



**UNIVERSITY
OF LATVIA**

FACULTY OF BUSINESS, MANAGEMENT AND ECONOMICS

FRANK W. HAGER

**SUPPORT NETWORK QUALITY AND PERSONALITY
TRAITS AS MODERATORS ON THE RELATIONSHIP
BETWEEN PERCEIVED SUPERVISOR SUPPORT AND
EMPLOYEE BURNOUT**

DOCTORAL THESIS

Submitted for the Scientific Doctor's Degree (*Ph.D.*) in Economics and Business

Supervisor: Professor Dr.oec. Baiba Šavriņa

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Author's Note

Nowadays there is probably hardly anyone who is not regularly confronted with the topic of burnout. The term is present in self-help departments of bookstores, in magazines and newspapers, as a television report or YouTube documentary, in figures and data of national health reports or also in the social environment. Despite this epidemic of discourse on the topic of burnout and the most varied thematization in many scientific, popular scientific but also non-scientific fields, the term still appears in society paired with a big question mark. What is the reason for this?

Let me be somewhat cynical: In my opinion there are three types of diseases - the accidental, the honorable and the stigmatized. There's not much to say about the accidental ones - they happen to you because you're in the wrong place at the wrong time and catch an infection, be it a corona or just a harmless cold. The second type of illness is the apparently honorable ones, which provide enough conversation material for the cocktail reception. Circulatory problems or high blood pressure are very common here - all those aches and pains that prove uninhibited willingness to work to the point of exhaustion. I almost forgot - a lumbago, which is a sign of biting through, is of course also one of them.

The stigmatized diseases, on the other hand, are those which are generally not taken seriously by society: Migraine is one such example. The German children's author Erich Kästner wrote the nasty sentence in his book "Pünktchen und Anton" in 1931: "*After lunch, Mrs. Director Pogge got her migraine. Migraines are headaches, even if you don't have any.*" Of course, that's nonsense, and Kästner knew it too, who himself suffered from migraines. But he knew the call of migraine just as well: It is still regarded as an excuse for a break that you simply treat yourself to.

Social scientists have been dealing with the concept of the stigma since the middle of the 20th century. Erving Goffman and others point out functions on both the individual and the societal level. Often the focus is on simplification and demarcation. By stigmatizing someone or something, we simplify reality. The stigma is an attribution of certain qualities and characteristics that pre-structure situations and make it easier for us to adjust to them. This reduces our insecurity and makes decisions easier. Especially in a society with rapid social and spatial changes, people have the need to classify their counterpart. Put simply and positively: Stigmata help us to understand something that we cannot (initially) understand or justify. On the other hand, they are an expression of our rejection. They create distance and spare us the confrontation and interaction with the stigmatized person.

Today there is a disease that used to be kept quiet but has almost become fashionable and has been frivolously renamed: Once categorized as depression, it's now called "burnout". Depression is considered a weakness, a disease that is stigmatized, burnout as a typical disease of working people, although it is still not officially classified by the WHO, but basically shows typical symptoms of depression. Ultimately, the term burnout thus plays down a depression. And even

if the opposite is perhaps intended, in the long run it even contributes to stigmatizing depression. Depressive patients then encounter the prejudice not having their life under control, overtax themselves out of ambition or simply do not pull themselves together.

When I was diagnosed with burnout in autumn 2014, this was a great help for me. I had no shame in being ill, although I knew the connection between burnout and depression. I just wanted to know what was going on with me, or what exactly was behind my physical and psychological condition. The problem and the symptoms became more tangible, and the naming made it easier to go to other specialists, a marathon which, by the way, lasted over 18 months.

When I talk about my breakdown today, I try to use the term burnout as an additional description, since it implies that those affected are burnt out by the work alone and can do little about it themselves. Of course, there are clearly burnout-promoting working conditions and burnout is a consequence of chronic workload or a chronic state of stress - but one's own preconditions, resources and reactions to them are just as important. So, there are also clear characteristics that employees bring, which then lead to this psychological-physical state of exhaustion - this is how I paraphrase the term burnout meaningfully and I will let these backgrounds flow into this dissertation, too.

Exhaustion was my central symptom. I did not burn out because my job was too strenuous, or the responsibility was too great. I burnt out because I could not exert any personal influence on my actions, was disoriented and powerless. My collapse or burnout involved a deep identity crisis, which had its origins, among other things, in my excessively high expectations in a wide variety of situations.

“What is real? How do you define real?” - In the movie “The Matrix”, Morpheus confronted the protagonist Neo with a choice between two pills. If he takes the blue pill, reality remains a computer-simulated illusory world - if he swallows the red pill, he will realize that nothing is as it seems: In truth, all people are part of an illusion. No, Neo didn't have a burnout, but in my case, it looked like a red pill and made me realize that I seemingly lived in a constructed world that was very different from the one after my burnout. That is why today I look back with absolute and sincere contempt on this person I was. Too late I realized that I was striving for ideals that were set by the system which could only be achieved through self-damaging my health. I suddenly understood that the world of work is based on dependencies that help shaping it.

Especially the so-called “insecure overachievers”, realize that they are somewhere compliant victims in this system. They have put themselves in it to get resonance, recognition, maybe even love. *“My boss doesn't give me credit,”* is a testimony to their futile quest. In these situations, it is a matter of maintaining one's self-image, because it is precisely the insecure achievers who often have a deficit. They have no inner core, no firm identity of their own that would be able to distinguish themselves. So, it is no wonder that relationships in companies often reflect family constellations. However, it is precisely this personality reference, the influence of various social

systems and the social support that takes place within them that make burnout not only a particularly worthwhile subject of (economic) psychological research, but also an organizational-sociological analysis of the present. There is no question that burnout, due to its presence in the media and the large number of social issues it raises, is of decisive relevance for several research disciplines. For when a disease, which according to medical definition is not a disease at all, raises questions about the correct personal and working environment, a meritocracy, self-realization, leadership style, social support or even criticism of the organizational system, it is necessary to take a multidisciplinary look at the construct.

So how could a scientific work deal with the topic? It certainly makes sense to start where burnout appears or from where it starts. In companies, burnout appears as a problem. A problem because, although it is not an illness, it is considered a reason to enter a state of medically prescribed sick leave. Work becomes illness and absence. In practice, this means two fewer working hands in the company. The temporary absence of an employee can possibly be compensated by the manpower of the colleagues. However, if this absence occurs more frequently, it becomes a problem for the company and subsequently a problem for the health care system and hence the national economy. This is not fiction but an abstract representation of the consequences of burnout in the present. From a different perspective, the fields of psychology and medicine are concerned with the diagnostic delimitation of the non-disease and the differential diagnoses, as well as the specification of measurability and classification.

The present work focuses on employees' perception of social support by the supervisor. From my point of view, social support in the sense of a social resource represents the link between organizational working conditions and individual parameters of dealing with the job. Furthermore, managers have a special duty of care towards their employees, which can be derived in particular from the legal framework for action. Even if the trigger for a burnout can also lie in the private environment, it is still the duty of a manager to recognize and address exhaustion and excessive demands on his employees and to offer support.

This work is not only about the phenomenon of burnout, but also about understanding the construct holistically in the social system organization and in interaction with neighboring systems in the private and professional area. The research in the context of this work made it clear: Making burnout tangible seems to be a deep need of today. Accordingly, this work should also make its contribution to this.

Annotation

The objective of the dissertation was to gain an understanding the impact of poor supervisor support on employee-burnout and showing up moderating effects of personal networks and personality traits on this relationship. With this, it is the purpose of this research to derive recommendations for managers and provide future fields of research for scientists. The hypothesis of the doctoral thesis is, that a high level of social support by the supervisor (perceived support of the employee) has a significant negative correlation with employee burnout in the operationalized dimensions emotional exhaustion, depersonalization and reduced personal accomplishment. In the first chapter, the fundamental theories on social systems, social networks and the embeddedness of social support as a function of social networks are explained. As a conclusion, supervisor support in the context of support-oriented leadership is high-lighted as a tool of organizational health management. In the second chapter, an in-depth literature review introduces general theoretical assumptions and concepts of social support and its effect as a burden or resource. In addition, empirical results were reviewed regarding the effect of social network characteristics and social support on burnout, stress and mental health in general. Moreover, a precise definition of personal support networks and the quality of personal support networks used for this research and their composition has been worded. Deduced from these backgrounds, a research model has been derived. Using qualitative methods at the end of chapter two and quantitative methods (pre- and main research) empirical evidence is gained through a problem centered interview and surveys among German managers in medium sized companies from automotive industry. The thesis shows the dependencies of leadership support outcomes on employee burnout and analyses different perceptions, emotions and the resulting behavior of the employees. Further, the extent of the impact of supervisor support on employee burnout is determined and illustrated. The research model turned out to be a reliable tool within the framework of organizational health management research that can adequately map direct and moderating effects of support network quality on burnout symptoms resulting from perceived supervisor support - taking into account personality traits. Additionally, a condensed behavior profile for supervisors, necessary for a healthy leadership style and the associated social support, has been recommended. The need for professional competence and social skills of supervisors, which is, seen from a business perspective, an indispensable prerequisite for the economic success, was depicted. As validated by expert interviews, this fit comes as a challenge to supervisors in medium sized companies. The thesis is limited to managers with functional executive responsibility without disciplinary supervisory role in medium-sized companies from the manufacturing automotive industry in Germany in the period from 2017 to 2022. The work concludes with recommendations for scientists to further research the topic and for supervisors as well as for the top management to implement the idea of health in daily work processes within the framework of health-oriented leadership behavior.

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List of Abbreviations

ArbSchG.....	Arbeitsschutzgesetz (Occupational Health and Safety Act)
BKK.....	Betriebskrankenkasse
DAK.....	Deutsche Angestellten-Krankenkasse
DEAS.....	Deutscher Alterssurvey
DGPPN.....	German Society for Psychiatry, Psychotherapy and Neurology
e. V.....	Eingetragener Verein (german) - Registered association
ISCED.....	International Standard Classification of Education
MBI.....	Maslach Burnout Inventory
MBI-D.....	German Version of Maslach Burnout Inventory
MCS.....	Mental Component Summary
WHO.....	World Health Organization
PCS.....	Physical Component Summary
SGB.....	Sozialgesetzbuch (Social Code)

Introduction

Actuality of the Topic

In today's world, business organizations face many and rapidly changing challenges. They have to react to technological as well as structural and political innovations and must not lose sight of the company's goals, which are usually oriented towards the highest possible profit. No other industry is under as much pressure to innovate as the automotive industry. Companies that want to establish themselves in this sector must continually adapt to their environment and are in global competition with growing locations such as India or China. Changes due to organizational structures and globalization are considered, as well as psychological factors such as health status. The greatest asset of German companies is still their well-trained workforce and productivity. Unfortunately, this potential is limited or endangered in many places by aspects such as overwork and stress-related illnesses, such as burnout. The following makes this clear:

The actual Health Report of the BKK Bundesverband e. V.¹ (2018) and also the analyses of the German Federal Ministry of Health (2018) show that the trend with regard to physical and mental health (including Burnout) continued in 2018. Since 2008, the number of days lost due to mental disorders has more than doubled (+129.4%). This high increase is partly since each case of illness is associated with an above-average number of days of absence (on average 37 days per case).² Based on data from DAK³- and the Psychoreport 2019, an estimated 2.2 million employees were affected by mental illnesses. Since 1997, the number of days of absence caused by depression or adaptation disorders has more than tripled. The most common absence is for employees diagnosed with depression. Absenteeism due to adjustment disorders has increased particularly sharply in recent years.⁴

While in the 1990s cardiovascular and respiratory complaints and musculoskeletal disorders were among the dominant groups of illnesses, this proportion of sick days is steadily declining. Otherwise, mental disorders are on the increase, especially affective, neurotic and somatoform symptoms. These developments are particularly apparent in health care workers and teaching

¹ The BKK Dachverband e. V. (BKK DV) is a political and professional interest group as well as the central organization of Germany's company health insurance funds. The BKK umbrella association has 76 company health insurance funds with 9 million insured persons as well as four BKK regional associations.

