deductive content analysis is an appropriate method (Mayring, 2002). To follow this deductive content analysis, the approach of an explicating categorization is briefly described below. The explicit categories, e.g. Affiliation and Growth, are derived from the previously performed literature research. Therefore, the definition of these categories and codes is rather constrained by the literature, other than for an inductive content analysis, where the categories will be mainly created and refined during the research.

The categories and related codes are derived from the literature review and are used as basic coding. The following table lists the factors of intrinsic motivation with the corresponding codes as derived from the literature review. In the third column, the unique labels for one dedicated code are given. The same labelling is used for coding the interviews.

Empirical Results

Table 1:
Pre-coding of Intrinsic Motivation Categories

Categories	Code
Affiliation	Interaction with people
	Relationship with other people
Acknowledgement	Personal and trustful relationship
	Give the feeling of being capable
	Feedback
Growth	Expand capabilities
	Increase confidence in capability
Achievement	Gaining internal reward
	Investing effort will lead to fulfilment of goal
	Challenging task
Purpose	The invested effort will be useful contribution toward common goal
	Valuable for the person
Autonomy	Own process
	Acceptance of results
	Independent decision-making

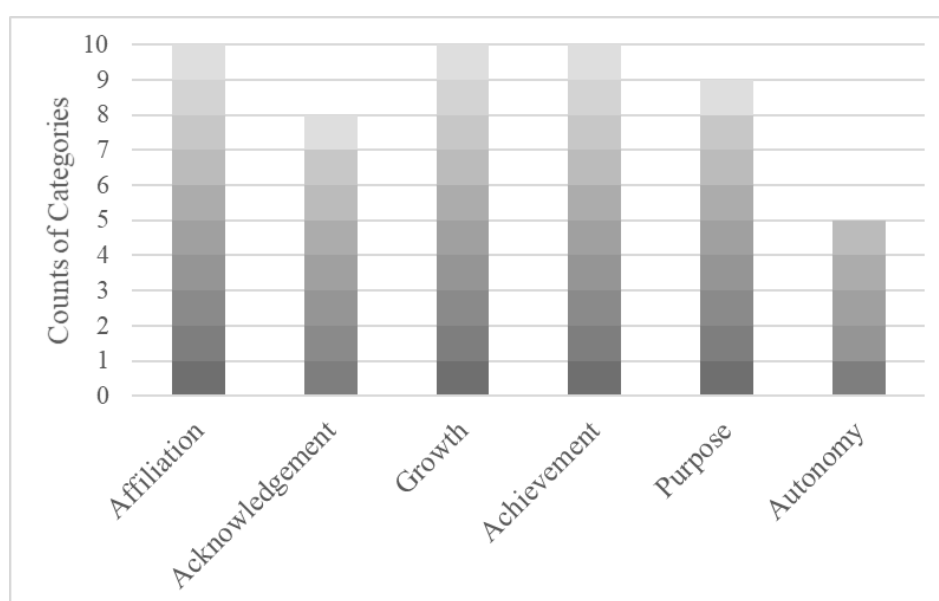
Summary of Results

Referring to the beginning of the chapter at which the coding was assessed, until the rest of the coding, there was no need to create an additional code. In this chapter, the results of all categories are summarized and illustrated in dedicated plots giving the overview of all categories and codes for intrinsic factors and extrinsic rewards.

In total, there are fifteen codes for intrinsic motivation. Nine of them were mentioned by more than five candidates. Furthermore, eleven codes were mentioned by more than three candidates. The following aspects were mentioned three times “Give the feeling of being capable”, “Increase confidence in capability”, “Independent decision-making”. It has to be emphasized that “Acceptance of result” was not mentioned once.

To illustrate the counts of factors of intrinsic motivation, reflected in the six categories, Figure 1 is used. To recapitulate, the category is counted, and thereby considered as known, if a candidate mentioned one or more aspects (codes) of the motivational factor. The factors “Affiliation”, “Growth” and “Achievement” were mentioned by all candidates. The second bar indicates the eight counts of “Acknowledgement”, and the last bar for “Autonomy” has five counts.

