# **Conference Proceedings**

# **DOKBAT**

**14th Annual International Bata Conference for Ph.D. Students and Young Researchers** 



Tomas Bata University in Zlín
Faculty of Management and Economics
Mostní 5139 – Zlín, 760 01
Czech Republic

# THE LINKS BETWEEN MEANINGFULNESS OF WORK, WORK-ENGAGEMENT AND MENTAL WELL-BEING

Frank W. Hager

#### **Abstract**

The objective of this study is to identify and synthesize what is known about links between (job-) meaningfulness, work-engagement and psychological well-being of employees. Therefore the respective understandings of a meaningful work and of healthy work has to be elaborated, to develop the underlying interpretations of subjectivity, in order to propose a perspective for empirical investigations of health-oriented working conditions. It is argued that a proactive thematization of meaningful work (e. g the individual attributions of meaningful work as well as the practices of making work meaningful) is closely related to workengagement and well-being. A holistic view of these constructs enables a comprehensive understanding of meaningful work and creates further starting points for future research work in Organizational Development (OD) or Human-Resources (HR) Management. The study was carried out as a review of general and relevant science literature as well as scientific publications researched in common journal-databases. The results show, that meaningfulness can be seen as a core, which interconnects different constructs. Therefore, meaningfulness is closely linked to work-engagement. The more meaningfulness employees perceive in their daily work, the more motivated they are performing on a higher level. Meaningfulness is also linked to the Sense of Coherence (SoC), a coping capacity of employees to deal with everyday life stressors. SoC refers to an individual's generalized perception of environmental stimuli. Thus, if an employee has a high level of sense of coherence he/she experiences work more meaningful and tends to have good coping strategies handling stressors. Meaningfulness has also a connection to wellbeing. By losing the meaningfulness at work, typical symptoms of burnout can be observed. It is argued, that creating meaningfulness at work is essential for positive work outcomes and healthy employees.

Keywords: meaningfulness, work-engagement, sense of coherence, well-being, mental health, *JEL-Classification: M140, M540, Z130* 

## 1 INTRODUCTION

The current German Gallup Engagement Index 2016 published alarming figures: According to this, 70% of the surveyed employees have a low emotional bond, another 15% have no emotional bond to their organization. 57% of those employees with no emotional bond stated, that they would leave the company within one year, which can be equated with a mental resignation by cutting of their ties with the job. These numbers are also reflected in the sick leave. Employees with low emotional bond were absent an average of 6.8 days, employees with no emotional bond an average of 10.3 days, because they felt sick or not well. The economic damage due to mental resignation or lack of emotional bond is estimated between 80.3 and 105.1 billion euros annually. Compared to recent years, only marginal differences in the study results are apparent (Gallup 2016). Wehner and Güntert (2010) report in a study, that more than 50% of the interviewed employees and two thirds of the top executives who has been surveyed, were motivated to accept pay cuts and give up their present status for more demanding and meaningful jobs. These results reflect the testimony of the former German Chancellor Willy Brandt. In his view, for most people, work is more than just a source of income - it has a deeper meaning and guarantees a successful life process (Brand, 1983:9).

Thus, it is only understandable, that this disturbing development raises the question of how employees see their work as meaningful, what meaningful work consist of and how work can be designed to make it meaningful, to eliminate psychosomatic complaints. While Aaron Antonovsky demonstrated the significance of a "Sense and Meaningfulness" for well-being and mental health as part of his theory of the Sense Of Coherence (Antonovsky, 1979) in the context of the concept of Salutogenesis, there are no previous works discussing the links between the different understandings of meaningfulness, work-engagement and mental health issues.

The analysis of different research offers the chance to show blind spots and thus to contribute to a sharpening of these linkages. For this purpose, three linkages are to be considered in more detail, which are of particular relevance for HR-management, organizational development and for work and organizational psychology: [1] By analyzing the linkage between meaningfulness and work-engagement, decisive factors and predictors, which are crucial in the workplace, are worked out. In the context of this paper, meaningfulness is strongly related to the "will to perform" and intrinsic motivation. [2] Another important link discussed, is the relationship between Antonovsky's Sense Of Coherence and employee health. Antonovsky's theory describes coherence as a particular "emotional quality" (Ducki, 2000:70), which can be considered as an indicator for mental health. Antonovsky (1979:8) is speaking of the "way of looking at the world", a general attitude towards the world and life, which is characterized by a high degree of reflexivity regarding one's own feelings and needs. Although the Sense Of Coherence is a relatively broad and generally accepted construct, connections with the organizational working context are shown along this discourse, researched from the work results of recent years. [3] Finally, the description of the relationship between work engagement and mental health is intended to address organizational and personal factors, which are responsible for employee motivation. Work-engagement in general, but also in this paper, is characterized by energy, involvement and professional efficacy.

## 2 METHODOLOGY AND LIMITAITONS

This paper aims to provide clarity by identifying, analyzing and discussing the main linkages between meaningfulness of work, work-engagement and psychological well-being, found in general and relevant science literature as well as scientific publications in common databases. Papers and research materials published in the databases of Taylor & Francis, SAGE Publications, Jstor, Wiley, NCBI, PsycNET, APA, Elsevier and Emerald made part of the basis of the scientific analysis. In addition, an internet search on google-scholar was undertaken to identify relevant studies and literature. In this way, also German articles in scientific journals were found. In some cases, it was necessary to contact researchers on researchgate.net to get full access to papers. Of the 118 identified scientific papers, 65 were screened as relevant to the review and had been included in the work. 22 works were reviews but most of the evidence identified or included within the reviews was of medium or low quality. Various German and English terms from the categories "work-engagement" (e.g. intrinsic motivation, commitment, work enthusiasm), "well-being" (e.g. employee health, mental health, sense of coherence) and "meaningfulness" (e.g. comprehensibility, self-fulfillment, affiliation) were combined and searched for. In addition, a manual search of references found in the articles was made. In addition, anthologies and scientific books were reviewed. Such a choice was determined by the degree of their availability in the University of Augsburg and the University Of Applied Sciences, Augsburg, Germany, which is the author's place of writing during his doctoral thesis.

Since meaningfulness and work-engagement are very comprehensive terms, they are analyzed more precisely at the beginning of this work, in order to be able to identify the linkages to

mental health. This work is limited by the assumption, that mental health is determined largely by the Sense of Coherence, the core theory of the Salutogenesis concept after Antonovsky (1979), which, in terms of a global emotional state, is developing as the overall result of many consistent process experiences characterized by the achievement of goals, which were part of higher-level motivational contexts. Other neighboring theories, like "resilience" or "hardiness" are not considered in detail. This paper is part of the author's doctoral thesis, which is intended to answer the question, how mobile telework can affect the mental health of teleworkers. Mobile Teleworkers are isolated physically from their organization and this work-form is therefore characterized by the lack of social contacts with colleagues and executives. The major contribution of the planned study is to examine the role of telecommuting on teleworkers psychological well-being and how neighboring constructs as work-engagement, meaning-fulness of work, social support, social isolation, identity and sense of coherence (as an indicator for well-being) can mediate or moderate these processes.

## 3 THEORETICAL BACKGROUND

The explanations in this section are intended to provide a basic understanding of meaning-fulness, work-engagement, and Sense of Coherence, which is a prerequisite for further discussion.

## 3.1 Meaningfulness at Work

The research for this work has revealed, that employees' inability to understand their work as significant is often a cause of mental disorder. In order to get a more accurate picture of exactly what the desire for meaningful work refers to, the following section will deal with the concept of meaningfulness in more detail.