² Pfaff, H. & Zeike, S. (2019): Psychische Gesundheit und Arbeit: Ein Überblick. In: Knieps, F. & Pfaff, H. (Ed.), Psychische Gesundheit und Arbeit. BKK Gesundheitsreport 2019. Berlin: MWV Medizinisch Wissenschaftliche Verlagsgesellschaft und BKK Dachverband e. V., p. 27. URL: https://www.bkk-dachverband.de/fileadmin/publikationen/gesundheitsreport2019/BKK_Gesundheitseport_2019_e-Book.pdf. Last accessed: 19.12.2019

³ DAK-Gesundheit is one of the largest statutory health insurance funds in Germany and insures 5.7 million people.

⁴ DAK (2019): DAK Psychoreport 2019. URL: <https://www.dak.de/dak/download/190725-dak-psy-choreport-pdf-2125500.pdf>. Last accessed: 19.12.2019.

professions, but also in public administration, management or sales - generally in occupational groups in which social contact with people is the focus. It can be deduced from the trend shown that, among other things, the mental health of employees in the relevant industries and professions mentioned will be even more at risk in the future.

Through appreciation, recognition and above all social support, supervisors can promote the mental health of their employees. For this it should be described right at the beginning where the line is drawn between a supervisor and a manager in the understanding of the dissertation. The specific differences are described by the overarching scope of each level of supervision and management. Another perspective is that a manager has responsibility for making important decisions about what drives the team in day-to-day operations - its purpose, functions, and role, and for making commitments and decisions that require the use of key team resources. Managers have a significant, external focus (on the world outside the team, e. g., product manager, sales manager, etc.), while a supervisor has a more internally focused responsibility for implementing the manager's decisions operationally and on the team's goal achievement. Once a decision is made on what to initiate, supervisors play an important role in deciding how to make it happen and how to achieve the goal set by the manager. For this study, Managers are understood as employees with functional executive responsibility, but without disciplinary management role. Supervisors often perform the same type of work as subordinates, e. g. department leaders (sales, controlling, buying, etc.) but they have responsibilities for their employees.

Health-oriented leadership means, among other things, that supervisors are responsive, support employees and allow mistakes to be made. This creates opportunities for action, even if supervisors cannot change much about the actual workload of the employees. Supervisors have a decisive influence on the culture of the organization. They also play an important role in implementing an organizational health management and promoting mental health in the company. Through their leadership understanding and behavior, supervisors have a decisive influence on communication and cooperation styles and thus on the overall climate and culture. Health- and support-oriented leadership also includes the allocation of work, considering existing skills and interests. Thus, overwork and underchallenge should be avoided as much as possible. The employees should be given opportunities for personal and professional development. Exemplary supervisors take responsibility, e. g. in conflicts with top management, and defend their employees. Leadership in this sense gives security and takes away the employees' fear - especially of the fast and often inscrutable changes in the workplace. Feedback in the form of response on performance and social behavior, the creation of scope for decision-making and action, as well as the support and participation of employees also have a decisive influence on the well-being, health, motivation and willingness to perform of employees. However, leadership also means that supervisors take care of the development of their staff within the company. Particularly in company health management, personnel development as an important component of a health-promoting company and personnel policy is of particular importance.

Certainly, the fact that employees do not have adequate coping strategies play a significant role - at first glance, the problem of getting burned out seems to be exclusively on the employee's side. Nevertheless, according to the German Occupational Health and Safety Act, a supervisor is responsible for the employees who are subordinate to him. Managers have many options for action to avoid unnecessary stress on their teams: The creation of an appreciative and consistent management culture, clear processes and structures as well as transparent tasks are just a few examples.

But the development of a health & support-oriented management culture is complex. It requires the development of health-related values. And it is only these that provide orientation for the perception of the employees. This is the only way to sharpen employees' awareness of the sickening effects of excessive and insufficient demands as well as of factors that make people healthy and provide a higher well-being, such as job satisfaction. Healthy leadership behavior and the associated social support requires the professional competence and social skills of supervisors. The behavior of managers has an impact on the motivation, commitment and in the following on perceived stress and burnout scores of employees - and thus ultimately on their work and employability. From a business perspective, the ability of managers to provide social support to employees is therefore an indispensable prerequisite for the economic success of the organization.

In accordance with the relevant literature on support research and a veritable flood of reports in this field, it is assumed that dyadic employee-supervisor relationships in particular initiate a process of mutual investment in professional activity, in which the full development potential of the interpersonal relationship is released. This results in contributions to team performance that go beyond the basic contributions and contribute decisively to team success.

Whether employees cooperate and show loyalty, depends largely on even if the supervisor is perceived as resource. Thus, managers who hardly or not at all fulfil their management tasks, who focus one-sidedly on the achievement of objectives and not on the needs of the employees, who exercise strong control, withhold information or deal with employees in a destructive way, are less a resource than a burden. Studies confirm the link between social support by the supervisor and sickness absence as well as early retirement. In conclusion, social support from supervisors has a positive influence on the employees' perception of stress, burnout symptoms and mental health. The transition from a stress orientation to a resource-oriented perspective offers numerous starting points for measures in the framework of organizational health management. Socially supportive behavior of supervisors can thus be described as a very important resource for the company's success.

However, the findings of support-research are also inconsistent - characteristic are numerous studies that can confirm no or only a limited positive effect or even contradictory findings. The question arises as to what these inconsistent results can be attributed to. It is assumed that other variables interact with the relationship between supervisor support and burnout-symptoms among employees.

In recent years, social science research has increasingly focused on the importance of networks and their understanding as resources. The starting point is that humans are social beings, embedded in a network of family, friends, colleagues, etc. These relationships form social networks for each person, from which, e. g. support can be obtained. The resource function of social support networks has been recognized especially in business psychology and consequently also in management research. Meanwhile it is undisputed that social networks act as a “buffer” against burdens or as a “protective shield” against crises and problems. As a result, social support networks in working life are not only reduced to an instrumental resource and represent only an informational and material support, but also other support services such as emotional support, which can be useful for daily working life and as a starting point for organizational health management regarding health promotion measures.

Therefore, the empirical analyses will focus on the direct and on the moderating effects of the quality of support networks.

Due to the presumed high value of personality traits, these variables will also be brought into focus to clarify the effect of social support by supervisors on burnout of the affected employee in a more differentiated manner.

Aim of the Dissertation

The aim of the dissertation was to gain an understanding of the impact of poor supervisor support on employee-burnout and showing up possible moderating effects of personal support networks and personality traits on this relationship.

Research Object & Subject

The object and subject of this research can be formulated as following:

- Object: Employee - supervisor dyads in manufacturing organizations.
- Subject: Supervisor support and its impact on burnout, moderated by employees' personality traits and the quality of their personal support networks.

Main Research Question

Is perceived supervisor support, in a business organization, able to strengthen or prevent burnout symptoms among employees?

Main Hypothesis

H1: A high level of social support by the supervisor (perceived support of the employee) has a significant negative correlation with employee burnout in the operationalized dimensions emotional exhaustion, depersonalization and reduced personal accomplishment.

Further Theses for Defense

- 1. Quality of Support Networks:** The quality of personal support networks plays a moderating role in the relationship between perceived social support by supervisors and burnout among employees. The quality of such networks represents a valuable resource for the better processing of stressors and burden by addressing the problem and receiving emotional support.
- 2. Personality Traits:** Personality traits moderate the relationship between perceived supervisor support and burnout among employees. Burnout patients are performance-oriented, ambitious, committed and perfectionist people. The combination of chronic stress factors in the workplace and the personality traits favors the development of burnout.

Tasks to achieve the Research Objective

- To analyze and explore the relevant theoretical fields of management theory, emphasizing on organizational health management and -promotion as well as systems theory.
- To develop a two-theories-approach defining social support as a decisive intersections to employees' health.
- To introduce, to define and to specify personal support networks as a health-resource of employees reflecting social capital.
- To assess and discuss the different measurement approaches applicable to the independent variable of the perception of supervisor support and burnout as the concrete health outcome as well as to develop an appropriate research model from it, considering personality traits and support network quality as potential moderators and direct effects.
- To conduct qualitative pre-research in the form of a problem centered discussion to be able to better understand the effect of supervisor support on burnout among employees.
- To develop hypotheses-blocks underlying the research model as a basis for the main-research.
- To conduct quantitative pre-research with global health variables for a first test of the general usability of the model.
- To examine empirically and to test the research models underlying hypothesizes by collecting data from the corresponding target group and organizations.
- To analyze the results with statistical methods and structure the data in order to make predictions and explanations from it.
- To derive conclusions from this research and managerial recommendations for top-management and supervisors, important to comprehend for any further enhancement of

“healthy” organizations as well as to develop supportive leadership competencies and behavior.

- To deduce recommendations for future research areas to scientists and to recommend possible directions to practitioners, universities and governmental institutions for increasing the persuasive power for implementing the health “thought” in manufacturing companies.

Novelties

The thesis provides the following scientific novelties:

1. Creation of uniform theoretical foundations for the characteristics and interrelationships of social (support) networks, social support and burnout (outcome) within the framework of organizational health management research.
2. Definition of the term “support network quality” in the context of organizational health management research as employees’ perceived social capital related to possible health-promoting determinants.
3. Based on the theoretical research, a model, which illustrates the theoretical dimensions of personal support network quality in the multi-person systems of the private near field and in the professional context was developed.

Approbation of the Research Results

Following are presentations in international conferences:

1. Hager, F. W. (2017): The Impact of Distance Communication on different motivational Concepts. 21st European Scientific Conference of Doctoral Students, PEF-NET 2017. 30th of November 2017. Presented at Mendel University, Faculty of Business and Economics, Brno, Czech Republic.
2. Hager, F. W. (2018): The Links between Meaningfulness of Work, Work-Engagement and mental Well-Being. 14th Annual International Bata Conference for Ph.D. Students and Young Researchers, DOK-BAT 2018. 25th of April 2018. Presented at the Tomas Bata University, Faculty of Management and Economics, Zlín, Czech Republic.
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Award

Best Paper Award at DOK-BAT 2018 - 14th Annual International Bata Conference for Ph.D Students and Young Researchers, on 25th of April, 2018 at Tomas Bata University in Zlín, Faculty of Management and Economics, Czech Republic.

Limitations of the Study

- The study focuses on Managers with functional executive responsibility without disciplinary supervisory role in medium-sized companies from the manufacturing automotive industry in Germany. The findings may differ from other job profiles of the respondents, types of organizations, cultures and other locations or fields of activities.
- The dissertation encompasses the period from 2017 to 2021 and discloses the author's personal point of view.
- Changes in work processes and in the work-environment may lead to different qualities of social relationships and qualities of social support networks.
- This thesis does not address such issues as “leading distributed teams” or “leading at a distance”. The theoretical, the analytical, the empirical part as well as the final suggestions only cover “face-to-face” contacts in supervisor-employee dyads.

Structure of the Dissertation

This work is divided into three chapters. The first chapter describes supervisor Support in the context of support-oriented leadership as a tool of the organizational health management. An overview is provided of what occupational health management is, how it is defined and what possibilities exist for a health-oriented supportive management to protect employees in terms of their physical and mental health. Furthermore, the role of social networks as a source of personal resources is explained and the conceptual classification of social networks within a social system is defined. The focus is on social relations as a potential source of social support and as a function of social networks. These links are the starting point for the representation of the effects of social support as a personal resource or burden which is explained in depth in chapter 2. On the other hand, they are necessary for the further explanations, since the functions of social support and the evaluation of the different components can be elucidated with the quantitative-structural aspects, and on the other hand with the qualitative-functional perspective. It is therefore a matter

of a more in-depth substantive dialogue on the theoretical construct of social support, its localization and of laying the theoretical foundation for the empirical part of this work, as well as for possible intervention recommendations for the purpose of workplace health promotion.

The second chapter introduces general theoretical assumptions and concepts of social support and its effect as a burden or resource. In particular, the perception of social support is at the center of all further explanations - both in terms of its definition and content as well as about the different sources of support. In addition, empirical results will be reviewed regarding the effect of social network characteristics and social support on health. Furthermore, a precise definition of personal support networks and the quality of personal support networks used for this research and their composition is done, which is important, because the quantification of relevant investigation characteristics in the design of the questionnaire and its evaluation is aimed at ensuring the comparability of the data and making the statistical evaluation procedures accessible regarding possible comparisons and dependencies. At this point, special emphasis is also placed on the presentation of previous empirical research results that shed more light on the effect of social networks and social network characteristics on burnout and mental health. The second chapter concludes with the construction of the theoretical model and the derivation of the hypothesis blocks for the empirical study in chapter 3. For this purpose, additional experts from middle management were interviewed in the context of a problem-centered group discussion in order to make the model suitable for practical use.