Figure 1:
Counting of Categories of Intrinsic Motivation regarding Knowledge

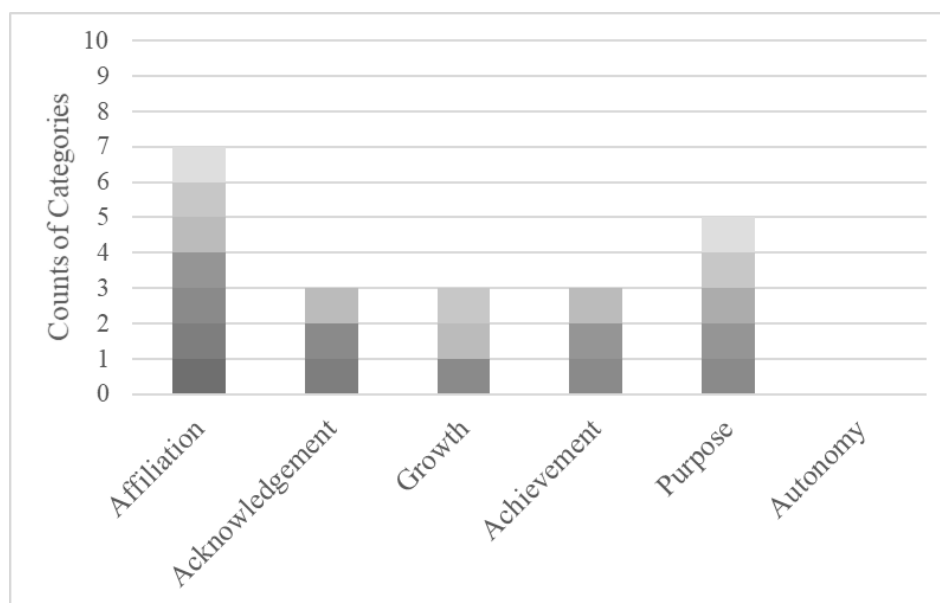


Further information can be taken from the following illustration, as Figure 2 shows the counts of candidates who mentioned all corresponding codes in a

category. This analysis reveals information on the second research question addressing the understanding of intrinsic motivation.

Figure 2:

Counting of Categories of Intrinsic Motivation regarding Understanding



Interpretation and Verification of the Assumptions

The following chapter will discuss the results presented before and link them to the theoretical framework. The fact that there were no additional codes created after the pre-coding indicates that a good literature basis was established in advance of the survey. An additional argument supporting the claim of a good theoretical framework is the rather high number of counts of the intrinsic factors. All factors (named categories for the coding) could be counted at least five times, but five of them more than eight times. Three were mentioned by all candidates (see Figure 1).

Taking into account that, in total, each factor of intrinsic motivation could be counted 52 times, this points to rather good knowledge of intrinsic motivation. There were ten interviews, and six factors could be mentioned in each, which could have led to a maximum of 60 counts. The comparison of the counts can only be used as an indication but must not be used as an

absolute number for the knowledge. The reason for this is that the data are based on a qualitative content analysis evaluating the data from interviews, which are no absolute manner to measure. However, the comparison gives a good enough idea to make a statement regarding the verification of the first assumption.

The factors of intrinsic motivation are fully known by leaders.

The assumption, as it is stated, suggests that all leaders know all factors of intrinsic motivation. However, this cannot be supported, as not all leaders have identified all factors. Not identifying all factors is not the ultimate argument to reject the first assumption, as a leader could just not remember the factor in the interview. But the fact that in some cases a candidate argued that a factor of intrinsic motivation (from the literature review) does not affect motivation is evidence that the factors of intrinsic motivation are not fully known.

An interesting supplement to the statement is an observation from the interviews. In most of the interviews, the factors of intrinsic motivation could be deduced directly from the explanation given by the leaders. Only a few times did a question need to be raised by pointing at a factor, to ask whether this factor is seen as relevant for motivation. Considering this and the previous deduction, one could rephrase the research question in the following way: “Leaders have a good knowledge of the factors of intrinsic motivation”. In contrast to the original statement, this one is likely to not be rejected, as a great number of the leaders identified the factors of intrinsic motivation.

A conclusion on the understanding of intrinsic motivation is drawn by assessing the codes of the various factors. It is assumed that one has to be aware of the aspects of an intrinsic motivational factor in order to understand the complete factor. The consideration is that the aspects describe the mechanism of a factor and therefore these aspects (reflected in the codes) are essential to understanding the factor. Hence the understanding of these codes is assessed and considered as being fully understood if a candidate mentions all corresponding codes in one category.