In the understanding of May, Gilson & Harter (2004) experiencing purpose and meaning-fulness is an important determinant of work-engagement. Hurrelmann and Albrecht (2014: 227) emphasize that work must have a clearly recognizable social benefit, promoting self-fulfillment, personal development and as well as allowing to reconcile work and family life in order to be experienced as meaningful. In this context it is surprising, that the heterogeneity of the different understandings of meaningful work and the associated fact, that the desire to reconcile work and family life also falls into the category of meaningfulness, is mentioned in the same breath as the desire for social responsibility of the employer, organizational identification and commitment (Hardening, 2015). According to Faltermaier et al. (2002:27), work is not just a way to experience recognition, fulfilment and social interaction, but also an important part of personality development. In their daily work, people change their motives, abilities and behaviors. Höge & Schnell see work as an individual experience of meaningfulness, goal-orientation and coherence in terms of personality and attitudes to life (Höge & Schnell, 2012:91). This comes close to Rudow's statement, which makes clear, that work has a strong impact on people's self-esteem, identity and health (Rudow, 2003:34).

Pratt and Ashforth (2003) define meaning as an individual interpretation of what work signifies in an individual's life (in the sense of a higher calling something to do, or an oppression). This opinion is also shared by Wrzesniewski et al. (2003). The perception of the meaningfulness of work is determined by employees themselves, although they are also significantly influenced by the environment or the social context. Schnell (2004:54) expresses this circumstance with the following words: "We know what we mean, but we cannot explain it and hardly describe it. Meaningfulness is felt, received, experienced. And yet it is also mentally mediated". According to Frankl (1962), people are actively looking for this feeling. They are seeking the meaning and purpose of life, in order to enrich and fulfill their sense of self. Frankl describes professions as

part of lifes. Lips-Wiersma & Morris (2009) explain meaningfulness in a similar way, as "the subjective experience of the existential significance or purpose of life."

Meaningful work is often designated as a comprehensive term, which can refer to the importance of work for life, as well as the perceived benefits of working for oneself and others (Rosso et al., 2010, Steger et al., 2012). This "subject-oriented" perspective, which is not primarily based on the technical and organizational conditions of work in society, but follows the action perspective of the employees, and thereby includes the entire life context of the workers, is also taken up by Voß & Pongratz (1997). Hence, work is seen as a fundamental element that can give meaning to life. The more meaningfulness people experience, the happier they are with their daily work. How work have to be designed to be perceived as stimulating and empowering by employees had been discussed especially in the 1970s, at the time of the humanization of the world of work. It should be noted, however, that the "Human Relations Approach" was developed at a time when the mechanization of production increased corporate capital intensity, high skills of employees were required and trained workers in North America tended to be scarce. Staff has become more valuable, and consequently, people should be more committed to the organization. The prevailing viewpoint of Taylorism, of treating the laborers only as part of a "machine", was no longer appropriate (Staehle & Sydow, 1991:634-636, Kieser, 1995:101-135, Vahs 2009:29-30). Ulich (2011:561) understands the quality of work as a decent, personality-promoting and health-promoting design of working conditions. Meaningfulness of work can therefore be understood as a dimension of work quality, which refers to conditions enabling the experience of significance, as well as to the direct perception of meaningfulness of one's own activity or tasks (Hardening, 2015).

According to Isaksen (2000), the feeling of belonging to the organization and tasks, engagement in social relationships in the workplace, consideration of work in a broader context and a sense of responsibility and pride contribute significantly to meaningfulness at work. Schnell, Höge & Pollet (2013) showed in their study, that not only characteristics of employees, but also the lived values of the company are crucial for the experience of meaningfulness. In addition, features of the work task, the fit of person and work contribute to the experience of meaningfulness. These findings are reflected in the Job Characteristics Model by Hackman & Oldham (1975, 1976, 1980). Meaningfulness of work is therefore an important "reference dimension" becoming relevant in two different forms. Firstly, the meaningfulness of the task (task significance) is understood as a job feature in addition to the variety and holism of requirements. Secondly, meaningfulness is defined as an experiential state resulting from the mentioned job characteristics. The desire for the experience of the existential significance or purpose of life (Lips-Wiersma & Morris, 2009) already described, associated with meaningfulness, can be explained by the need for self-actualization (Maslow 1943, 1954:22, 1971:269). According to Maslow, self-actualization can be compared to a mystical summit experience: The employee transcends his own limits, becoming one with humanity and the cosmos. In Maslow's view, the individual has reached in this way the very core of existence at all. This self-actualization is based on personal growth through the fulfillment of a life's mission, which may lie in the unfolding of one's own creativity and just and worthwhile causes. In this context, Koltko-Rivera (2006) speaks of self-transcendence. In his view, the experience of meaningfulness ascends, if employees perceive an authentic link between their daily work and a broader transcendent lifepurpose beyond the self.

Surprisingly, in the last few decades, the question of qualitative claims (and thus also of meaningfulness) of work has hardly been raised and has been pushed into the background by the thematization of employment conditions (Sauer, 2011).

#### 3.2 Work-Engagement

According to Nerdinger (2000), work-engagement refers to occupational activities that promote the organization's objective. These activities are outside the primary work instructions and are carried out on employees own initiative. This includes helping colleagues, protecting the organization from vandalism, making suggestions for improvement, acquiring knowledge in own initiative (which is conducive to an improvement in work performance), taking responsibility which has not been formally credited and representing the organization outwardly in a positive way. The basic prerequisite for work-engagement is intrinsic motivation. Enthusiasm is often described as an intrinsic-motivational disposition (Moé, 2015; Kunter, 2011). Work-engagement is "the individual's involvement and satisfaction (as well as enthusiasm) for work." (Harter et al., 2002). It is characterized by energy, involvement and professional efficacy (Schaufeli, 2013). The absence of these positive, engagement-promoting aspects can adversely affect the mental health of employees and thus decrease work engagement - when "[...] energy turns into exhaustion, involvement turns into cynicism, and efficacy turns into ineffectiveness" (Maslach, 1997:24).

Work-engagement presupposes that every person has to identify with his/her work and performance. This is also the statement of Kahn (1990:694): "In engagement, people employ and express themselves physically, cognitively, and emotionally during role performances." Macey et al. (2009:7) describe work-engagement on an emotional level as energy or absorption, which leads to a behavior beyond one's role - directed toward organizational goals. Schaufeli et al. (2002) define engagement as a "[...] positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption". The dimension vigor "[...] is characterized by high levels of energy, the willingness to invest effort in the own work, and persistence even in the face of difficulties. Dedication refers to being strongly involved in the own work, and experiencing a sense of significance, enthusiasm, inspiration, pride and challenge. Absorption is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work. "Losing the sense of time and a state of uninhibited, full involvement is also associated with the flow-experience (Csíkszentmihályi, 1975).

This approach is based on the fact, that the motivation potential of an action does not arise from the result or the success of an activity, but from the incentive of the work itself and thus an intense pleasure is associated. Concentration strength on acting, self-forgetfulness, steering attention carrying out the tasks and losing the sense of time are characteristics of flow. In the definition of Csíkszentmihályi (1975:9, 38-43, 71), the flow-experience is described as an autotelic experience or a state of uninhibited, full involvement in the process of an activity. Schaufeli & Bakker (2010), however, differentiate flow from absorption. They refer flow to special, short-term, high-level experiences, while absorption is a profound, persistent state of mind. Work-engagement can be divided into various dimensions. These include inter alia: helpfulness, conscientiousness, politeness, straightforwardness, respectively sporting spirit (expressed by the fact that small deficiencies and shortcomings are tolerated), self-initiative and bourgeois virtue, regarding regular, courageous and constructive participation in the company life.