In chapter three, the individual focal points are differentiated and empirically investigated, evaluated and discussed about the chosen methodology and the results obtained. At the end of the work conclusions and recommendations for further academic research or practice are made.

Methods used

Next to an intensive academic literature research by searching various scientific databases, academic publications, scientific journals and book editions, the author relied on qualitative research. As first empirical approach, a modified method of the group discussion by referring to aspects of the problem-centered interview was used, accompanying the literature research which represented the first part of the triangulation as research strategy. This offered the possibility to systematically derive blocks of hypotheses. Based on this, the author has developed a theoretical model to visualize the hypothesizes.

In a next step of the triangulation quantitative pre-research (N = 132) has been done. The focus of the quantitative pre- and main-research (third part of the triangulation, N=338) approach was to empirically collect reproducible data, measured based on a systematic, standardized procedure, and to test the proposed hypotheses. This procedure aimed to investigate cause-effect relationships and the generalizability of sample testing results. As an appropriate instrument, a self-administered, structured and anonymous online questionnaire has been used. All items were based on previously tested reliable scales. The names and personal data of the surveyed employees

(in qualitative and quantitative research) were kept strictly confidential. The author edited the data obtained by the online questionnaire by performing correlation-, regression- and moderator analyses. All statistical investigations were conducted using SPSS Version 25.

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1. Supervisor Support in the Context of Health- and Support-oriented Leadership as a tool of organizational Health Management and the Role of social Networks as a Source of personal Resources

The following chapter describes supervisor support in the framework of a health- and support-oriented leadership (as tool of organizational health management) and points out how social networks in between social systems (organizations) and in the private sphere (family, friends) can be a source of helpful personal (health protecting) resources. These relationships are the starting point for the presentation of the effects of social support as a coping strategy to counteract burnout in business organizations. Furthermore, the explanations are necessary to explain that supervisors can mitigate burnout of their employees through appreciation, recognition and social support. This means, for example, that they are approachable, support employees and allow mistakes to be made. Supervisors, thus have room for maneuver, even if they cannot change much about the actual workload of their people.

1.1. Overview of the Composition of Systems and social Networks as a Prerequisite for the Provision of social Support in organizational Health Management Processes

A system, such as a business-organization, consists of components, subsystems and relations, which do not interact randomly and are associated with a mutual, circular, environment-related complementary and exchange context respectively in an interdependence.⁵ The way the elements (e. g. employees) interact (behavior) is determined by the structure. This results in turn from the set of all relationships and their requirements.⁶ A social system is a system of human actions. Society can be understood as a social, superordinate action system (supersystem), a business-organization as a sub-system.⁷

Organizations do not consist of individuals or elements, but always of concrete actions (unit act⁸) that connect people, cultures or other organizations in situations of interaction. Although employees are the carriers of the respective organization, they do not enter the system physically - with their psychological attitudes, needs, wishes or expectations. Rather, only a part of the actions that employees are capable of and that they perform becomes relevant for the system, and

⁵ Parsons, T. (1951): *The social System*. Glencoe: Free Press, pp. 5-8.

⁶ Scott, R. W. (2003): *Organizations: Rational, natural and open Systems*. Upper Saddle River: Prentice Hall, p. 90.

⁷ Ulrich, H. (2001): *Systemorientiertes Management*. Bern: Haupt, p. 63 & pp. 111-112.

⁸ Parsons, T. (1968/1937): *The Structure of social Action*. Glencoe: The Free Press. pp. 43-48.

only through such specific contexts of action do employees become integrated into their organization.⁹

„*The whole is greater than the sum of its parts.*“¹⁰ Already the famous sentence of Aristotle points out that it is not only important to know the parts of a whole, but also to consider the relations between the parts. An organization as a social system is to be understood as a sub-system of society and always moves in the context of other social systems and its environments. Subsystems fulfil primary tasks, i. e. tasks for which the system was created.¹¹ The respective subsystem specializes in certain functions.¹² The corresponding actions, thereby receive their meaning.¹³

While the mesh of social relationships is referred to as a social network, social networks in a broader sense refer to the provision of social support and thus the effects of social relationships on individual well-being.¹⁴ This is based on the fact that social networks can assume important integrative functions but also protective functions in our lives and that social support can be a function of social systems or social networks - in addition to regulatory, controlling but also conflict-prone and stressful dimensions.¹⁵ The function of social support includes both - objective help and psychological help¹⁶ (e. g. practical help, emotional sustenance and provision of information).¹⁷

Social support therefore takes place within the relationships of a network. In and of itself, social support does not yet denote a theory, nor a social mechanism, and yet it belongs to a research tradition of investigating informal exchange processes. Similarly, it is difficult to define how social networks relate to social systems or how social networks are woven into social systems. In systems

⁹ Mikl-Horke, G. (2001): *Soziologie: Historischer Kontext und soziologische Theorie-Entwürfe*. Oldenbourg: De Gruyter, p. 220.

¹⁰ Aristotle, *Metaphysics* 8.6 [=1045a] (n. d.): More detailed: “Concerning the challenge we just faced about how to describe things in numbers and definitions, what is the reason for a unity/oneness? For however many things have a plurality of parts and are not merely a complete aggregate but instead some kind of a whole beyond its parts, there is some cause of it since even in bodies, for some the fact that there is contact is the cause of a unity/oneness while for others there is viscosity or some other characteristic of this sort. But a definition [which is an] explanation is one [thing] not because it is bound-together, like the Iliad, but because it is a definition of a single thing.“

¹¹ Rudow, B. (2012): *Die gesunde Arbeit: Arbeitsgestaltung, Arbeitsorganisation und Personalführung*. Oldenbourg: De Gruyter, p. 21.

¹² Luhmann, N. (1984): loc. cit., 57; Luhmann, N. (2005): *Einführung in die Theorie der Gesellschaft*. Heidelberg, Carl-Auer, p. 262.

¹³ Parsons, T. & Jensen, S. (Ed.) (1976): *Zur Theorie sozialer Systeme*. Wiesbaden: VS Verlag für Sozialwissenschaften, p. 124.

¹⁴ Berkman, L. & Glass, T. (2000): Social Integration, Social Networks, Social Support, and Health. *Social Science & Medicine*, 51(6), pp. 843, 845 & 848.

¹⁵ Nestmann, F. (2000a): *Netzwerkintervention und soziale Unterstützungsförderung - konzeptioneller Stand und Anforderungen an die Praxis Gruppe*. *Interaktion. Organisation (GIO)* Vol. 31(3), VS Verlag für Sozialwissenschaften: Wiesbaden, p. 259.

¹⁶ Nestmann, F. (2000a): loc. cit., p. 259.

¹⁷ House, J. S.; Umberson, D. & Landis, K. (1988): Structures and Processes of social Support. *Annual Review of Sociology*, 14, p. 293-318.

theory, a social network is often understood or equated as a system. However, the question arises whether this is justified, or whether the perception of the living world within a network or thinking in networks is different from that of the corresponding (superordinate) social system. On closer examination, a social system disintegrates into smaller network-like organized parts, so that ultimately their connections, relationships and processes as an independent level come into focus. If this approach is projected onto management science or on employees in organizations, this means a turning away from conventional, hierarchically-dirigiste organizational structures, but rather a turning towards informal management- and exchange processes which are essential for social support within the personal social network of the employees.

A comprehensive organizational health management includes, among other things, the conscious control and integration of these informal management, exchange and support processes within business-organizations, aiming the promotion and maintenance the health of employees. In this way, in a business-organization many positive changes can be achieved, whereby organizational health management is closely anchored in the leadership culture of a company. The two terms „health“ and „leadership“ in particular, have been put into context by DUCKI & FELFE, thus also advancing health-promoting leadership from a scientific point of view.¹⁸

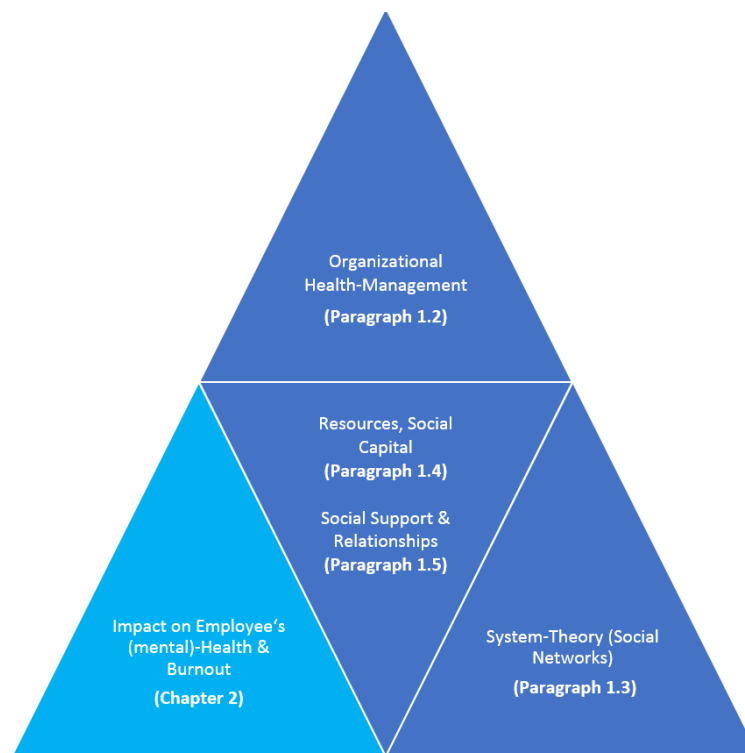


Fig. 1: Two-Theories-Approach to the Dissertation Topic

Source: Author's construction

¹⁸ Ducki, A. & Felfe, J. (2011): Führung und Gesundheit: Überblick, in: B. Badura et al. Fehlzeiten Report 2011, Heidelberg: Springer Verlag, 2011, VII.

The theoretical approach to the dissertation topic is thus based on two theoretical currents: The management theory, which focuses on organizational health management, and system theory, which emphasizes social networks and their composition. Both theories are linked by the construct of social support, which is made clear in Figure 1.

After the theoretical anchoring of the topic has been established in the first chapter, an analysis is made of the extent to which social support from supervisor mitigate the mental health of employees in Chapter 2. The following paragraphs will illustrate this in more detail.

1.2. Organizational Health Management as a Framework for Health- and Support-Oriented Leadership

The following paragraph provides an overview of what is understood by an occupational health management, how it is defined and what possibilities exist for health- and support-oriented leadership to protect employees in terms of their mental health and physical performance. In addition, it will be discussed, which characteristics a supervisor should possess in the context of organizational health management. The background of this dissertation is examined from the perspective of management science in a first step (Two-Theories-Approach to the dissertation topic).

What is organizational health management and what can it achieve?

Organizational health management is comprehensively described as „*the systematic and sustained effort to design structures and processes of social systems in a way that promotes health [...]*“¹⁹ It aims to prevent a wide variety of illnesses at the workplace, improve the physical and mental well-being, performance and motivation of employees, and strengthen health potential. Ultimately, organizational health management aims to promote healthy aging among employees, which necessitates the establishment of health-promoting conditions at the workplace and the systematic training of the workforce, including supervisors, in health-conscious behavior.

Organizational health management is more than just workplace health promotion, as it goes far beyond individual health-promoting measures such as nutritional counseling, back training, sports or management training. Occupational health management should be sustainably aligned with the organizational strategy. It is part of the organizational strategy, management concepts,

¹⁹ Badura, B. & Hehlmann, T. (2003): Betriebliche Gesundheitspolitik - Der Weg zur gesunden Organisation. Springer Verlag, Wiesbaden, p. 41.

organizational culture and controlling.²⁰ Middle management is the driving force behind successful implementation²¹ and its realization.