Other than for the categories, the different codes were not mentioned by the interviewer if a candidate did not mention them without prompting. The codes are only deduced from the statements that the candidates gave. Thus, the argument that a candidate might know about an aspect but just not remember it at that moment has a higher relevance.

Often mentioned were the two codes of Affiliation, with “interaction with people” identified as motivating by nine candidates and the “relationship with other people” also mentioned by eight. Overall, seven candidates mentioned both aspects of Affiliation as derived from literature. Therefore, it is argued that this factor is understood rather well. Bearing in mind that an aspect could be known but just not remembered during the interview, one could even interpret this factor as being fully understood.

Acknowledgement seems to be an interesting factor, as there is a significant difference in the occurrence of the three codes. To give “feedback” was mentioned by seven candidates as having a positive effect on motivation; and seven times as well, it was stated that a “personal and trustful relationship” has to be the basis for Acknowledgement. The third aspect of “giving people the feeling of being capable” was only

identified three times, which is interestingly less than the other two factors. All three aspects of Acknowledgement were mentioned by three candidates. In addition, it was also claimed during the interviews that giving feedback does not affect motivation but rather acts against it. It was stated that giving feedback has the same mechanism as monetary rewards, causing dissatisfaction on a long-term basis. Based on this statement, which argues against the derived literature, and the few times all codes were mentioned, this factor of intrinsic motivation is postulated to be only understood partially.

The factor Growth consists of the two aspects “expand capabilities” and “increase confidence in capability”. Nine of the candidates mentioned that it is important for motivation that employees learn in order to gain deeper knowledge or expand their capabilities. Therefore, this aspect seems to be present in the cognition of leaders. On the other hand, there is a significant difference with regard to the code C-2 “increase confidence in capability”. The second aspect seems to rarely be present, and all codes were only named by three candidates. As an increase in confidence is considered as an important component for the author, it cannot be concluded that Growth is fully understood by leaders, but rather partially.

Studying the understanding of Achievement Motivation, the three derived aspects “gaining internal reward”, “invested effort will lead to fulfilment of the goal”, and to have “challenging tasks” were assessed. All three codes were mentioned by at least five candidates. However, all aspects were mentioned by only three candidates. Evidence to verify the second assumption, that “the factors of intrinsic motivation are fully understood by leaders”, cannot be confirmed with respect to this factor.

As regards Purpose, the following two codes have been established and verified. The first aspect, that “invested effort will lead to fulfilment of common goal”, was mentioned in six interviews. Additionally, it was stated by eight leaders that a task has to be “valuable for the person”. Both aspects were mentioned by five candidates. The facts that both codes were broadly present in the interview and five candidates mentioned all aspects provide good evidence that the second research question can be supported for this factor of intrinsic motivation.

For the sixth factor of intrinsic motivation, Autonomy, three codes were identified. The first aspect,

“own process”, was mentioned by five candidates, which is half of the total. The second, “acceptance of results”, was not mentioned once, so there is a strong indication that this aspect of Autonomy motivation is not known nor understood. Furthermore, there is also an indication for this argument with regard to the aspect “independent decision making” because this code was only mentioned three times in all interviews. Compared to all other factors of intrinsic motivation, it appears to be the least understood, which is reinforced by the fact that no candidate mentioned all three codes.

Deriving the overall verification of the research question, the six factors are assessed individually. From the assessment of the factors of intrinsic motivation Affiliation and Purpose, there is limited evidence that the assumption needs to be rejected. However, from the verification of Acknowledgement, Growth, Achievement, and Autonomy, there is strong evidence that the research question is not supported. Concluding from the verification of the second research question: “The factors of intrinsic motivation are fully understood by leaders” is not supported.

Conclusions

Studying the awareness of intrinsic motivation of leaders, a qualitative content analysis has been applied to data from qualitative interviews (Mayring, 2010). All interviews were conducted in the same internationally active company in a high-tech engineering environment. The fact that all interviewees work in the same company located in Germany and provided a convenient sample should be interpreted as a limitation of this research. With respect to the gender, level, and experience of a leader, the representativity is discussed in the respective chapter and considered as appropriate for this research. A further limitation is the fact that if a factor of intrinsic motivation was not mentioned by the interviewee, it was raised by the interviewer. Even if it was intended to help the candidates to remember their knowledge, this might introduce a manipulating component.