## 3.3 Sense of Coherence - Indicator for Well-Being and Health

Antonovsky defines the Sense of Coherence (SoC) as a general basic attitude of the individual towards the world and one's own life. However, he also describes the fact, that health condition is additionally influenced by external factors. Nevertheless, people's well-being also differs, living under the same external conditions. According to Antonovsky, this depends on the

individual, the cognitive, as well as the affective-motivational basic attitude. In other words, it depends on how well the individual can use his or her resources and to use it for health maintenance. This is defined by Antonovsky as a global life orientation and referred to as Sense Of Coherence. It means, that the stronger the feeling of Sense Of Coherence is perceived, the healthier an individual is, or the faster this person is able to recover from disease (Antonovsky 1979:123; Antonovsky, 1987a:30; Meckel-Haupt, 2001:7).

The Sense Of Coherence is composed of three components. The feeling of perceiving the world as organized (Sense Of Comprehensibility), but also the conviction to find a solution (Sense Of Manageability) for each problem and to consider it as meaningful to invest energy for certain tasks (Sense Of Meaningfulness) (Antonovsky, 1991; Bengel et al., 2001:37-38; Lindström & Eriksson, 2006; Eriksson & Lindström, 2006).

Sense Of Comprehensibility represents the most important component in Antonovsky's conceptual formation. It describes the ability of a person to perceive his environment, everyday situation and information as ordered, explainable, realistic - combining it into a consistent image. "It refers to the extent to which one perceives the stimuli that confront one, deriving from the internal and external environments, as making cognitive sense, as information that is ordered, consistent, structured, and clear, rather than noise-chaotic, disordered, random, accidental, inexplicable." (Antonovsky, 1987a:16). Sense Of Comprehensibility is a cognitive component. It is thereby only be possible to make sense from the stimuli and information, the inner and outer environment, which appear to be chaotic at first sight. "Death, war, and failure can occur, but such a person can make sense of them" (Antonovsky, 1987a:17). Therefore, situations or conditions interpreted as meaningful will not lead into distress and can even be a challenge (Meckel-Haupt, 2001:9). Comprehensibility, however, is also an active process, which serves flexible interpretations acting as a guide in the concern with the reality. Comprehensibility represents what Antonovsky postulates for the Sense Of Coherence but also in general: "A strong sense of coherence includes a solid capacity to judge reality" (Antonovsky, 1979:127).

Antonovsky describes *Sense of Manageability* as the conviction of individuals that tasks, recognized as significant and meaningful are solvable. It includes the basic trustfulness and the realistic assessment of accessible resources, in order to cope with the emerging problems and requirements. Through participation, or the opportunity to shape the workday actively, employees have a high degree of manageability and cannot easily be pushed into a victim role (Antonovsky, 1987a:18; Bengel et al., 2001:29). According to Antonovsky, it is not just about control and the use of own resources, but also direct access to resources controlled by legitimate others, such as confidants (Antonovsky, 1979:127). For this reason, this attribute is closely related to concrete coping strategies. The stress avoided or repelled in this way, is the positive result of a developed ability facing difficult situations in a better way (Meckel-Haupt, 2001:10; Bauer et al., 2015:21).

The third component, the *Sense of Meaningfulness*, includes the skills and conviction, or the confidence to solve tasks. It can be interpreted as motivation and willingness to tackle difficulties, or to see a meaning in it. An important aspect of Sense Of Meaningfulness is its emotional aspect. Individuals with a strong ability to consider life as meaningful also see many situations in their everyday life as important and significant. They therefore have the ability to interpret critical circumstances not as stress but as a challenge (Idan et al., 2013). A Sense of Meaningfulness is described in the words of Antonovsky (1987a) as "[...] the extent to which one feels that life makes sense emotionally, that at least some of the problems and demands posed by living are worth investing energy in, are worthy of commitment and engagement, are challenges that are welcome rather than burdens that one would much rather do without" (Antonovsky, 1987a:18).

#### 3.4 Generalized Resistance Resources (GRR)

In Antonovsky's stress management process, Generalized Resistance Resources (GRR) describe individuals ability to cope with the given social and biological strains and pressures so as to contribute to their own benefit and to promote their own development (Höfer, 2000:82). GRR must be available to the individual in order to meet the requirements of the real world of life (Reinshagen, 2008). GRRs can therefore support the effective stress management of the organism, whereby strain can be avoided or better be managed, so that strain is not experienced as stress, but the stressors are given a sense (Hurrelmann, 2000:52-60). "What is common to all GRRs, I proposed, was that they facilitated making sense out of the countless stressors with which we are constantly bombarded" (Antonovsky, 1989:52). In the understanding Antonovsky these resources are effective in situations of all kind (Bengel et al., 2001:34). Antonovsky attaches particular importance to the management of stress, especially to the social and cultural environment. "Ready answers provided by one's culture and its social structure are probably the most powerful GRR at all" (Antonovsky, 1979:119). This is exactly the point, GRR provides people with information that help them to cope with stress. According to his view, the functional commonality of the GRR lies in the ability of the individual to build up a robust life concept, which enables a cognitive, emotional and practical stress management. The GRRs therefore specify the framework, the existence or non-existence of which determine the non-existence of individual coping competencies. This is how Antonovsky sees the GRR - "as defined, which build up a strong Sense of Coherence (SoC) crucial to one's ability to manage tension well" (Anonovsky, 1987a:30, Meckel-Haupt, 2001:7).

## 4 LINKS BETWEEN SOC, MEANINGFULNESS & HEALTH

The following chapter describes the relationships between the constructs meaningfulness, work-engagement, and Sense of Coherence.

## 4.1 Meaningfulness of Work and its Link to Work-Engagement

Kahn (1990) defines personal engagement with the presence of physical, cognitive and emotional commitment and considers meaningfulness as a condition for work-engagement. Kahn's studies indicate that, in general, three factors influence the experience of meaningfulness - (1) Task characteristics: Clarity of the task and autonomy, (2) Role characteristics: Harmony between self-image and role, (3) Work interactions: Significant interpersonal interactions. Kahn (1990) also refers to connections between "core job characteristics" from the Job Characteristics Model (JCM) of Hackman and Oldham (1980) and work engagement. In addition, findings suggest that these core features of work of the JCM (autonomy, skill variety, task identity, task significance and feedback), not only correlate with work-engagement but also with meaningfulness. He also concluded that people in work situations unconsciously deal with three questions that determine whether they are personally involved or more distant. The questions are: "How meaningful is it for me to bring myself into this performance?", "How safe is it to do so?" and "How available am I to do so?" If people perceive their role as psychologically significant or meaningful, they do not expect negative consequences (psychological safety) and feel that they have the necessary resources for work tasks (availability). Finally, they will engage in their work role (Kahn, 1990). May et al. (2004) were able to demonstrate Kahn's studies empirically, and confirmed, among others, that meaningfulness is significantly related to engagement. In the opinion of Holbeche & Springett (2003) the perception of meaningfulness in the working context clearly relates to their engagement and ultimately to their performance. They even go a step further and argue, that employees are actively looking for meaningfulness in their daily work. In their view, high levels of engagement can be seen only in workplaces, with a shared sense of destiny and purpose, that connects people at an

emotional level, which raises their personal aspirations. Meaningfulness at work can be seen in this way as one of the antecedents of work engagement. This position is also supported by Geldenhuys et al. (2014). For them, meaningfulness is a predictor for work engagement, while meaningfulness and engagement predicts organizational commitment. Milliman et al. (2003) investigated workplace spirituality and employee work attitudes. They revealed, that an employee who experiences his/her job as meaningful, is likely to be a desirable employee. These workers are willing to do extra work, spend more time on their work, and do it more diligently. Spirituality has three dimensions in the context of this study: (1) meaningful work on an individual level, (2) sense of community on a group level, and being in (3) alignment with organizational values and mission on an organization level.