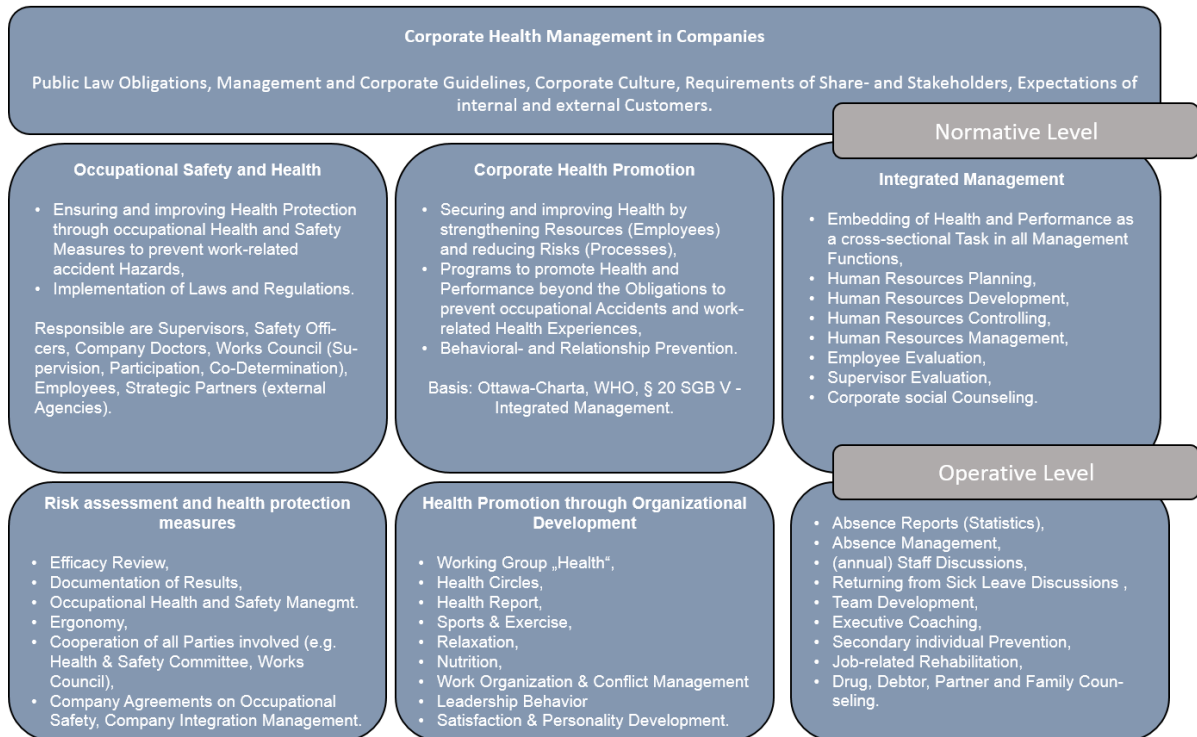


Fig. 2: Three-Pillar-Model of organizational Health Management

Source: Author's construction, based on the "Three Columns Model of Corporate Health Management" (German: Das Drei-Säulen-Modell des Betrieblichen Gesundheitsmanagement) according to OPPOLZER.²²

On the one hand, organizational health management can take corrective action by correcting known deficiencies or eliminating them altogether; on the other hand, it has a preventive or prospective effect by preventing physical and mental illnesses from occurring in the first place through health-promoting measures.²³ This offers advantages not only to the employees, but also to the employer. Only by investing in social capital does the lively, process-oriented and result-oriented interaction between people and technology unfolds fully transparent and manageable in an employee-oriented sense.

²⁰ Badura, B. & Hehlmann, T. (2003): loc. cit., p. 79.

²¹ Akkerman, I. (2013): Betriebliches Gesundheitsmanagement in der Praxis - Von der Analyse bis zur Umsetzung. Hamburg: Dashöfer, p. 7-8.

²² Oppolzer, A. (2010): Gesundheitsmanagement im Betrieb, Integration und Koordination menschengerechter Gestaltung der Arbeit. Hamburg: VSA, p. 31.

²³ Ulich, E. (2001): Arbeitspsychologie. Schäfer Poeschel Verlag, Stuttgart, p. 176.; Ducki, A. (2000): Diagnose gesundheitsförderlicher Arbeit. Eine Gesamtstrategie zur betrieblichen Gesundheitsanalyse (Mensch - Technik - Organisation). vdf Hochschulverlag AG, Zürich, p. 85-86.

According to OPPOLZER's three-pillar model, workplace health promotion is one of the three columns on which organizational health management rests. The second pillar describes the public occupational health and safety, which aims to reduce work-related accidents and health hazards. Various laws, regulations and ordinances, company agreements on occupational health and safety, and medical services help implementing it.²⁴ The third column, Integrated Management, incorporates the concept of health into all areas and structures of the organization as a cross-cutting task. A manager has an influence on all three pillars and is obliged to act in a caring manner, as the next paragraph makes clear. Figure 2 provides more detailed information about the contents of the model.

Healthy Employees - economic Cornerstone and Guarantor of organizational Success

A healthy company needs healthy employees, FOURNIER postulates. An organization consists of individual living beings, the employees, and can be described by analogy as something „living“. It connects the individual departments or people to a whole and is characterized by the fact that these „organs“ cooperate optimally. Consequently, the healthier the employees are, the healthier the company is. The organization „company“ can develop, grow and prosper, but it can also become sick or even die.²⁵

This metaphor becomes even more understandable when viewed from the perspective of economic efficiency: If employees fall ill, this results in a reduction in their willingness and ability to perform, as well as costs in terms of continued payment of wages and lost work, which also must be absorbed in some form in terms of organization and logistics. In the worst case, service deficiencies arise, and work processes and quality suffer due to the additional workload of colleagues.

Especially due to the shortage of skilled workers and the demographic change, employee health and performance become an important success factor. BIENERT & RAZAVI describe the health of the workforce as the strategic factor that has a decisive influence on the image and culture of the company.²⁶ According to this thesis, the targeted use of health-promoting measures strengthens the potential of employees and decisively improves the company's competitive position on the labor market. In addition, the company's reputation as an attractive employer is enhanced. Against this background, for organizations it is more important than ever, to sensitize supervisors to the issue of health-promoting leadership.²⁷

²⁴ This model reflects the Basic Law, the Social Law and Labor Laws of the Federal Republic of Germany.

²⁵ Fournier, C. (2010): Die 10 Gebote für ein gesundes Unternehmen: Wie Sie langfristig Erfolg schaffen. Campus Verlag, Frankfurt/Main, p. 16-17.

²⁶ Bienert, M. L. & Razavi, B. (2007): Betriebliche Gesundheitsförderung: Entwicklung, Vorgehensweise und Erfolgsfaktoren. In: Hellmann, W. (Ed.) Gesunde Mitarbeiter als Erfolgsfaktor. Heidelberg, Economica, p. 62-63.

²⁷ Kraemer, R. & Lenze, M. (2011): Entwicklung einer Führungskräfte-Toolbox „Gesundheitskompetenz“ bei REWE. In: Badura, B. et al.: Fehlzeitenreport 2011: Führung und Gesundheit. Berlin, Heidelberg: Springer, p. 169.

After all, health means much more than the absence of physical illness. In the future, the prevention of harmful stress will play just as important a role as the prevention of accidents and work-related physical illnesses. Health and support-oriented leadership and the promotion of mental health by supervisors helps employees, but also makes itself felt in an increase in work motivation and, as a result, higher productivity by optimizing relevant cost types (e. g. manufacturing and machine costs). A healthy workforce also reduces the number of errors and rejects. A low sickness rate also improves the planning security of workforces.²⁸

Physically and mentally healthy employees can work at full capacity for their company. If the human interaction between colleagues, or between employees and managers is disturbed, work motivation, sense of responsibility, initiative and willingness to perform are often affected and limited to the essentials. If there is little emotional attachment to the company, sick leave increases - the reason often lies with the direct supervisor. In the opposite sense, health- and support-oriented leadership, leads to great motivation and bonding factors.²⁹

If companies and managers succeed in sustainably protecting the performance of their workforce through health-promoting measures or occupational health management, this represents a decisive competitive advantage. Investments in the human and social capital of an organization are strategic investments. They are intended to secure long-term employment and economic success. For this reason, Health in organizations is therefore an advantage that is difficult for competitors to catch up on.

Manager's Duty of Care and mental Risk Assessment

Managers have a special duty of care towards their employees, which can be derived from the legal framework for action. In the relevant literature on organizational health management, two roles of a manager are often described for the implementation of health tasks in organizations and for the maintenance of employee health.³⁰

Supervisors are both - safety managers and resource managers. As safety managers, supervisors inform and instruct their employees about occupational safety and act as role models themselves. In addition, they provide the necessary protective equipment for daily work. In this role model, management action is limited to occupational health and safety regulations. In their function as resource managers, managers can have a targeted effect on social, personal and organizational resources by social support and granting scope for action and decision-making. In this task,

²⁸ Badura, B; Hehlmann, T. (2003): loc. cit., p. 9.

²⁹ BauA (2001): Gesunde MitarbeiterInnen in gesunden Unternehmen: Das Europäische Netzwerk Betriebliche Gesundheitsführung. URL: <http://www.baua.de/de/Publikationen/Broschueren/A5.html?nn=667384>. Aufgerufen am: 08.11. 2020. Dortmund: Bundesanstalt für Arbeitsschutz und Arbeitsmedizin, p. 5-6.

³⁰ Franke, F. & Felfe, J. (2011): Diagnose gesundheitsförderliche Führung - Das Instrument „Health-oriented Leadership“. In: Badura, B. et al.: Fehlzeitenreport 2011: Führung und Gesundheit. Berlin, Heidelberg: Springer, p. 3.

classical occupational health and safety is extended by the important understanding of the salutogenic approach. The protection motive of a pathogenic view is in a sense supplemented by the motive of health-promotion.³¹

According to ZIMBER & GREGERSEN, in this dual role, executives should be guided by four fields of action which, in addition to the necessary management structures and formal framework, also focus on the behavior of the executives. All management levels are involved in the implementation of the associated measures. The two fields of action „making health and safety a goal and topic“ and „ensuring occupational safety“ clarify, that organizational health and safety are concrete management tasks for which top management is primarily responsible. However, middle and lower management are also promoters of a positive health culture and occupational safety and must support these measures. The third set of tasks, „health-promoting design of work activities“, is the responsibility of middle-level managers. Leadership corresponding to direct interaction between supervisors and employees, on the other hand, is a matter for middle management and the lower level. Employee health is not dependent on technical, structural and organizational factors solely. The climate at the workplace and job satisfaction are significantly influenced by the interaction of the actors involved. Due to their opportunities for targeted communication, direct supervisors have a significant influence on the health behavior of their employees. However, the implementation of the fourth field of action, „motivating and participative leadership of employees“, will only have the desired effect if the health concept is exemplified at higher hierarchical levels (role model function of top management) and top-down support is offered accordingly.³² According to these statements, the health of the workforce is an integral part of operational action and decision-making at all hierarchical levels. The entire management team must be significantly involved in implementing and shaping a health-oriented organizational culture.

Paragraph 5 of the German Occupational Health and Safety Act (ArbSchG) stipulates that employer must determine the hazards at the workplace for employees associated with their work. This involves an assessment of physical and, since 01.01.2014, also psychological hazards, with a final derivation of appropriate measures. The psychological aspects are difficult to grasp in a risk assessment in many companies, as there are a large number of different stress factors in the daily working environment. One important point is the behavior of managers, to which the employer should pay particular attention. This is because their behavior can have a negative impact on the mental health of the workforce.³³

³¹ Franke, F. & Felfe, J. (2011): loc. cit., p. 4.; Zimber, A. & Gregersen, S. (2006): BGW-Projekt „Führung und Gesundheit“ Literaturanalyse. URL: https://www.bgw-online.de/SharedDocs/Downloads/DE/Medientypen/Fachartikel/BGW-Projekt-Fuehrung-Gesundheit-Download.pdf__blob=publication-File. Berufsgenossenschaft für Gesundheitsdienst - BGW, Hamburg. Aufgerufen am: 08.11.2020.

³² Zimber, A. & Gregersen, S. (2006): loc. cit., p. 19-20.

³³ Hahnzog, Simon (2015): Psychische Gefährdungsbeurteilung - Impulse für den Mittelstand. Wiesbaden: Springer Gabler, p. 1-3.