The initial number of ten interviews was derived from experience cited in literature. After four interviews, the pre-coded codes were checked and confirmed to be correct for the goal of the research. Furthermore, it is considered that saturation of the qualitative research is reached with ten candidates (Malterud et al., 2016). The performed sanity checks are

assumed as sufficient quality criteria for the survey and analysis. Therefore, the qualitative content analysis is considered as being an appropriate method for the purpose of the research, because not everything is covered in the paraphrasing of the interviews, as there is no full transcription.

Verifying the first assumption “The factors of intrinsic motivation are fully known by leaders”, it is concluded that the factors of intrinsic motivation are not fully known, which leads to not supporting the assumption. The main reasons are the clearly stated negative effect of feedback on employees’ motivation, arguing against the motivational effect of feedback and Acknowledgement (Kuvaas & Dysvik, 2009; Steers et al., 2004). Nonetheless, the results suggest a good knowledge of intrinsic motivational factors, even if they are not fully known.

Following the taxonomy of learning defined by Bloom et al. (1976), the second research question focuses on the understanding of intrinsic motivation by leaders: “The factors of intrinsic motivation are fully understood by leaders”. As assumption one is not supported, logic suggests that assumption two is not supported either, which was also verified based on the compiled data. However, there is more evidence for the rejection of this assumption, as the aspect of accepting results of a subordinate was not mentioned once in all interviews. This fact demonstrates that there is no full understanding of all aspects of intrinsic motivation because “result acceptance” is a contributor to motivation (Desjardins & Baker, 2013).

Furthermore, it is interesting that the codes relating to supporting the self-esteem of employees were mentioned less than all other codes. These codes are the “giving the feeling of being capable” aspect of Acknowledgement (Locke, 1996), the “increase confidence in capability” aspect of Growth (Deci & Ryan, 1980), and the “independent decision-making” aspect of Autonomy (Desjardins & Baker, 2013). The last aspect, “independent decision-making”, related to Autonomy is not directly derived from self-esteem, however it is considered that a good level of self-esteem is necessary to make independent decisions and to motivate people. In particular, the positive effect of autonomous motivation was highlighted by Deci et al. (2017), as they postulate that it will foster a high level of performance with good quality as well as the wellness of employees. For further research, the author recommends quantitatively verifying whether the

mentioned aspects relating to self-esteem are less comprehensive in leaders' cognition than other aspects. Generally, as this research is qualitative and aimed at gaining a basic understanding of the cognition and comprehension on intrinsic motivation in leadership, it is obvious that quantitative research should follow.

As highlighted before, the important basis for leaders to apply intrinsic motivation is first and foremost that motivation has to be known and understood. Conducting underlying research on the cognition and comprehension of leaders' awareness of intrinsic motivation, this thesis will contribute to understanding why factors of intrinsic motivation are not yet fully applied at work.

About the author

Maximilian Freudling's core expertise lies in the development of advanced systems and cutting-edge technologies in the area of aerospace.

In 2004, he started his professional education with a diploma study of Technical Physics in Munich, after which he graduated with a Bachelor's degree in Physics in Nottingham. He then went on to specialize in the field of Optics and Photonics for his Master of Science.

After accruing almost ten years of professional experience, he felt intrinsically motivated to study business administration, leadership, and international culture on the MBA program run by the Professional School of Business and Technology at Kempten University of Applied Sciences, which he completed with great interest.