From this point of view, spirituality at work and work attitudes are part of meaningfulness (Milliman et al. 2003). The study of Hoole & Bonnema (2015) established a relationship between meaningfulness and work-engagement at different age groups. The research has shown, that in particular older employees are valuable to their business as they have a strong work-commitment and thus contribute to the company's success. Also Kordbacheh et al. (2014) studied different age groups of employees and established a relationship between employeeengagement, motivation, meaningfulness, and intrinsic motivation. The results has shown that especially younger people - compared to older employees, who are engaged despite considering their work meaningful or not - are less intrinsically motivated. Höge & Schnell (2012) describe the positive affective-motivational states of experience as a prerequisite for work-engagement. This was also confirmed in the study by May et al. (2004), who followed up with Kahn's (1990) conceptualization of work-engagement. Positive correlations between psychological meaningfulness, psychological safety and availability with work engagement were confirmed. Experience of meaningfulness at work showed the strongest relationship to work-engagement. In addition, there is further research confirming the strong relationship between workengagement and meaningfulness of work (Chen et al., 2011, Olivier & Rothmann, 2007).

It can thus be stated, that employees who experience meaningfulness at work, invest more time, diligence and energy in their job. In other words: These employees are more motivated. From a reverse perspective, it can be argued that engaged employees might consider their work as meaningful due to the time and effort they spend on it. The constructs of meaningfulness at work and work-engagement thus have a direct relationship - the more an employee is engaged, the more he or she is dedicated, vigorous and absorbed.

## 4.2 Sense of Coherence and its Link to (mental) Well-Being

Currently several studies are existing, that relate the three dimensions of SoC to employee-motivation and mental health (Pallant & Lae, 2002; Gana, 2001, Erikson & Lindström, 2006; Kivimäki et al., 2002; Buddeberg-Fischer et al., 2001). Direct, moderator - and mediator-effects has been observed.

Antonovsky assumed, that work in adulthood plays an important role for the SoC (Antonovsky, 1996; Nilsson et al., 2010; Hakanen et al., 2007). He described a balanced workload (neither over- nor under-challenging), as well as control as important factors for manageability. He mentioned participation, decision-making and social assessment (power, reward, prestige) as important influencing factors for meaningfulness. Finally, Antonovsky argued, that comprehensibility of work depends on its consistency, holistic tasks, roles, workplace security, and social relationship quality (Antonovsky, 1987b).

In this context, Albertsen et al. (2001) reported in a large cross-sectional study of more than 2,000 Danish employees, between the ages of 18 and 69 with a variety of occupational backgrounds, that individuals with higher SoC levels experience far less stress symptoms. They

were also able to confirm a mediating effect in in relation to work environment and stress symptoms. Lu et al. (2016) found similar results in a study focusing the modern service industry in Shanghai. Van der Colff & Rothman (2009) report that SoC is not only closely related to mental exhaustion, but also to the work results and engagement shown by employees at work. Employees with a high SoC are able to perceive their environment in a positive sense and show a higher work-engagement due to better coping strategies. The study was supplemented by Muller and Rothman (2009). They carried out a content analysis, whose quantitative evaluation of over 600 employees showed, that the perception of support and the feeling of restriction in a familiar work environment, is decisively dependent on the extent of the employee's SoC. In the field of forestry, a 10-year longitudinal study by Kalimo et al. (2003), with 174 participating employees showed, that SoC can have a protective effect regarding to the burnout syndrome. The studies by Feldt (1997) and Söderfeldt et al. (2000) show similar results. The stronger the SoC, the less psychosomatic symptoms and emotional exhaustion occur among individuals, consequently people are better protected against adverse effects of unfavorable working conditions. Kinman (2008) reported in a study with academic staff about poor physical and mental health, which was related to a low SoC. To a small extent, an interaction effect of SoC, as a personal resource, could also be demonstrated, regarding to the connection between working conditions and health. A one-year longitudinal study by Feldt et al. (2000) confirmed that a good organizational climate, job security and a good relationship with management are strongly related to a high SoC, which in turn could be strongly related to the well-being of employees. Just as Albertsen et al. (2001), Hogh and Mikkelsen (2005) proclaimed, that SoC describes the relationship between work environment and stress. Feldt et al. (2004) found that employees with a high SoC also have better opportunities to change their personal workability towards the positive. Höge and Büssing (2004) examined various mechanisms of action of SoC more precisely. In their study, which took place in the working contexts of hospital workers, they found that SoC affects perception, self-selection and stress-creating mechanisms at work. In a similar work environment, Khamisa et al. (2016) and Vinoth & Hansi (2016) adehere to the statement, that empolyees with a higher SoC have been found to have better mental health, fewer incidences of burnout, a greater level of job satisfaction, and a greater sense of accomplishments concerning regular working activities. The studies confirmed also the moderating role of SoC between coping strategies and occupational stress.

## 4.3 Work-Engagement and its Impact on Well-Being and SoC

In today's working world, employees are required to show their own initiative, demonstrating that they are joyful to perform their tasks in a motivated manner. Bakker et al. (2011) refer to a psychological interconnectedness with work activities, which includes an individual commitment to the team and the organization, as well as the provision of personal resources, in the form of full abilities, into the work process.

Satisfaction of basic psychological needs is considered by Ryan & Deci (2000) as a central aspect of subjective well-being and mental health. According to Emmons (1986), the achievement of personal goals is associated with increased subjective well-being. Not all personal goals serve equally to satisfy basic psychological needs. Personal goals influence mental health in a positive sense only if they are based on an intrinsic motivation. According to Sheldon et al. (2004), these goals must also be pursued autonomously and outside the control of other individuals. In addition, goals must harmonize with the needs (of a person) which are characterized by their implicit motives. According to Baumann & Quirin (2006), the long-term pursuit and the monitoring of non-congruent goals, i. e. goals, which are not in the interest of an individual and not part of its own desires, lead to a need-frustration, accompanied by permanent stress and psychosomatic symptoms. Mental health is largely based on the ability to cope with critical life events and to self-control stress. Individuals who are able to master stress

and negative affect in an adequate way, have a higher subjective well-being and a better mental health, than those who cannot regulate their stress level and mood, without external support (Hobfoll, 1989; Lazarus & Folkman, 1984). Closely intertwined with the ability to cope with stress is Antonovsky's concept of Sense Of Coherence. Maslach et al. (2001) describe engagement as the opposite of burnout and note that burnout involves the "erosion of engagement with the job". Maslach et al. (2001) name six factors that can lead to burnout or, in the positive sense, to engagement. In their opinion, job engagement is associated with: (1) A sustainable workload, (2) feelings of choice and control, (3) appropriate recognition and reward, (4) a supportive work community, (5) fairness, justice and meaningfulness, (6) as well as valued work. Just like burnout, engagement acts as a mediator between individual work-life factors. The connections of work-engagement and Sense of Coherence, as a holistic concept, are shown by Van der Colff & Rothman (2009). They illustrated, that stress at the workplace, due to lack of organizational support and due to high workload contributed essentially to emotional exhaustion and depersonalization. Furthermore, the results show a moderate correlation between emotional exhaustion and work-engagement, while depersonalization was associated with personal performance and work-engagement. The results clearly show that people with a strong SoC are better able to cope with work-related stress because of lack of organizational support and high workload. SoC was the only variable in this study that showed a link to personal performance. Feldt (1997) and Naudé & Rothmann (2006) found that there is a negative relationship between burnout constructs (emotional exhaustion and cynicism) and SoC. Van den Broeck et al. (2008) argue that health-promoting work-tasks should be designed, that exhaustion, which is a core component of burnout, is avoided, and that vigor, a core component of work-engagement, is supported.