What characterizes a leader in the context of organizational health management?

While competencies such as the ability to structure, control processes or optimize productivity certainly characterize a good supervisor, they do not automatically constitute a healthy and supportive leadership style. Supervisors who lead in a healthy and supportive way have a high level of social competence, promote job satisfaction and motivation, and ideally manage to reconcile the individual needs of employees with the goals of the organization.

According to a study conducted by the University of St. Gallen/Switzerland, promising leadership that contributes to a significant increase in employee health is primarily characterized by a combination of results-oriented and inspirational leadership. More specifically, this involves managers communicating clearly and transparently, providing their employees with differentiated feedback, and praising at regular intervals when performance is good, but also offering constructive criticism when performance needs improvement. In addition, they also act as role models in this study, providing individual support to their employees and encouraging them to think along with them. In the spirit of „healthy leadership“, they treat both themselves and their employees with respect.

In this respect, healthy and supportive leadership includes a healthy self-leadership, since supervisors in particular are also exposed to high levels of stress and as already mentioned, have to act as role models. The health behavior of supervisors can influence the health of employees by suggesting and adopting certain behaviors. If it is perceived that the supervisors constantly exceed their limits, the impression can quickly arise that this behavior is also expected of the employees. A conscious approach to their own health, on the other hand, can have a positive influence on the health actions of employees.

Furthermore, numerous studies in the past have been able to prove a connection between health-related variables and the extent of support from supervisors. Employees who do not feel socially supported are more often irritable, have work-related anxiety and suffer more frequently from exhaustion depression. These factors have an impact on general satisfaction and productivity. In this context, the creation of suitable room for maneuver also plays an important role. Support should be tailored to the individual employee. While some employees may need additional guidance and direction to achieve a goal, others may be less dependent on it. It is important to have the security of being able to fall back on the support of the supervisor if necessary.

In addition, supervisors can influence an adequate workload for individual employees. This can counteract both excessive and insufficient demands. In this context, it is useful to obtain feedback on the quantity of tasks, perception of the workload and time resources, and to prioritize tasks or offer new challenges. This idea will be demonstrated in more detail in the next paragraph.

Support-oriented Leadership in the Context of organizational Health Management as a protective Shield for mental Illness and Burnout

With leadership built on social support, participation and opportunities to have their say, employees experience appreciation, praise, recognition and access to additional resources. The esteem factor denotes a positive basic attitude and acceptance toward employees. Furthermore, this also represents a decisive health factor. According to his model of the gratification crisis of SIGRIST, stress arises from an imbalance between expenditure and reward. Thus, an employee's health is impaired if he or she does not feel sufficiently rewarded for his or her work.³⁴

The factors of praise and recognition can be understood as positive feedback on a performance. Regular feedback is a good tool for reflecting on the employee's performance.³⁵ In the absence of social contacts, psychosocial stresses can increase and, through social support, stresses and strains can be avoided, but also existing stresses can be absorbed. An existing, well-functioning network thus stands for social togetherness as well as the type, scope and quality of interpersonal relationships. Social relationships have a decisive influence on emotions, motivation, cognitive processes, behavior and the health of the employee.³⁶

Employees also need a certain amount of freedom to make decisions and act within the scope of their work. This is, because a high control by supervisors has a psychologically stressful effect. Conversely, a basis of trust is created. Employees feel valued because they are allowed to decide important things for themselves within the scope of their work. As a result, employees feel a stronger sense of loyalty to the company and identify more strongly with their daily work. Questioning one's own room for maneuver and taking an interest in employees' wishes is a first step towards salutogenic employee management.

SPRENGER describes three possibilities for expanding the scope of action of employees. The supervisor has the option to increase employee's scope of action. The employees take on a broad spectrum of tasks instead of working on narrowly defined sub-tasks. In this sense, a periodic change of tasks (e.g. job rotation) would also be conceivable. Getting to know upstream and downstream work processes, as well as a deeper understanding of the associated quality requirements, is a welcome learning and side effect. The scope for decision-making and control can also be increased. In addition to the task competence, the corresponding decision-making competence is passed on to the employee. However, it should be examined in which area and to what extent a transfer of the decision-making and control leeway makes sense. Ultimately, the

³⁴ Siegrist, J. (2015): Arbeitswelt und stressbedingte Erkrankungen. Forschungsevidenz und präventive Maßnahmen. München: Elsevier.

³⁵ Kloimüller, I. (2013): Wertschöpfung durch Wertschätzung. In: Hernsteiner - Fachzeitschrift für Management- und Leadership-Entwicklung, 02/2013. Wien: Hernstein Institut für Management und Leadership, wko campus wien, p. 12.

³⁶ Tintor, M. (2015): Betriebliches Gesundheitsmanagement in Restrukturierungsprozessen. Wiesbaden: Springer, p. 60.

employees, their personality and abilities must fit the expanded area of responsibility. Once the decision-making authority has been transferred, supervisors must of course be able to live with the results. As a third option, it is conceivable to create or expand individual freedom within the framework of daily work. This mainly involves more self-determination in terms of time and place, e.g. flexible working hours, flexible work locations, or the opportunity to plan appointments independently.³⁷ The goal of a supervisor is to create an optimal interplay between these three components.

The art of a health- and support oriented leadership is to formulate work instructions in such a way that employees perceive them as challenging. Avoiding stress is possible through clearly formulated expectations. In order to make a work instruction explicit as a challenge and not as a burden, the stressor must be given a meaning. A wish represents a value. So the clue would be to find out employees' needs in the context of his daily work, or in his dealings with colleagues and supervisors (let's leave economic motives aside for a moment). When assigning work processes and tasks, a supervisor should make sure that these are communicated in an understandable and appreciative manner, presenting them in a larger context. Only in this way is it possible to convince employees of a task and to give it meaning.³⁸

In order to create meaning as a supervisor, additional development and learning opportunities should be created for staff members. Especially because these are the key to a culture of ideas and innovation. Here, too, the manager must find out what inspires each individual person and where his or her personal goals lie. Monetary incentives alone are therefore often not enough to ensure the satisfaction and well-being of the workforce.³⁹

As a supervisor, it is important to know whether work instructions or information provided to employees are comprehensible, or whether the problems are perceived in a cognitively meaningful way in the organizational context. This requires a high degree of social and emotional competence. Does the employee perceive them as orderly, consistent, structured, or as arbitrary, inexplicable, random and disorderly? Supervisors should first conduct an analysis of the problem or task. This can be done by asking various questions regarding e. g. if the problem is self-contained, the ramifications, moral aspects, or if such problems appeared before in their organization. Another point to consider is whether the issue is improving or worsening - regardless of what is being done. The problem can thus be ordered and understood - „*Chaos gives way to order and clarity*.“⁴⁰ The interest in creating transparency, an open information policy and a

³⁷ Sprenger, B. (2012): Die praktische Umsetzung im Unternehmen. In: Lohmer, M.; Sprenger, B.; Wahlert, J. von: *Gesundes Führen, Life-Balance versus Burnout im Unternehmen*. Schattauer Verlag, Stuttgart, p. 60.

³⁸ Antonovsky, A. (1997): *Salutogenese. Zur Entmystifizierung der Gesundheit*. Tübingen: DGVT, p. 132.

³⁹ Tintor, M. (2015): loc. cit., p. 20.

⁴⁰ Antonovsky, A. (1997): loc. cit., p. 131.

good feedback and communication culture can also be cited as positive characteristics of supervisors in the area of organizational health management.⁴¹

In summary, organizational health management with the effective tool of health-oriented leadership is therefore not only a trend of recent years, but also a strategy for meeting the challenges of demographic change. Organizations in Germany are not just expecting these in a few years' time; many businesses are already confronted with the effects - many of them, also medium sized companies, are deciding to establish organizational health management as a personnel marketing argument and ultimately as a recruiting aid. Organizational health management is not a series of individual measures and is often equated with company health promotion or company sports. The idea, however, is rather a systematic and permanent procedure to improve the psychological and mental, but also the physical health of the employees by designing operational processes and the leadership of the employees. The aim is to increase productivity and the performance level of the company and to present its image to the outside world in a positive light.

1.3. Definition of the Concept of social Network and its Demarcation to other social Structures

This chapter distinguishes the network concept from the closely related concept of social support and represents the second approach to the dissertation topic as presented in Figure 1. In the following, it characterizes social networks as mediating and consulting bodies. In this sense they are available as social resources. Social networks can be starting points for direct and indirect interventions to strengthen and mobilize existing, or to build up new support potential.

Reception of the Network Perspective in Social Sciences – an Overview

In the field of social support there was a real research boom in Germany in the 1980s and early 1990s, which declined somewhat at the end of the 1990s.⁴² During this time (small network boom) a considerable successes in the development of theories could be recorded, but also an unmanageable amount of empirical data emerged, which are printed in monographs and publications in sociological, sociological, psychological, educational and also medical journals were.⁴³ STRAUS gives the reasons for the first boom in network research. On the one hand, networks established themselves as a feature of alternative living environments during this time. Networks were hopefuls for the stronger implementation of social support, more community and

⁴¹ Bach, C. (2013): Mehr Wertschätzung und Anerkennung im Job: Wie Mitarbeiter und Führungskräfte die betriebliche Zusammenarbeit fördern und die Beziehungsqualität verbessern können. Hamburg: Tredition, p. 15.

⁴² Nestmann, F. (2000a): loc. cit., p. 259

⁴³ Jungbauer-Gans, M. (2002): Ungleichheit, soziale Beziehungen und Gesundheit. Wiesbaden: VS Verlag für Sozialwissenschaften, p. 122.

humanity as well as forms of cooperation characterized by creativity, equal rights and non-alienated work. The development described below as a big network boom did not begin until the late 1990s. It was only with the triumph of the Internet that it became clear that the network perspective not only helps to make complex processes easier to understand, but that we have more and more network processes in a wide variety of everyday areas.⁴⁴ The focus of social science research today is on the theory and empiricism of network interventions. The areas of intervention include working with individual social networks as well as institutional and interorganizational networks.⁴⁵ The network's metaphor is used in various scientific disciplines.⁴⁶ Networking has long since ceased to be defined as systems connected by information technology or specific mathematical relationship patterns. Within the framework of general sociology, the focus is on social processes and social structures.⁴⁷

Networks have become particularly important in the study of groups in social theory.⁴⁸ In terms of social relationships, MITCHELL defines a network as: „[...] *a specific set of linkages among a defined set of actors, with the additional property that the characteristics of these linkages as a whole may be used to interpret the social behavior of the actors involved.*”⁴⁹ The concept of the social network thus focuses on the totality of social relationships, and in part also on the relations between different relationships in a network (e. g. clustering). Network research, on the other hand, is concerned with the systematic search for the significance of structural features of the network and social relationships for social integration.⁵⁰ In system theory, structures are understood and formally described as essential social characteristics, with the aim of explaining the emergence or change of structures through individual action.⁵¹ Thus GRANOVETTER refers in his „Theory of Embeddedness“ to how action is integrated into social relationships. In order to adequately capture purposeful action, it is necessary to consider the integration of the actors into the social structure. Direct and indirect social relationships open possibilities or they are obstacles for the purposeful action of the actor. Network analysis looks at the behavior of individuals against the background of structural

⁴⁴ Straus, F. (2010): Die neue Welt der Netzwerke - Ein Paradigma für die Gesellschaft des 21. Jahrhunderts? In: Hergenröder, C. W.: Gläubiger, Schuldner, Arme - Netzwerke und die Rolle des Vertrauens. Wiesbaden: Springer VS, p. 16 & 19.

⁴⁵ Otto, U. & Bauer, P. (2005): Mit Netzwerken professionell zusammenarbeiten. Soziale Netzwerke in Lebenslauf- und Lebenslagenperspektive. Deutsche Gesellschaft für Verhaltenstherapie, Tübingen, 2005, p. 22.

⁴⁶ Winker, G. (1999): Koordination in strategischen Netzwerken. Springer: Wiesbaden, p. 2.

⁴⁷ Weyer, Johannes: Soziale Netzwerke. Konzepte und Methoden der sozialwissenschaftlichen Netzwerkforschung. München: Oldenbourg Verlag, p. 50.