Bibliography

- Alderfer, C. P. (1972). Existence, relatedness, and growth: Human needs in organizational settings.
- Ambrose, M. L., & Kulik, C. T. (1999). Old friends, new faces: Motivation research in the 1990s. *Journal of Management*, 25(3), 231–292.
- Avolio, B. J. (1999). *Full leadership development: Building the vital forces in organizations*. Sage.
- Baldassarre, G. (Ed.) (2011). *What are intrinsic motivations? A biological perspective: International Conference on Development and Learning (ICDL): vol. 2*. IEEE.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122.
- Bandura, A., & Cervone, D. (1983). Self-evaluative and self-efficacy mechanisms governing the motivational effects of goal systems. *Journal of Personality and Social Psychology*, 45(5), 1017.
- Bandura, A., & Schunk, D. H. (1981). Cultivating competence, self-efficacy, and intrinsic interest through proximal self-motivation. *Journal of Personality and Social Psychology*, 41(3), 586.
- Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3), 19–31.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Psychology Press.
- Bassous, M. (2015). What are the Factors that Affect Worker Motivation in Faith-Based Nonprofit Organizations? *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 26(1), 355–381.
- Behrendt, P., Matz, S., & Göritz, A. S. (2017). An integrative model of leadership behavior. *The Leadership Quarterly*, 28(1), 229–244.
- Bennis, W., & Nanus, B. (1985). Organizational learning: The management of the collective self. *New Management*, 3(1), 6–13.
- Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1976). *Taxonomie von Lernzielen im kognitiven Bereich* (5. Aufl. (17. - 21. Tsd.)). Beltz-Studienbuch: Vol. 35. Beltz Weinheim, Germany.
- Brunel, P. C. (1999). Relationship between achievement goal orientations and perceived motivational climate on intrinsic motivation. *Scandinavian Journal of Medicine & Science in Sports*, 9(6), 365–374.
- Cerasoli, C. P., & Ford, M. T. (2014). Intrinsic Motivation, Performance, and the Mediating Role of Mastery Goal Orientation: A Test of Self-Determination Theory. *The Journal of Psychology*, 148(3), 267–286.
- Chandler, J. M. (1969). *The Psychology of the Child*. JSTOR.
- Charles, K. R., & Marshall, L. H. (1992). Motivational Preferences of Caribbean Hotel Workers: An Exploratory Study. *International Journal of Contemporary Hospitality Management*, 4(3), 58.
- Clanton Harpine, E. (Ed.). (2015a). *Group-Centered Prevention in Mental Health: Theory, Training, and Practice*. Springer International Publishing.

- Clanton Harpine, E. (2015b). Is Intrinsic Motivation Better Than Extrinsic Motivation? In E. Clanton Harpine (Ed.), *Group-Centered Prevention in Mental Health: Theory, Training, and Practice* (pp. 87–107). Springer International Publishing.
- Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review*, 13(3), 471–482.
- Csikszentmihályi, M. (1975). Beyond boredom and anxiety: Experiencing flow in work and play. London.
- Csikszentmihályi, M. (1997). *Finding flow: The psychology of engagement with everyday life*. Basic Books.
- Deci, E. L. (1972). Intrinsic motivation, extrinsic reinforcement, and inequity. *Journal of Personality and Social Psychology*, 22(1), 113.
- Deci, E. L. (1975). *Intrinsic Motivation*. Springer US.
- Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 19–43.
- Deci, E. L., & Ryan, R. M. (1980). Self-determination theory: When mind mediates behavior. *The Journal of Mind and Behavior*, 33–43.
- Deci, E. L., & Ryan, R. M. (1985a). *Conceptualizations of Intrinsic Motivation and Self-Determination*. Springer US.
- Deci, E. L., & Ryan, R. M. (Eds.). (1985b). *Intrinsic Motivation and Self-Determination in Human Behavior*. Springer US.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- Desjardins, C. (2001). *Handlungsorientierte Prozeßgestaltung: Ein arbeitspsychologischer Ansatz zur Optimierung von Serviceprozessen*. Johann-Wolfgang-Goethe University, Frankfurt am Main.
- Desjardins, C. (2012). The Leadership Productivity Model. *Journal of Applied Leadership and Management* (1), 20–38.
- Desjardins, C. (2019). *Workbook Principles of Leadership*. Kempten University of Applied Sciences.
- Desjardins, C., & Baker, M. (2013). The Leadership Task Model. *Journal of Applied Leadership and Management*, 2, 17–39.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331–362.
- Gagné, M., Senecal, C. B., & Koestner, R. (1997). Proximal job characteristics, feelings of empowerment, and intrinsic motivation: A multidimensional model 1. *Journal of Applied Social Psychology*, 27(14), 1222–1240.
- Ganster, D. C., & Fusilier, M. R. (1989). Control in the workplace. *International Review of Industrial and Organizational Psychology*, 4, 235–280.
- Geiselhardt, C. (2018). *The Measurement of Leadership Tasks Fulfillment: Determining the quality criteria and evaluating the operationalization of the Leadership Productivity Model*. Kempten University of Applied Sciences, Germany.
- Graen, G. B., Scandura, T. A., & Graen, M. R. (1986). A field experimental test of the moderating effects of growth need strength on productivity. *Journal of Applied Psychology*, 71(3), 484.
- Graves, L. M., & Luciano, M. M. (2013). Self-determination at work: Understanding the role of leader-member exchange. *Motivation and Emotion*, 37(3), 518–536.
- Gregory, J. B. (2010). *Employee coaching: The importance of the supervisor/subordinate relationship and related constructs*. University of Akron.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16(2), 250–279.
- Hackman, J. R., & Oldham, G. R. (1980). Work redesign.
- Harter, S. (Ed.) (1981). *A model of mastery motivation in children: Individual differences and developmental change*. Erlbaum Hillsdale, New Jersey.
- Herzberg, F. I. (1966). Work and the nature of man.
- Houkes, I., Janssen, P. P. M., Jonge, J. de, & Bakker, A. B. (2003). Specific determinants of intrinsic work motivation, emotional exhaustion, and turnover intention: A multisample longitudinal study. *Journal of Occupational and Organizational Psychology*, 76(4), 427–450.
- Kassin, S., Fein, S., & Markus, H. R. (2007). *Social Psychology: Readings*. Wadsworth Publishing Company.
- Kotter, J. P. (1990). *A Force for Change: How Leadership differs from Management*. Simon and Schuster.
- Kovach, K. A. (1995). Employee motivation: Addressing a crucial factor in your organization's performance. *Employment Relations Today*, 22(2), 93–107.
- Kuvaas, B., & Dysvik, A. (2009). Perceived investment in permanent employee development and social and economic exchange perceptions among temporary employees. *Journal of Applied Social Psychology*, 39(10), 2499–2524.
- Leontjew, A. N. (1977). Tätigkeit, Bewusstsein. *Persönlichkeit. Stuttgart*.
- Locke, E. A. (1996). Self-esteem and work. *International Review of Organizational Psychology*, 11, 1–32.
- Locke, E. A., & Latham, G. P. (1984). Goal setting: A motivational technique that works!

- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*. Prentice-Hall, Inc.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57(9), 705.
- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: guided by information power. *Qualitative Health Research*, 26(13), 1753–1760.
- Maslow, A. H. (1954). *Motivation and Personality*. Harper & Row.
- Maslow, A. H. (1971). The farther reaches of human nature.
- Mayring, P. (2002). *Einführung in die qualitative Sozialforschung // Qualitative Sozialforschung*. Beltz; Beltz Verlagsgruppe.
- Mayring, P. (2010). Qualitative Inhaltsanalyse. In G. Mey & K. Mruck (Eds.), *Handbuch Qualitative Forschung in der Psychologie* (pp. 601–613). VS Verlag für Sozialwissenschaften.
- McClelland, D. C. (1961). The achieving society. Princeton, NJ: D. Van Nostrand Company.
- Murray, H. A. (1938). Explorations in personality: A clinical and experimental study of fifty men of college age.
- Oldham, G. R., & Hackman, J. R. (1981). Relationships between organizational structure and employee reactions: Comparing alternative frameworks. *Administrative Science Quarterly* (26), 66–83.
- Pajares, F., & Schunk, D. H. (2001). Self-beliefs and school success: Self-efficacy, self-concept, and school achievement. *Perception*, 11, 239–266.
- Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management Journal*, 49(2), 327–340.
- Pinder, C. C. (2008). *Work motivation in organizational behavior*. Psychology Press.
- Porter, L. W., & Lawler, E. E. (1968). Managerial attitudes and performance.
- Reeve, J., Nix, G., & Hamm, D. (2003). Testing models of the experience of self-determination in intrinsic motivation and the conundrum of choice. *Journal of Educational Psychology*, 95(2), 375.
- Rheinberg, F. (2002). Freude am Kompetenzerwerb, Flow-Erleben und motivpassende Ziele. *Emotionale Kompetenz Entwickeln*, 179–206.
- Rogers, C. R. (1961). *On Becoming a Person: A Therapist's Point of View of Psychotherapy*. Houghton Mifflin Harcourt.
- Rosse, J. G., & Miller, H. E. (1984). Relationship between absenteeism and other employee behaviors. *Absenteeism*, 1, 194–228.
- Rothwell, W. J., & Kazanas, H. C. (1989). *Strategic human resource development*. Prentice Hall.
- Ryan, R. M., & Deci, E. L. (1985). Intrinsic Motivation and Self-Determination in Human Behavior.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54–67.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069.
- Schmidhuber, J. (2010). Formal theory of creativity, fun, and intrinsic motivation (1990–2010). *IEEE Transactions on Autonomous Mental Development*, 2(3), 230–247.
- Sharp, H., Hall, T., Kuusinen, K., Petrie, H., Fagerholm, F., & Mikkonen, T. (Eds.) (2016). *Flow, Intrinsic Motivation, and Developer Experience in Software Engineering: Agile Processes in Software Engineering and Extreme Programming*. Springer International Publishing.
- Simons, T., & Enz, C. A. (1995). Motivating hotel employees: beyond the carrot and the stick. *Cornell Hotel and Restaurant Administration Quarterly*, 36(1), 20–27.
- Sperber, S., & Linder, C. (2018). The impact of top management teams on firm innovativeness: a configurational analysis of demographic characteristics, leadership style, and team power distribution. *Review of Managerial Science*, 12(1), 285–316.
- Steers, R. M., Mowday, R. T., & Shapiro, D. L. (2004). The Future of Work Motivation Theory. *Academy of Management Review*, 29(3), 379–387.
- Stogdill, R. M. (1974). *Handbook of leadership: A survey of theory and research*. Free Press.
- Sullivan, G. S. (2019). SDT Mini-Theories: Basic Psychological Need Satisfaction, Intrinsic Motivation, and Cognitive Evaluation. In G. S. Sullivan (Ed.), *Servant Leadership in Sport: Theory and Practice* (pp. 219–227). Springer International Publishing.
- Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An “interpretive” model of intrinsic task motivation. *Academy of Management Review*, 15(4), 666–681.
- Thomas, W. K. (2009). *Intrinsic Motivation at Work: What Really Drives Employee Engagement*. Berrett-Koehler Publishers.
- Tu, Y., & Lu, X. (2016). Do Ethical Leaders Give Followers the Confidence to Go the Extra Mile? The Moderating Role of Intrinsic Motivation. *Journal of Business Ethics*, 135(1), 129–144.
- Vallerand, R. J. (1997). Toward A Hierarchical Model of Intrinsic and Extrinsic Motivation. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 29, pp. 271–360). Academic Press.
- Vroom, V. H. (1964). *Work and motivation*. Wiley New York.
- Wall, T. D., Kemp, N. J., Jackson, P. R., & Clegg, C. W. (1986). Outcomes of autonomous workgroups:

- A long-term field experiment. *Academy of Management Journal*, 29(2), 280–304.
- Winston, B. E., & Patterson, K. (2006). An integrative definition of leadership. *International Journal of Leadership Studies*, 1(2), 6–66.
- Wunderer, R., & Mittmann, J. (1995). *Identifikationspolitik: Einbindung des Mitarbeiters in den unternehmerischen Wertschöpfungsprozess*. Poeschel.
- Yidong, T., & Xinxin, L. (2013). How Ethical Leadership Influence[s] Employees' Innovative Work Behavior: A Perspective of Intrinsic Motivation. *Journal of Business Ethics*, 116(2), 441–455. <https://doi.org/10.1007/s10551-012-1455-7>
- Yukl, G. (1989). Managerial leadership: A review of theory and research. *Journal of Management*, 15(2), 251–289.
- Yukl, G. (1999). An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *The Leadership Quarterly*, 10(2), 285–305.
- Yukl, G., Mahsud, R., Hassan, S., & Prussia, G. E. (2013). An improved measure of ethical leadership. *Journal of Leadership & Organizational Studies*, 20(1), 38–48.
- Zaleznik, A. (1977). Managers and leaders: Are they different? *Harvard Business Review*, May/June, 67–78.
- Zimbardo, P., & Formica, R. (1963). Emotional comparison and self-esteem as determinants of affiliation 1. *Journal of Personality*, 31(2), 141–162.