## 5 CONCLUSION AND CONCEPTUAL MODEL

Roosevelt's assertion on a speech on September 7, 1903, still sounds true today - meaningful work can greatly enrich human life: "Far and away the best prize that life has to offer is the chance to work hard at work worth doing." (Pine, 2012:39). This is also the explanation of this paper. The research suggests that people experience their professional lives much more positively as they make progress in a work that they find significant or meaningful. What matters is not what we do - but whether we recognize a deeper meaning in our work. If the words of Viktor E. Frankl are to be believed, that the search of life's meaning appertains to the nature of man, today's leaders must take on their role as "giver of meanings", if they want to maintain the performance of their employees and their well-being. If employees find meaningfulness, and as long as they can see significance in their work-tasks, they are ready for maximum achievements and personal sacrifices. Meaningfulness can be seen as the origin from which the mentioned power rises that stimulates people, if motivation is depleted whilst the goal has not yet been reached. Like Frankl, Aaron Antonovsky also emphasizes that people want to understand their lives and shape their own values. To accomplish this, it is all about identifying complex relationships. People want to fathom their existence and life, and they are ready to make all reasonable efforts.

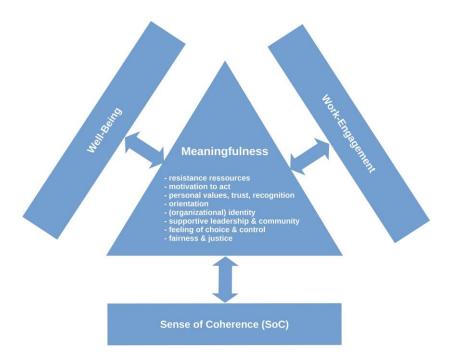


Figure 1: The Triangle of Meaningfulness. Source: Own work

The previous discussion raises the question, how the relationship between well-being, Sense of Coherence and work-engagement of field sales members can be conceptualized. The model in Figure 1, in the shape of a triangle structure, contains this three constructs discussed before, attempting to link these against the background of meaningfulness at work. It is a reduced to the essentials, graphical, clear representation of the complex interrelationships and could serve as a conceptual model or a general guidance. However, it is expressive enough to adequately implement further recommendations in the framework of organizational development. In summary, from the model can be deducted:

## *Meaningfulness and motivation:*

Employees want to know what the company stands for and why their work is important to the company. They want to investigate out what their personal contribution to the organizational success looks like, where the organization is supposed to develop, and, basically, what the company is fighting for. Answering the question of meaningfulness is important for the orientation and identification which employees seek in their working lives. By answering the question of meaningfulness, there are also operating guidelines for everyday business. Above all, meaningfulness is the implementation of common values as an orientation benchmark for actions. These values are guidelines that have to be found in the mission statement and management principles. Supervisors should give a clear vision what their company or their team wants to achieve, and how and by which rules the objective shall be reached. Only in this way employees can be given the necessary orientation.

Meaningfulness cannot be prescribed. Meaningfulness can be found, discovered and felt only by the individual in a specific situation or task. The answer to the question of meaningfulness is different for each employee and may change over time. The authentic and comprehensible communicated meaningfulness of work not only creates a personal identity, but also motivates employees to act purposefully. The awareness, that this effective action contributes to the company's achievements, provides a stable and lasting motivation (work-engagement). It is therefore the primary task of all leaders illustrate employees' significant contribution to the company's success (vgl. Malik, 2003).

#### *Meaningfulness and Well-Being:*

Self-fulfillment respectively loss of meaningfulness during the daily work is manifested in certain emotions and cognitions. At the appearance of self-fulfillment, joy and satisfaction can be felt, which can increase to the flow experience. By losing the meaningfulness at work, typical symptoms of burnout can be observed. Accompanying feelings are boredomness, apathy, inner dissatisfaction and irritability. The joy, the passion, the burning for the task can no longer been felt by the employee. Earlier incentive systems such as power, money or status have lost their effect. Mentally, questions of meaningfulness arise. Cynicism and sarcasm are often observed at affected workers. Loss of meaningfulness leads to changes in behavior: postponing or unenthusiastic completion of work tasks or motivational blocks can be consequences. Losing meaningfulness at work can produce a creeping discomfort over years, can reduce motivation and take the pleasure in life. This crisis regarding the deep meaning of work is associated with problems in the professional identity. In the case of losing the meaningfulness of work, not only identity problems occur in the currently practiced profession, but rather the questioning of the entire self-concept occurs. This creeping process of inner erosion leads into a life crisis (Rudow 2006:139).

# *Meaningfulness and SoC:*

Leadership should be understood as providing resistance resources for employees. According to Antonovsky, GRR are important in order to offer enhanced protection and resistance against stressors or to represent the sources of a positive development. In his opinion, they significantly influence the maintenance or improvement of health, life satisfaction and quality of life. Sense of Coherence, the enduring global orientation that expresses itself in the expectation that life's things will develop in a rational way, can be greatly supported by the provision of GRR. Worthwhile emphasizing are the works of Bauer & Jenny (2007), Vogt et al. (2013) and Bauer et al. (2015). The so-called Work-SoC clarifies additional variance of work-related demands and proves to be a stronger predictor than the global SoC. The construct can also be interpreted as a meta-resource that reduces the pathogenic effects of stressors in the workplace and providing an integrative explanation of why personal and external resistance resources in the workplace reduce work-related strains.

Executives play a decisive role in helping to organize such experiences, which employees consider as significant and meaningful within supportive leadership. It will only succeed if they are capable to "invite," "encourage" and "inspire" their staff. Leadership becomes a matter of attitude and trust in that way and recognition of life motives can be crucial in developing the necessary empathy.

#### References

Albertsen, K., Nielsen, M. L. & Borg, G, V. 2001. The Danish psychosocial work environment and symptoms of stress: The main, mediating and moderating role of Sense Of Coherence. Work & Stress, Taylor & Francis, Milton Park, 15, pp. 241–253. DOI: 10.1080/02678370110066562

Antonovsky, A. 1979. Health, Stress and Coping. Jossey-Bass, San Francisco.

Antonovsky, A. 1987a. Unraveling the mystery of health. How people manage stress and stay well. Jossey Bass, San Francisco.

Antonovsky, A. 1987b. Health promoting factors at work: the sense of coherence. In: Cooper, C. L.; Kalimo, R. & El-Batawi M. (Eds.), Psychosocial factors at work and their relation to health, World Health Organization, Geneve, pp. 153–167.