⁴⁸ A differentiation within sociological theories can be made between social theories, which are interested in the basic functioning of the social, and social theories, whose objective is the analytics of the social in modernity.

⁴⁹ Mitchell, J. C. (1969): The Concept and Use of Social Networks. In: J. Clyde Mitchell (Ed.), Network Analysis. Studies in Human Interaction, Paris: Mouton, p. 2.

⁵⁰ Hollstein, B. (2001): Grenzen sozialer Integration - Zur Konzeption informeller Beziehungen und Netzwerke. Wiesbaden: VS Verlag für Sozialwissenschaften, p. 44.

⁵¹ Benger, A. (2007): Gestaltung von Wertschöpfungsnetzwerken. Berlin: Gito, p. 73.

relationships.

Distinctions between „strong“ and „weak“ relationships are as much a part of network theory assumptions and fields of investigation as the „multiplexity“ of relationships and the emergence of „social capital“.⁵² According to DE CAROLIS, social capital in a network is expressed to varying degrees - a higher social capital in a network means a high density of relationships for the network. Consequently, it becomes easier to use the external contacts of other members of the network.⁵³ While sociology mainly takes a structuralist approach and examines social networks according to their structures and relationship patterns, psychological network research examines social networks primarily with regard to their support function in coping with crises and diseases⁵⁴ - i.e. functional or adaptive interrelationships.⁵⁵ Just as psychology in general focuses on the experience and behavior of individuals, psychological network research is accordingly less concerned with the analysis of groups or systems and more with the individual and his social relationships.⁵⁶ In psychology, social networks are primarily associated in terms of content with functions of social relationships, especially with social support, in the sense of support resources, support networks or social supporters.⁵⁷ Network research is primarily concerned with the analysis of the effects of social networks on the well-being and health of an individual, the prevention of illness and its genesis. Social networks can act like a social immune system and the function of social support can be described as a „stress buffer“.⁵⁸

Psychological approaches to explain these effects assume that social support satisfies social needs, influences strategies for coping with stressors and contributes to orientation in complex social situations.⁵⁹ Thus, social support can cushion harmful effects in stressful life events and

⁵² Granovetter, M. S.: (1985): Economic Action and Social Structure: The Problem of “Embeddedness”. In: American Journal of Sociology, H. 3, pp. 481-510.

⁵³ De Carolis, D. M. & Saporito, P. (2006): Social Capital, Cognition and entrepreneurial Opportunities: A theoretical Framework. In: Entrepreneurship Theory and Practice 30(1), pp. 51-56.

⁵⁴ Jütte, W. (2005): Methodische Überlegungen zu Netzwerkanalysen. Report, (28) 2/2005, Bonn: Deutsches Institut für Erwachsenenbildung. URL: <https://www.die-bonn.de/doks/jutte0503.pdf>. Last accessed: 26.02.2019.

⁵⁵ Von der Lippe, H. (2012): Zur Fundierung einer psychologischen Netzwerkforschung. In: Altrichter, H.; Berkemeyer, N.; Kuper, H. & Maag Merki, K.: Netzwerke im Bildungsbereich. Waxmann: Münster, p. 36.

⁵⁶ Waterkamp, C. (2007): Haupt- und Ehrenamtliche - Freiwillig Engagierte - Gemeinwesenorientierte Netzwerkförderung (Dissertation). URL: <http://www.uni-kassel.de/upress/online/frei/978-3-89958-304-5.volltext.frei.pdf>. Kassel: Universität Kassel, pp. 48 & 49.

⁵⁷ Lairaiter, A.-R. (2008): Soziales Netzwerk in der Psychologie. Forum Gemeindepsychologie, 13(1), München: Deutsches Jugendinstitut, p. 5.

⁵⁸ Nestmann, F. (2005): Netzwerkinformation und soziale Unterstützung fördern: Effektivität und Maximen der Nachhaltigkeit. In: Otto, U. & Bauer, P. (2005): Mit Netzwerken professionell zusammenarbeiten. Soziale Netzwerke in Lebenslauf- und Lebenslageperspektive, Tübingen: dgvt, pp. 131-156.

⁵⁹ Uchino, B. N. (2004): Current Perspectives in Psychology. Social Support and physical Health: Understanding the Health Consequences of Relationships. New Haven: US: Yale University Press, p. 11.

permanent stress. It thus represents a resource for coping with both physical and mental illnesses. These different research interests of the various disciplines are reflected accordingly in the access to the concept of social support. The psychological approach focuses on the content of the support services, on the description of the personal conditions for the mobilization of social support, and on the analysis of the effectiveness of social support. From a sociological perspective, the approach is structuralist, i.e. support processes within social networks are considered in the context of social relationship patterns and structures. The substantive aspect of „social support“ is only relevant in sociology when it comes to questions such as which persons from the social environment are available as sources of support, which persons are sources of support and how these persons are structurally connected to each other.⁶⁰

In pedagogy, the network perspective is classically taken up in social pedagogy, whereby the reception is primarily within action-guiding or application-oriented concepts. Not structures or functions of social networks are primarily considered, but rather, against the background of the importance of social networks for development, education and training, they are focused on their inventory utilization. An example of this is the empowerment concept, which is frequently used in pedagogy, and which as a principle of intervention is intended to enable people to shape their lives according to their own goals, whereby personal and social resources for coping with life move to the center or available social support for the environment is activated.⁶¹

Management sociology is still a young sub-discipline of sociology, which is closely linked to premises of social and organizational theory. In this respect, it represents an extension of classical management theory, as it analyses not only management as a specific group of actors, but also, and above all, organizations as a social system and as the structural background of action. It investigates the contribution that managers and executives make to the structuring of organizations and the consequences of their social positioning as economic elite under the conditions of changing organizational constellations of action and social structures. It aims to make visible, through historical and concrete analyses, profound social structures that open up special opportunities for power and influence as well as excellent careers for people in management positions. On the other hand, it also shows the consequences for those for whom these career paths remain closed.

⁶⁰ Röhrle, B. (1987): Soziale Netzwerke und Unterstützung. Befunde und Rezeptionsvarianten eines „neuen“ Konzepts in der Psychologie. Heidelberg: Universität, Psychologisches Institut, pp. 77-87; Reithmayr, K. (2008): Soziale Unterstützung - ein Erfolgsfaktor für den beruflichen Wiedereinstieg nach einer beruflichen Rehabilitation? Dissertation. Köln: Humanwissenschaftlichen Fakultät, Universität Köln. URL: https://kups.ub.uni-koeln.de/2484/2/Dissertation_Veroeffentlichung.pdf, p. 15.

⁶¹ Reithmayr, K. (2008): loc. cit, p. 15.

Definition and Delimitation of the Term „Social Network” in System Theory

Networks are everywhere. They surround us in everyday social, economic and technical life and meet us in different contexts.⁶² The use of social networks as a theoretical concept goes back to the social sciences. In the early twentieth century, SIMMEL spoke of the „geometry of social life“⁶³. VON WIESE addressed the “bonds between individuals”.⁶⁴ Other forerunners are MORENO with his „sociometry“ and „experimental communication network research“⁶⁵ These early theories have in common that social networks were related to meshes of relationships, i.e. the human being is the starting point for the analysis.

More recent definitions, such as those of KEUPP, focus on the organization, or network itself, and describe social networks as „*the specific web patterns of everyday social relationships*“.⁶⁶ The previous definition by MITCHELL refers to the possibility of understanding the social action of individuals through insights into a particular social network. The basis for this is the view that social action is not determined solely by personality traits, internal intentions and knowledge of the individual actors, but that the social system in which a member of the network is integrated already helps to shape the respective goals and ideas, expands or restricts options for action and thus represents the framework conditions.⁶⁷ Similarly, HALL & WELLMAN describe social networks - as “[...] *a set of nodes or actors (persons or organizations) linked by social relationships or ties of a specified type.*”⁶⁸

In this respect, CROSS & PARKER name two different perspectives on social networks, which they describe as „*personal (egocentric) network approach*“ on the one hand and „*group (or sociocentric) network approach*“ on the other.⁶⁹ PATARAIA; MARGARYAN; FALCONER & LITTLEJOHN refer to SCOTT & CARRINGTON and sum up the description of both approaches: „*The*

⁶² Krajic, K. (2017): Netzwerke überall? Anmerkungen zum wissenschaftlichen und praktischen Gebrauch von Netzwerk und Netzwerkanalyse. *Pädiatrie und Pädologie Austria*, 52(1), p. 5.

⁶³ Simmel, G., 1968 [1908]: *Soziologie. Untersuchungen über die Formen der Vergesellschaftung*. Berlin: Duncker & Humblot, p. 10.

⁶⁴ Wiese, L. von (1921): Zur Methodologie der Beziehungslehre. In: *Kölner Vierteljahrshefte für Sozialwissenschaften 1: System der allgemeinen Soziologie*. Berlin: Duncker & Humblot, pp. 47-55. On the concept of „connectedness“ see also the monology: Wiese, L. von (1951): *Abhängigkeit und Selbständigkeit im Sozialen Leben*. Schriften der soziologischen Abteilung des Forschungsinstituts für Sozial- und Verwaltungswissenschaften in Köln: N. F. d. Schriften des Forschungsinstituts für Sozialwissenschaften. Wiesbaden: VS Verlag für Sozialwissenschaften, p. 3; 23; 35; 56 & 256.

⁶⁵ Moreno, J. L. (1954): *Die Grundlagen der Soziometrie. Wege zur Neuordnung der Gesellschaft*. Wiesbaden: Westdeutscher Verlag. More practice-oriented: Stadler, C. (2014): *Soziometrie. Messung, Darstellung, Analyse und Intervention in sozialen Beziehungen*. Wiesbaden: Springer VS.

⁶⁶ Keupp, H. (1987): *Soziale Netzwerke. Eine Metapher des gesellschaftlichen Umbruchs?* In: Röhrle, B. & Keupp, H.: *Soziale Netzwerke*. Frankfurt: Campus, p. 7.

⁶⁷ Mitchell, J. C. (1969): loc. cit., p. 2.

⁶⁸ Hall, A., & Wellman, B. (1985): *Social Networks and social Support*. In: Cohen, S. & Syme, S. L. (Eds.). *Social Support and Health*. San Diego: Academic Press, pp. 23-41.

⁶⁹ Cross, R. and Parker, A. (2004), *The Hidden Power of social Networks: Understanding how Work really gets done in Organizations*, Boston: Harvard Business School Press, p. 143.

sociocentric approach takes a bird's-eye view of social structure, focusing on the pattern of relationships between people within a socially defined group. In contrast, the egocentric, personal network analysis centers on individuals and their connections."⁷⁰

This work approaches the topic through the ego-centered network concept; each individual or member is seen as the center and starting point of their personal social network. Common to both approaches is the representation of social networks according to their metaphorical definition provided by JANSEN. According to her, social networks can be generally defined „as a set of nodes [...], which are connected to each other by a set of relationships“ - a definition that resembles that of HALL & WELLMANN. Actors, who are represented by nodes, are thus connected by relations (edges) running between them. Edges represent the relationship between the nodes. The relationship between two nodes can be, for example, a personal acquaintance, a family relationship, a friendly relationship or a formal relationship.⁷¹ According to this definition, a social network is defined by elements that are in a certain relation to each other. Howsoever social networks are defined, the basic structures of relationships in social networks are dyads and triads. The smallest possible unit of a social network is the dyad and consists of two nodes followed by the triad, which is formed by three elements that are in a relationship.⁷²

In the newer understanding of social networks, their units do not necessarily have to be individuals. Although the term social network is mainly used to refer to the network of relationships between people, it can also be applied to other social units, such as organizations, parties, associations or social positions.⁷³ Particularly in sociologically oriented network research, this more comprehensive understanding of social networks is used more often.

Social Networks and the Demarcation to Groups

As already noted in the previous paragraph, the smallest possible network form, namely that consisting of only two people, is called a „dyad“.⁷⁴ But as soon as more than two people are related

⁷⁰ Patariaia, N.; Margaryan, A.; Falconer, I.; Littlejohn, A. & Falconer, J. (2014): Discovering Academics' Key Learning Connections: An ego-centric Network Approach to analysing Learning about Teaching. *Journal of Workplace Learning* (26)1, pp. 58. Scott, J. & Carrington, P. J. (2011), *The Sage Handbook of Social Network Analysis*, Thousand Oaks: Sage Publications, p. 19.