- Antonovsky A. 1989: Die salutogenetische Perspektive: Zu einer neuen Sicht von Ge-sundheit und Krankheit. Meducs, 2, pp. 51-57.
- Antonovsky, A. 1991. The structural sources of salutogenic strengths. In: Cooper, C. L, Payne, R., (Eds.), Personality and stress: Individual differences in the stress process. Wiley, New Jersey, pp. 67–104.
- Antonovsky, A. 1996. The sense of coherence An historical and future perspective. Journal of Medical Sciences, Peshewar, 32(3-4), pp. 170–178.
- Bakker, A. B.; Albrecht, S. L.; Leiter, M. P. 2011. Key questions regarding work engagement. European Journal of Work and Organizational Psychology. Routledge, London, 20, pp. 4–28. DOI: 10.1080/1359432X.2010.485352
- Bauer, G. & Jenny, G. F. 2007. Development, implementation and dissemination of occupational health management (OHM): Putting salutogenesis into pratice. Occupational Health Psychology, Washington, 2, pp. 219–250.
- Bauer, G.; Vogt, K.; Inauen, A. & Jenny, G. J. 2015. Work-SOC Entwick-lung einer Skala zur Erfassung des arbeitsbezogenen Kohärenzgefühls. Zeitschrift für Gesundheitspsychologie, Hogrefe, Göttingen, 23(1), pp. 20-30.
- Baumann, N. & Quirin, M. 2006. Motivation und Gesundheit Bedürfnis-frustration als Vermittler zwischen Selbststeuerungsdefiziten und psychosomatischen Symptomen. Zeitschrift für Gesundheitspsychologie. Hofgrefe, Göttingen, 14(2), pp. 46–53.
- Bengel, J.; Strittmatter, R. & Willmann, H. 2001. Was erhält Menschen gesund? Antonovskys Modell der Salutogenese Diskussionsstand und Stellenwert. Forschung und Praxis der Gesundheitsförderung, Köln.
- Brandt, W. 1983. Foreword. In: Marie Jahoda: Wieviel Arbeit braucht der Mensch. BeltzPVU, Weinheim.
- Buddeberg-Fischer, B.; Klaghofer, R.; Schnyder, U. 2001. Sense of Coherence in adolescents. Sozial- und Präventivmedizin, Birkhäuser, Basel, 46(6), pp. 404-410.
- CHen, Z.; Zhang, X. & Vogel, D. 2011. Exploring the underlying processes between conflict and knowledge sharing: a work-engagement perspective. Journal of Applied Social Psychology, Wiley, New Jersey, 41, pp. 1005-1033. DOI: 10.1111/ j.1559-1816.2011.00745.x
- Csíkszentmihályi, M. 1975. Beyond Boredom and Anxiety. The Experience of Play in Work and Games, Jossey-Bass, San Francisco.
- Ducki, A. 2000. Diagnose gesundheitsförderlicher Arbeit. Eine Gesamtstrategie zur betrieblichen Gesundheitsanalyse. (Mensch Technik Organisation). vdf Hochschulverlag AG, ETH Zürich.
- Emmons, R. A. 1986. Personal strivings: An approach to personality and subjective well-being. Journal of Personality and Social Psychology, APA, Washington, 51, pp. 1058-1068. DOI: 10.1037/0022-3514.51.5.1058
- Erikson, M. &. Lindström, B. 2006. Antonovsky's sense of coherence scale and the relation with health: A systematic review. Journal of Epidemiology and Community Health, BMJ, London, 60(5), pp. 376–381. DOI: 10. 1136/jech.2005.041 616
- Faltermeier, T.; Mayring, P.; Saup, W. & Stremel, P. 2002. Entwick-lungspsychologie des Erwachsenenalters. Kohlhammer, Stuttgart.

- Feldt, T. 1997. The role of sense of coherence in well-being at work: Analyses of main and moderator effects. Work and Stress, Taylor & Francis, Milton Park, 11, pp. 134–147. DOI: 10.1080/02678379708256830
- Feldt, T.; Kinnunen, U.; Mauno, S. 2000. A mediational model of sense of coherence in the work context: A one-year follow-up study. Journal of Organizational Behavior, Wiley, New Jersey, 21, pp. 461–476. DOI: 10.1002/(SICI) 1099-1379(200 006)21:4%3C461::AID-JOB11%3E3.0.CO;2-T
- Feldt, T.; Kivimäki, M.; Rantala, A. & Tolyanen, A. 2004. Sense of coherence and work characteristics: A cross-lagged structural equation model among managers. Journal of Occupational and Organizational Psychology, Wiley, New Jersey, 77, pp. 323–342. DOI: 10.1348/0963179041752655
- Frankl, V. E. 1962. The will to meaning. Foundations and applications of logotherapy. Penguin, New York.
- Gallup 2016. Engagement Index 2016. URL: http://www.gallup.de/183104/enga gement-index-deutschland.aspx. Retrieved on 30. Oct. 2017
- Gana, K. 2001. Is Sense of coherence a mediator between adversity and psycho-logical wellbeing in adults? Stress & Health: Wiley, New Jersey, 17, pp. 77-83. DOI: 10.1002/smi.882
- Geldenhuys, M.; Łaba, K. & Venter, C. M. 2014. Meaningful work, work engagement and organizational commitment. SA Journal of Industrial Psychology, SAJIP, Johannesburg, 40(1), pp. 1-10. DOI: 10.4102/sajip.v40i1.1098
- Hackman, J. R., & Oldham, G. R. 1975. Development of the Job Diagnostic Survey. Journal of applied Psychology, APA, Washington, pp. 159-170. 10.1037/h007 6546
- Hackman, J. R., & Oldham, G. R. 1976. Motivation through the design of work: Test of a theory. Organizational Behavior and Human Performance, Elsevier, Amsterdam, 16, pp. 250-279. DOI: 10.1016/0030-5073(76)90016-7
- Hackman, J. R., & Oldham, G. R. 1980. Work redesign. Prentice Hall, Upper Saddle River.
- Hakanen, J.; Feldt, T. & Leskinen, E. 2007. Change and stability of sense of coherence in adulthood: Longitudinal evidence from the Healthy Child Study. Journal of Research in Personality, Elsevier, Amsterdam, 41, pp. 602-617. DOI: 10.1016/j.jrp. 2006.07.001
- Hardening, F. 2015. Meaningful work: Sinnvolle Arbeit zwischen Subjektivität, Arbeitsgestaltung und gesellschaftlichem Nutzen. Österreichische Zeitschrift für Soziologie, Springer Fachmedien, Wiesbaden, 40, pp. 391–410.
- Harter, J. K.; Schmidt, F. L. & Hayes, T. L. 2002. Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. Journal of Applied Psychology, APA, Washington, 87(2), pp. 268-279. DOI: 10.1037/0021-9010.87.2.268
- Hobfoll, S. 1989. Conservation of resources: A new attempt at conceptualizing stress. American Psychologist, APA, Washington, 44, pp. 513-524. DOI: 10.1037/00 03-066X.44.3.513
- Hogh, A. & Mikkelsen, E. G. 2005. Is sense of coherence a mediator or moderator of relationships between violence at work and stress reactions? Scandinavian Journal of Psychology, Linköping, 46, pp. 429–437. DOI: 10.1111/j.14 67-9450.2005.00474.x
- Holbeche, L. & Springett, N. 2003. In search of meaning in the workplace. Roffey Park Institute Ltd., Horsham, Roffey Park.

- Hoole, C. & Bonnema, J. 2015. Work engagement and meaningful work across generational cohorts. SA Journal of Human Resource Management, Cape Town, 13(1). DOI: 10.4102/sajhrm.v13i1.681
- Höge, T. & Büssing, A. 2004. The impact of sense of coherence and negative affectivity on the work stressor strain relationship. Journal of Occupational Health Psychology, APA, New York, 9(3), pp. 195–205. 10.1037/1076-8998.9.3.195
- Höge, T. & Schnell, T. 2012. Kein Arbeitsengagement ohne Sinnerfüllung. Eine Studie zum Zusammenhang von Work Engagement, Sinnerfüllung und Tätigkeits-merkmalen. Wirtschaftspsychologie, 1/2012, pp. 91-99.
- Höfer, R. 2000. Jugend, Gesundheit und Identität. Studien zum Kohärenzgefühl. Leske & Budrich, Opladen.
- Hurrelmann, K. 2000. Gesundheitssoziologie. Eine Einführung in sozialwis-senschaftliche Theorien von Krankheitsprävention und Gesundheitsförderung. Juventa, München.
- Hurrelmann, K. & Albrecht, E. 2014. Die heimlichen Revolutionäre Wie die Generation Y unsere Welt verändert. Beltz, Weinheim.
- Idan, O.; Braun-Lewensohn, O. & Sagy, S. 2013. Qualitative, Sense of Coherence-Based Assessment of Working Conditions in a Psychiatric In-Patient Unit to Guide Salutogenic Interventions. In: Bauer, G. F. & Jenny, G. J. (Eds.): Salutogenic organizations and change the concepts behind organizational health intervention research. Springer, Wiesbaden, pp. 55-74.
- Isaksen, J. 2000. Constructing Meaning despite the Drudgery of Repetitive Work. Journal of Humanistic Psychology, Sage Publications, Thousand Oaks, 40, pp. 84-107. DOI: 10.1177/0022167800403008
- Kahn, W. A. 1990. Psychological conditions of personal engagement and disenga-gement at work. Academy of Management Journal, Briarcliff Manor, 33, pp. 692–724. DOI: 10.2307/256287
- Kalimo, R.; Pahkin, K.; Mutanen, P. & Toppinen-Tanner, S. 2003. Stay-ing well or burning out at work: Work characteristics and personal resources as long-term predictors. Work & Stress, Taylor & Francis, Milton Park, 17(2), pp. 109-122. DOI: 10.1080/0267837031000149919
- Khamisa, N.; Oldenburg, B. & Peltzer, K. 2016. Work related stress, burnout, job satisfaction and general health of nurses. International Journal of Environmental Research and Public Health, MDPI, Basel, 12(1), pp. 652-666. DOI: 10.3390/ijerph120100652
- Kieser, A. 1995. Organisationstheorien, Kohlhammer, Stuttgart.
- Kinman, G. 2008. Work stressors, health and sense of coherence in UK academic employees. Educational Psychology, APA, Washington, 28, pp. 823–835. DOI: 10.10 80/01443410802366298
- Kivimäki, M.; Elovainio, M.; Vahtera, J.; Nurmi, J.-E.; Feldt, T.; Kelti-Kangas Järvinen, L. & Pennti, J. 2002. Sense of coherence as a mediator between hostility and health: Seven-year prospective study on female employees. Journal of Psychosomatic Research, Elsevier, Amsterdam, 52(4), pp. 239-247. DOI: 10.1016/S0022-3999(01)00305-1
- Koltko-Rivera, M. E. 2006. Rediscovering the later version of Maslow's Hierarchy of Needs: Self-Transcendence and opportunities for theory, research, and unification. Review of

- General Psychology, APA, Washington, 10, pp. 302-317. DOI: 10.1037/1089-2680.10.4.302
- Kordbacheh, N.; Shultz, K. S. & Olson, D. A. 2014. Engaging mid and late career employees: The relationship between age and employee engagement, intrinsic motivation, and meaningfulness. Journal of Organizational Psychology, West Palm Beach, 14(1), pp. 11-25.
- Kunter, M. 2011. Motivation als Teil der professionellen Kompetenz Forschungsbefunde zum Enthusiasmus von Lehrkräften. In: Kunter, M.; Baumert, J.; Blum, W.; Klusmann, U.; Krauss, S.; Neubrand, M. (Eds.): Professionelle Kompetenz von Lehrkräften. Ergebnisse des Forschungsprogramms COACTIV. Waxmann, Münster, pp. 259-275.
- Lindström, B. &. Erikson, M. 2006. Contextualizing Salutogenesis and Antonovsky in Public Health Development. Health Promotion International, Oxford Academic, Oxford, 21(3), pp. 238-244. DOI: 10.1093/heapro/dal016
- Lazarus, R. & Folkman, S. 1984. Stress, Appraisal, and Coping. Springer, New York.
- Lips-Wiersma, M. & Morris, L. 2009. Discriminating Between "Meaningful Work" and the "Management of Meaning". Journal of Business Ethics, Springer International Publishing AG, Basel, 88(3), pp. 491–511. DOI: 10.1007/s10551-009-0118-9
- Lu, X..; Dai, J. M.; Wu, N.; Shu, C.; Gao, J. L. & Fu, H. 2016. Association between sense of coherence and occupational stress of workers in modern service industry in Shanghai. Chinese journal of industrial hygiene and occupational diseases, China, 34(10), pp. 731-736. DOI: 10.3760/cma.j.issn.1001-9391.2016.10.003
- Macey, W. H.; Schneider, B.; Barbera, K. & Young, S. A. 2009. Employee engagement: Tools for analysis, practice, and competitive advantage. Blackwell, London.
- Malik, F. 2003. Strategie des Managements komplexer Systeme. Haupt, Bern.
- Maslach, C.; Schaufeli, W. B. & Leiter, M. P. 2001. Job burnout. Annual Review of Psychology. Annual Reviews, Palo Alto, 52, pp. 397-422. DOI: 10.1146/annurev.psych.52.1.397
- Maslach, C. & Leiter M. P. 1997. The truth about burnout. Jossey-Bass, San Francisco.
- Maslow, A. H. 1943. A Theory of Human Motivation. Psychological Review, APA, Washington, 50(4), pp. 370-396. DOI: 10.1037/h0054346
- Maslow, A. H. 1954. Motivation and Personality. Harper, New York.
- Maslow, A. H.; Geiger, H. & Maslow, B. G. 1971. The Farther Reaches of Human Nature. Viking Press, New York.
- May, D. R.; Gilson, R. L. & Harter, L. M. 2004. The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. Journal of Occupational and Organizational Psychology, Wiley-Blackwell, Oxford, 77, pp. 11-37. DOI: 10.1348/096317904322915892
- Meckel-Haupt, A. 2001. Ein Beitrag zur Validierung des deutschsprachigen SOC-Fragebogens von Aaron Antonovsky. Medizinische Fakultät der Heinrich-Heine-Universität Düsseldorf.
- Milliman, J.; Czaplewski, A. J., & Ferguson, J. 2003. Workplace spirituality and employee work attitudes: An exploratory empirical assessment. Journal of Organizational Change Management, Bingley, 16, pp. 426–447. DOI: 10.1108/09534 810310484172