⁷¹ Jansen, D. (1999): *Einführung in die Netzwerkanalyse: Grundlagen, Methoden, Anwendungen*. Opladen: Leske und Budrich, p. 53. See in this regard also: Keupp, H. (1987): loc. cit., p. 12: „People are represented as nodes, from which connecting ties lead to other people, which in turn are symbolized as nodes.“

⁷² Jansen, D. (1999): loc. cit., 54.

⁷³ Pappi, F. U. (1987): *Techniken der empirischen Sozialforschung*. Band 1. *Methoden der Netzwerkanalyse*. München: Oldenbourg, p. 13. Pappi defines a social network as „[...] a set of social units such as persons, positions, organizations, etc., linked by relationships of a certain type“.

⁷⁴ Jansen, D. (1999): loc. cit., 54. See also: Otto, A. (2002): *Management und Controlling von Supply Chains. Ein Modell auf der Basis der Netzwerktheorie*. Wiesbaden: Deutscher Universitätsverlag, p. 239. The author considers the dyad from the perspective of supply chain management and consciously speaks of stages in a network and not of social units: „The dyad is the smallest compound structural form in a network and therefore comprises only two stages.“

to each other, one speaks of a „group“. In the special case of three persons also a „triad“. This concept of the social group is defined in the literature in a different and varied and heterogeneous way, like the concept of the social network, which is made clear by the further course of this paragraph.

A widely accepted socio-psychological definition for the term „social group“ was developed by TAJFEL & TURNER and is applied to small groups as well as to ethnic groups and whole nations: „We can conceptualize a group, in this sense, as a collection of individuals who [1] perceive themselves to be members of the same social category, [2] share some emotional involvement in this common definition of themselves, and [3] achieve some degree of social consensus about the evaluation of their group and of their membership in it.“⁷⁵

For NOLLMANN the direct interaction of the members is essential for the formation and continuation of a group.⁷⁶ This distinguishes the group from an organization in terms of its number of members, social structure (anonymous structure, formalized, anonymous meetings, etc.).

This means that a group is limited in size due to the necessary interaction. SADER speaks in this respect of a „transparency of the group for each member“.⁷⁷ Classical sociological definitions, such as those of HOMANS, also emphasize the „interaction of their participants“, which is important for member relationships.⁷⁸ KEUPP speaks of „relatively clearly definable group boundaries“⁷⁹ within which a „we-feeling“ of the group participants,⁸⁰ „a life of the whole“ and „an inner unity“⁸¹ develops, which LUHMANN describes as „group identity“. Group identity, which includes norms, rituals or expectations of members, ensures the continuity of a group.⁸² From these different definitions the core content can be extracted and formulated:

A group is a mesh of relationships with a transparent and manageable number of members, in which the individual participants are interactively connected to a high degree, identify with this group and feel a sense of belonging.

In the following the concept of network and group is distinguished from each other. Looking at networks from their structure, those with a high degree of unity (closed networks) and those with a multitude of network gaps (open networks) can be identified. Open networks are structures in

⁷⁵ Tajfel, H. & Turner, J. C. (1986): The social Identity Theory of Intergroup Behavior. In: Austin, W. C. & Worchel, S. (Ed.): Psychology of Intergroup Relations. Chicago: Nelson-Hall, p. 15.

⁷⁶ Nollmann, G. (1997): Konflikte in Interaktion, Gruppe und Organisation. Zur Konfliktsoziologie der modernen Gesellschaft. Wiesbaden: Westdeutscher Verlag, p. 102.

⁷⁷ Sader, M. (1991): Psychologie der Gruppe. Grundlagentexte Psychologie. Weinheim: Juventa, p. 39.

⁷⁸ Homans, G. C. (1970): Theorie der sozialen Gruppe. Opladen: Westdeutscher Verlag, p. 102.

⁷⁹ Keupp, H. (1987): loc. cit., p. 15.

⁸⁰ Schäfers, B. (1999): Einführung in die Gruppensoziologie. Geschichte - Theorien - Analysen. Heidelberg: Quelle und Meyer (UTB), p. 20.

⁸¹ Vierkant, A. (1982): Handwörterbuch der Soziologie, Stuttgart: Enke, p. 67.

⁸² Luhmann, N. (1997): Die Gesellschaft der Gesellschaft. Frankfurt: Suhrkamp, p. 576.

which not every actor is connected to other members of the network.⁸³ Rather, sub-networks exist or are created, which coexist weakly and unconnectedly.⁸⁴ Closed networks show a high degree of coherence between members. A large proportion of the potentially possible network connections are actually established, i.e. each network member is ideally connected to every other member.⁸⁵ WELLMANN also shares this opinion: „*the group is a social network*“ and indeed a special one, with the above-mentioned limitations inherent to the group, that „*its ties are closely confined to a delimited area and closely linked, so that almost all network members are directly connected to each other.*“⁸⁶ SRINIVAS & BÉTEILLE distinguish groups and networks in their study of Indian social structure: Groups are a bound unit, “[...] *a network, on the other hand, ramifies in every direction, and, for all practical purposes, stretches out indefinitely [...].*”⁸⁷ Consequently, the entire social network of an individual encompasses far more connections than its dyads and the close-meshed groups to which it belongs, including ramifications that are not present in the primary groups.⁸⁸ KEUPP refers to the principle of friends of friends, to whom the individual has no relationship, but who are nevertheless connected with his contacts. Even though such weak ties may at first seem quite advantageous and important because they extend the personal network by new, valuable connections,⁸⁹ in reality they pose a problem in maintaining or even establishing contact with these ties.⁹⁰ In network research, weak ties are attributed greater significance, as they are able to assume a bridging function between different subgroups of a network, several networks, and thus also different departments or teams, but they are not relevant for the maintenance and upkeep of a personal support network, as the close relationships with the supporters already exist.

Social Networks and the Demarcation to Communities

In analogy to the preceding description of the concept of social group, the understanding of a social network can be contrasted with the definition of community. For the first time, Friedrich Schleiermacher separated a community conceptually as a purpose-bound social structure from a

⁸³ In the further course of the work, unless otherwise stated, the term network and its properties refer to „open“ networks.

⁸⁴ Lin, N. (2001): Building a Network Theory of social Capital. In: Lin, N.; Cook, K. & Burt, R. S. (Ed.): Social Capital. Theory and Research, New York: Aldine de Gruyter, p. 10.

⁸⁵ Franzen, A. & Pointer, S. (2007): Sozialkapital: Konzeptualisierungen und Messungen. In: Freitag, M. (Ed.), Sozialkapital. Wiesbaden: Verlag für Sozialwissenschaften VS, p. 69.

⁸⁶ Wellmann, B. (2000): Die elektronische Gruppe als soziales Netzwerk. In: Thiedecke, U. (Ed.), Virtuelle Gruppen: Charakteristika und Problemdimensionen. Wiesbaden: Westdeutscher Verlag, pp. 135.

⁸⁷ Srinivas, M. N. & Béteille, A.: (1964): Networks in Indian social structure. Man 66, p. 166.

⁸⁸ Keupp, H. (1987): loc. cit., p. 15.

⁸⁹ Granovetter, M. S. (1973): The Strength of weak Ties. In: The American Journal of Sociology, 78(6), pp. 1372.

⁹⁰ Mühlhausen, V. (2015): Die Macht sozialer Online-Netzwerke: Wie sich unsere sozialen Beziehungen verändern. Hamburg: Diplomica.

society that does not pursue a specific goal.⁹¹ In contrast to social living conditions, community living conditions are based more on affect and tradition than on interests or rational purposes. The concern of communities is thus not the fulfilment of external functions, but the acquisition of meaning from themselves.⁹² In his explanations, WEBER uses the term „socialization“ and also emphasizes the „affective and traditional“, subjectively felt togetherness.⁹³

Like groups, TÖNNIES attributes clear lines of demarcation⁹⁴ and a high internal density of interaction to communities.⁹⁵

According to TÖNNIES community can take three central forms: neighborhood, kinship, and friendship. By kinship TÖNNIES understands the „community of blood“. This community, which can be associated with a traditional extended family, lives in a joint multi-generational household, has the same interests and represents a place of love, protection and security. According to TÖNNIES, one of the characteristics of kinship represents „will and spirit“. For TÖNNIES neighborhood means „community of the place“. Compared to kinship, this form of community is not permanent: It is created by getting used to each other and can continue to exist even if there is no daily interaction between neighbors. However, contact must be established regularly, because neighbors may otherwise move away from each other. Thus TÖNNIES emphasizes at this point that this community of place „*seeks its support in certain habits of gathering and sacred customs*“. The strongest community for TÖNNIES is friendship or comradeship: He describes it as a „community of the spirit“. It does not come about by birth or by belonging to a local community but is based on chance and free choice. TÖNNIES speaks of the „spiritual bond“ of community, which requires constant interaction between individuals. Friends must care for each other. Otherwise, the mental bond between the two individuals fades. Friends have common interests, opinions and goals, which results in their mental connection to each other. Beyond the proximity of the blood and the proximity of the place, spiritual closeness, such as that found in a religious community, but also in a circle of friends, thus ensures community alliances.⁹⁶

⁹¹ Geiger, T. (1982): Gesellschaft. In: Alfred Vierkandt (Ed.): Handwörterbuch der Soziologie. Stuttgart: Enke, p. 202 (ungekürzte Fassung).

⁹² Zapfel, S. & Promberger, M. (2011): Gemeinschaft, Gesellschaft und soziale Sicherung - Überlegungen zu Genese und Wandel des modernen Wohlfahrtsstaats. (IAB- Discussion Paper, 21/2011), Nürnberg, p. 7.

⁹³ Weber, M. (1980/1920): Wirtschaft und Gesellschaft - Grundriß der verstehenden Soziologie. Tübingen: Mohr.

⁹⁴ Pfütze, H. (1991): Antike Logik - moderne Hektik Zur Tradition subjektloser Denkfiguren in der Soziologie. In: Clausen, L. & Schlüter, C.: Hundert Jahre „Gemeinschaft und Gesellschaft“- Ferdinand Tönnies in der internationalen Diskussion. Wiesbaden: Springer VS, p. 183.

⁹⁵ Walther, M. (1991): Gemeinschaft und Gesellschaft bei Ferdinand Tönnies und in der Sozialphilosophie des 17. Jahrhunderts oder Von Althusius über Hobbes zu Spinoza und zurück. In: Clausen, L. & Schlüter, C.: Hundert Jahre „Gemeinschaft und Gesellschaft“- Ferdinand Tönnies in der internationalen Diskussion. Wiesbaden: Springer VS, p. 103.

⁹⁶ Tönnies, F. (1988): Gemeinschaft und Gesellschaft. Grundbegriffe der reinen Soziologie. Darmstadt: Wissenschaftliche Buchgesellschaft Darmstadt, p. 12 - 34.

Emotional closeness, depth of feeling and mutual helpfulness are enabled and maintained by the relatively small number of members and lasting personal relationships of communities.⁹⁷ The work of REDFIELD is also worth mentioning with regard to the concept of community. It defines four characteristic features for communities in the sense of ethnological research, which partly coincide with the aforementioned: [1] Distinctness: clear differentiation from other groups, [2] smallness: manageable number of members, [3] Homogeneity: very great agreement in the world views of the members and [4] self-sufficiency: economically and socially largely autarkic.⁹⁸

The following definition for the scope of this work can be derived from the previous points:

A community is an affect- and tradition-based, purpose-bound social structure, which is characterized by exclusive membership, a high density of interaction and a pronounced emotional, spiritual connection, which clearly distinguishes itself from other communities and groups by its homogeneity and acts economically and socially largely autarkic.

In addition to these positive aspects, the use of the community term in the current literature also conceals negative characteristics. For some members, their community is often an involuntary association, as they do not join voluntarily, but are born into it and are often profoundly shaped.⁹⁹ While in religious communities, communities of interest, but also political communities, the member is free to decide on his entry and the right to leave cannot be taken away from her/him¹⁰⁰, the family community is a special case. The example of a patchwork family makes this particularly clear: a married couple formally marries voluntarily, but the children become involuntary members of the family and in the worst-case family interests are put before their own interests (forced interests). A member's withdrawal from the family community is not possible simply because of his or her unchangeable lineage, as the Latin name *arbor consanguinitatis* (tree of consanguinity) metaphorically illustrates.