- Moé, A. 2015. Does displayed enthusiasm favour recall, intrinsic motivation and time estimation? Cognition and Emotion, 30(7), Taylor & Francis, London, pp. 1361-1369. DOI: 10.1080/02699931.2015.1061480
- Muller, Y. & Rothmann, S. 2009. Sense of coherence and employees' perceptions of helping and restraining factors in an organisation. South African Journal of Industrial Psychology, SAJIP, Johannesburg, 35(1), pp. 89-98. DOI: 10.2478/s115 36-013-0222-1
- Nausé, J. L. P. & Rothmann, S. 2006. Work-related well-being of emergency workers in South Africa. South African Journal of Psychology. University of Kwa Zulu-Natal, Durban, 36, pp. 63–81. DOI: 10.1177/008124630603600105
- Nerdinger, F. W. 2000. Extra-Rollenverhalten. Gruppendynamik und Organisationsberatung, VS Verlag für Sozialwissenschaften, Wiesbaden, 31, pp. 155-167.
- Nilsson, K. W.; Leppert, J.; Simonsson, B & Starrin, B. 2010. Sense of coherence and psychological well-being: improvement with age. Journal of Epidemiology and Community Health, BMJ, London, 64, pp. 347–352. DOI: 10.1136/jech.2008.081174
- Olivier, A. & Rothmann, S. 2007. Antecedents of work engagement in a multinational oil company. Journal of Industrial Psychology, SAJIP, Johannesburg, 33, pp. 49-56. DOI: 10.4102/sajip.v33i3.396
- Pallant, J. F. & Lae, L. 2002. Sense of Coherence, well-being, coping and personality factors: Further evaluation of the sense of coherence scale. Personality and individual differences, Elsevier, Amsterdam. 33(1): pp. 39-48. DOI: 10.1016/S0191-8869(01)00134-9
- Pine, J. 2012. Wit and Wisdom of the American Presidents: A Book of Quotations. Dover Publications, Mineola.
- Pratt, M. G. & Ashforth B. E. 2003. Fostering meaningfulness in working and at work, in Cameron, K. S.; Dutton, J. E. & Quinn, R. E. (Eds.), Positive Organi-zational Scholarship: Foundations of a New Discipline, Berrett-Koehler Publishers, San Francisco, pp. 309-327.
- Reinshagen, R. 2008. Antonovsky Theorie und Praxis der Salutogenese. In: Pflege und Gesellschaft, Juventa, München, 13(2), pp. 142-158.
- Rosso, B. D.; Dekas, K. H. & Wrzesniewski, A. 2010. On the meaning of work: A theoretical integration and review. Research in Organizational Behavior, Elsevier, Amsterdam, 30, pp. 91-127. DOI: 10.1016/j.riob.2010.09.001
- Rudow, B. 2003. Arbeits- und Gesundheitsschutz im Lehrerberuf. Gefährdungs-beurteilung und Schutzmaßnahmen. In: Sicher durch den Schulalltag (1-12). Berlin, Stuttgart, Raabe.
- Rudow, B. 2006. Das gesunde Unternehmen Gesundheitsmanagement, Arbeits-schutz, Personalpflege. Oldenbourg, München.
- Ryan, R. M. & Deci, E. L. 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, Washington, 55, pp. 68–78. DOI: 10.1037/0003-066X.55.1.68
- Sauer, D. 2011. Von der "Humanisierung der Arbeit" zur "Guten Arbeit". Aus Politik und Zeitgeschichte, Bundeszentrale für politische Bildung, Bonn, 15, pp. 18-24.
- Schaufeli, W. B.; Salanova, M.; Gonzàles-Romà, V.; Bakker, A. B. 2002. The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach. Journal of Happiness Studies, International Publishing AG, Basel, 3(1), pp. 71-92. DOI: 10.1023/A:1015630930326

- Schaufeli, W. B.; Bakker, A. B. 2010. The conceptualization and measurement of work engagement. In: A. B. Bakker and M. P. Leiter (Eds.), Work engagement: A handbook of essential theory and research, Psychology Press, New York, pp. 10-24.
- Schaufeli, W. B. 2013. What is engagement? In: Truss, C.; Alfes, K.; Delbridge, R.; Shantz, A. & Soane, E. (Eds.), Employee Engagement in Theory and Practice Routledge, London, pp. 15-35.
- Schnell, T. 2004. Implizite Religiosität Zur Psychologie des Lebenssinns. Pabst Science Publishers, Lengerich.
- Schnell, T., Hoege, T. & Pollet, E. 2013. Predicting Meaning in Work: Theory, Data, Implications. The Journal of Positive Psychology, Routledge, New York. DOI: 10.1080/17439760.2013.830763
- Sheldon, K. M.; Ryan, R. M.; Deci, E. L. & Kasser, T. 2004. The independent effects of goal contents and motives on well-being: It's both what you pursue and why you pursue it. Personality and Social Psychology Bulletin, SAGE Publications, Los Angeles, 30, pp. 475-486. DOI: 10.1177/0146167203261883
- Staehle, W. H. & Sydow, J. 1991. Managementforschung 1. De Gruyter, Berlin.
- Steger, M. F., Dik, B. J. & Duffy, R. D. 2012. Measuring meaningful work: The work and meaning inventory. Journal of Career Assessment, Sage Publications, Thousand Oaks, 20, pp. 322–337. DOI: 10.1177/1069072711436160
- Söderfeldt, M.; Söderfeldt, B; Ohlson, C. G.; Theorell, T. & Jones, I. 2000. The impact of sense of Coherence and high demand/low-control job environment on self-reported health, burnout a psychophysiological stress indicators. Work & Stress, Taylor & Francis, Milton Park, 14(1), pp. 1-15. DOI: 10.1080/026783 700417195
- Ulich, E. 2011. Arbeitspsychologie. Schäffer-Poeschel, Stuttgart.
- Vahs, D. 2009. Organisation: Ein Lehr- und Managementbuch. Schäffer Poeschel, Stuttgart.
- Van Der Colff, J. J., & Rothmann, S. 2009. Occupational stress, sense of coherence, coping, burnout and work engagement of registered nurses in South Africa. South African Journal of Industrial Psychology, SAJIP, Johannesburg, 35(1), pp. 1-10. DOI: 10.4102/sajip.v35i1.423
- Vinoth, K. M.; Hansi, H. 2016. Moderating role of Sense Of Coherence in the relationship between coping strategies and occupational stress among intensive care unit nurses. International Journal of research in organizational behavior and human ressource management, Asian Research Consortium, New Delhi, 4(3), pp. 15-26.
- Vogt, K.; Jenny, G. J.; Bauer, G. F. 2013. Comprehensibility, manageability and meaningfulness at work: Construct validity of a scale measuring work-related sense of coherence. South African Journal of Industrial Psychology, SAJIP, Johannesburg, 39(1), pp. 1-8. DOI: 10.4102/sajip.v39i1.1111
- Voß G. & Pongratz H. J. 1997. Subjekt und Struktur die Münchener subjektorientierte Soziologie. Zur Einführung. In: Voß G. G. & Pongratz H. J. (Eds.) Subjektorientierte Soziologie. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 7-29.
- Wehner, T. & Güntert, S. T. 2010. Beruf und Berufung. Gehirn und Geist, Spektrum der Wissenschaft, Heidelberg, 7-8, pp. 24-27.

Wrzesniewski, A.; Dutton, J. E., & Debebe, G. 2003. Interpersonal sense-making and the meaning of work. Research in Organizational Behavior, Elsevier, Amsterdam, 25, pp. 93-135. DOI: 10.1016/S0191-3085(03)25003-6

## **Contact information**

Frank Hager, Dipl.-Wirt.-Ing. (FH), MBA, M.A.
University Of Latvia - Faculty of Economics and Management,
Raiņa bulvāris 19, Centra rajons, Rīga,
LV-1586, Latvia.
Home-Adress:
Geltendorfer Str. 15,
D-86316 Friedberg

Cell: +49 (0)170 284 955 6

E-mail: info@mitarbeiterdiagnostik.de ORCID-ID: 0000-0002-7268-7564

DOI ID: https://www.doi.org/10.7441/dokbat.2018.08