Is a community a social network? If, to stay with the example of the family, one compares a network with an extended family, which TÖNNIES described as a community of blood, no analogies to a social network can be seen at first. The general idea of a social network, as already mentioned, includes distant contacts - members connected at several levels do not even have to know each other in networks. Crucial is their connectivity and the possibility of establishing contacts via paths in a network. Basically, in a family it is also possible that not all members know each other. Just think of the descendants of former emigrants of the German overseas migration of the 19th and early 20th century or separation from siblings through divorce and the parents' breaking off contact. Neither the potential, practically realizable interaction with every other

⁹⁷ Schäfers, B. (2003): Gemeinschaft. In: Schäfers, B. (Ed.): Grundbegriffe der Soziologie. Opladen: Leske & Budrich, pp. 99-101.

⁹⁸ Haller, D. (2010) Dtv-Atlas Ethnologie. München: dtv, p. 177.

⁹⁹ Minkenber, M. & Willems, M. (2003): Politik und Religion. Wiesbaden, Springer VS, p. 62.

¹⁰⁰ Hillebrandt, K. (2012): Aszendentenunterhalt: Eine Kritik der normativen Grundlagen. Berlin: Berliner Juristische Universitätsschriften: Grundlagen des Rechts, p. 394.

member included, which SCHENK emphasizes is an important prerequisite and descriptive characteristic for a social network,¹⁰¹ is given in this case, nor is the prerequisite of a manageable number of members and close social interactions as a constitutive feature of a community, which TÖNNIES describes as a „high internal density“ of interaction. Another argument against the equation of network and family community according to the understanding of TÖNNIES is that networks neglect the collective character of a community. While for the constitution of a group the experienced feeling of belonging or the pure membership through formal criteria is sufficient as a distinguishing feature to the network concept, it is true for communities that it aims at a common lifestyle practice and the deepening of personal relationships, which also does not take place in networks.

In summary, the following definition of a social network can be derived:

A person's social network consists of all her/ his social relationships and, in addition, of all network members with whom that person is indirectly connected through her/ his direct relationships and with whom an actual possibility of interaction is given.

It clearly distinguishes the concept of network from other sociological constructs of social relations and provides the basis for further work.

Features of social Networks

In network research, it is not the combinations of characteristics of individual persons, nor their attitudes or subjectivity that are of interest; the focus is on the structure of relations. The starting point is not the point of view of individual persons, but rather the consideration of the consequences of the connections between the various units.¹⁰² For the structural and content-related analysis of social networks, additional characteristics are defined in addition to the various types of social networks, on which there is a broad consensus in the literature. When defining these characteristics, the authors did not orientate themselves on a uniform categorization, but rather the elements „gradually developed into a comprehensive fund used according to the interests at hand.“¹⁰³

The multitude of features, which represent the relationships and interdependencies between the elements, are located in systems of order, so-called feature groupings. Following RÖHRLE's explanations, the following characteristic groupings are possible: Structural (morphological) characteristics, relational characteristics and functional characteristics. In the following paragraphs, the individual groupings are introduced and some sub features are outlined in extracts:

¹⁰¹ Schenk, M. (1983): Das Konzept des sozialen Netzwerks. In: Neidhardt, F. (Ed.). Gruppensoziologie. Perspektiven und Materialien, Westdeutscher Verlag: Opladen, p. 93.

¹⁰² Mehler, A. & Lücking, A. (2017): Symposium: Was ist Netzwerkforschung? Soziologie 46(1), Deutsche Gesellschaft für Soziologie, Frankfurt: Campus, pp. 18 & 19.

¹⁰³ Röhrle, B. (1987): loc. cit., p. 15.

Structural (morphological Characteristics) of social Networks

Structural features of social networks include those characteristics that describe the formal attributes of the network. The entire social structure is the focus of interest. The characteristics are not used to characterize individual social relationships, but to describe the morphology of the entire social structure. „*The structure of social networks is thereby reconstructed as an overall order from the formal characteristics of individual connections.*“¹⁰⁴ According to RÖHRLÉ, structure-related measures include size (describes the number of network members of a person), density (indicates the extent to which the members of the network are directly connected to each other), accessibility (expresses how quickly and immediately an element can reach another within the social network). Often the term proximity is also used, as it can be assumed that a short distance from home means a high frequency of contact, centrality (degree of social integration) and composition (clusters/cliques or sectors/zones). If parts of networks have a comparable density, they are called clusters. Cliques have a density of almost 100%. Sectors as well as zones are normatively defined sub-units such as friends or relatives.¹⁰⁵ In summary, morphological (structural) characteristics thus show the quantity of the network and explain, on the one hand, the relationships that the people in a network have with each other and, on the other hand, the connections between the individual sectors.

Relational Characteristics of social Networks

Relational characteristics characterize the individual social relationships between the members of a network. „*The analysis of individual social relationships (relational characteristics) refers to formal characteristics, which are, however, in part closely related to the quality and possible evaluation processes by members of a social network.*“¹⁰⁶ Of particular note is the intensity of social connections - the degree of emotional closeness, which is made up of „[...] *the effort with which such relationships are maintained, the degree of emotional engagement or mutual trust and the degree of mutual support*“. According to GRANOVETTER, strong or weak relationships are distinguished and operationalized. Weak connections are less emotional and are usually found on the edge of personal networks. They are considered to have a decisive bridging function to other social circles. Strong connections, on the other hand, are relationships with close reference persons (significant others).¹⁰⁷ Other relational characteristics are more behavioral and characterized by objectivity, e. g. the content - the type of social content that connects network members. Furthermore, the directness indicates whether the mutual „knowing“ is one-sided or mutual. The relationship duration refers to the time dimension of the relationship. Other relational characteristics rather point to objectifiable characteristics of social relationships, e. g. behavioral proximity of the characteristic, frequency of

¹⁰⁴ Röhrle, B. (1987): loc. cit., p. 18.

¹⁰⁵ Röhrle, B. (1987): loc. cit., p. 19-21.

¹⁰⁶ Röhrle, B. (1987): loc. cit., p. 17.

¹⁰⁷ Granovetter, M. S. (1973): loc. cit., pp. 1360-1380.

contact or distinction between latent and actualized social relationships. Latent network relationships are characterized by an extremely low or almost zero contact frequency, but under certain conditions they are regarded as activatable social units, while updated relationships show a high degree of emotionality and contact frequency.¹⁰⁸ With regard to reciprocity or mutuality, which illustrates the so-called "taking and giving" in network relationships, it can be said: The more a social relationship benefits the respective recipient, the more self-centered this relationship is. One could conclude from this that when support is needed in working life (problems, conflicts, etc.), relationships between friends and the support recipient are less reciprocal than between the support recipient and close, familiar work colleagues.

Functional Characteristics of social Networks

Another important aspect is the focus when considering social networks, i.e. what functions social networks provide for a person. For RÖHRLE, social networks are characterized by functional features as „self-sustaining“ or „self-regulating systems“. Social networks are attributed two functions in this context: social control and social support. The functional characteristic that is essential for the present research topic and most frequently received in the literature is social support.¹⁰⁹

However, social networks also exercise social control, which contributes to the stability of social networks through normative and value-based guidelines. Deviation from this norm, i. e. behaviour that violates the social norms in a society or one of its substructures, should thus be prevented or restricted. If a norm exists, which is socially controlled, there are also deviations from these rules. PEUCKERT gives as examples the fraud on income tax return, a disregard of the traffic regulations or even the failure to greet one's neighbor.¹¹⁰

However, social networks can also be controlled from the outside via their functional properties. In parallel to the recording and evaluation of social networks, it is often necessary in organizations to remedy the weaknesses identified analytically. Besides to the aforementioned social actions in the sense of social supports and social controls, communicative processes are considered important regulative characteristics of social networks.

1.4. Resources and Social Capital as Prerequisites for Social Support

The benefit of a network for an individual lies in the *“totality of current and potential resources associated with the possession of a permanent network of [...] relationships of mutual knowing or recognizing.”* Friendships, family, contacts to neighbors or at work - Social networks fulfill functions which, according to

¹⁰⁸ Röhrle, B. (1987): loc. cit., p. 17.

¹⁰⁹ Röhrle, B. (1987): loc. cit., p. 18.

¹¹⁰ Peuckert, R. (2000): Abweichendes Verhalten und soziale Kontrolle. In: Korte, H. & Schäfers, B. (2000) (Eds.), Einführung in Hauptbegriffe der Soziologie. Opladen: Leske & Budrich, pp. 103-123.

BOURDIEU, can also be referred to as social capital.¹¹¹ The term social capital can first of all be understood as a metaphor - for the value that social structures (relationships and networks) can represent for individuals or groups in the implementation of their goals. Social structures are therefore to be understood as a kind of capital that can be used to create value.¹¹² The social capital approach according to BOURDIEU also asks about the support options contained in specific relationship structures. This includes all material benefits and resources „based on belonging to a group.“¹¹³ This category of resources includes support services such as lending money or helping out with small items of everyday use and intangible services such as repairs or childcare.

However, social networks also fulfil important functions about mental stability through the experience of affection and acceptance as well as the possibility of discussing problems with others. This creates a feeling of belonging. Besides social capital, emotional support is the second function of social networks.¹¹⁴ DIEWALD in this respect speaks of soft support factors and cites examples such as the mediation of recognition, sociability or a feeling of security.¹¹⁵

In the professional context, MAAS refers to „professional social capital“ and mentions in this context a variety of multiplex support services from the supervisor. They range from emotional support to the provision of information and the design of learning spaces. Emotional support includes above all appreciation, encouragement and positive confirmation. Women in particular, feel that emotional support is important for their own career. The provision of information includes advice, ideas and feedback on the work done, so that learning on a professional and personal level is made possible.¹¹⁶ Active maintenance and expansion of the professional social network (network management) serves to strengthen informal ties, the potential effect of which lies in facilitating work-related tasks. For example, people within the network provide resources or contacts, so that overall mutual benefits are realized. Examples are the simplification of processes (small official channels), the passing on of strategic information and assistance in individual career development.¹¹⁷

¹¹¹ Bourdieu, P. (1983): Ökonomisches Kapital, kulturelles Kapital, soziales Kapital. In: Kreckel, R. (Ed.), Soziale Ungleichheiten (Soziale Welt Sonderband 2), Göttingen: Otto Schwartz, pp. 190.

¹¹² Riemer, K. (2005): Sozialkapital und Kooperation: Zur Rolle von Sozialkapital im Management zwischenbetrieblicher Kooperationsbeziehungen. Ökonomik der Kooperation 3. Tübingen: Mohr & Siebeck, p. 58.

¹¹³ Bourdieu, P. (1983): loc. cit., p. 190.

¹¹⁴ Gestring, N.; Janßen, A. & Polat, A. (2006): Prozesse der Integration und Ausgrenzung. Wiesbaden: Springer VS.

¹¹⁵ Diewald, M. (1991): Soziale Beziehungen - Verlust oder Liberalisierung? Soziale Unterstützung in informellen Netzwerken. Berlin: Rainer Bohn, p. 73.

¹¹⁶ Maas, M. (2018): Karrierewege im Berufsfeld Investor Relations - Exploration eines neuen Berufsfeldes anhand eines Mixed-Methods-Designs. In: Alewell, D.; Kabst, R.; Martin, A.; Matiaske, W.; Nienhüser, W.; Schramm, F. & Weber, W. (Eds.): Empirische Personal- und Organisationsforschung 59, Augsburg, München: Rainer Hampp, p. 139.

¹¹⁷ Wolff, H. G. & Moser, K. (2006): Entwicklung und Validierung einer Networkingskala. Diagnostica 52(4), pp. 161-180.

Social capital has a crucial difference compared to other concepts of capital such as monetary capital or human capital. It does not lie in the absolute power of disposal of the owner, since it cannot be „*detached from the relationship between two or more participants*“.¹¹⁸ It is called relational in this sense.

For this reason, success can often also be described as a relational construct: Individuals benefit from a network of contacts in their search for information and professional positions and generally receive help and support in achieving their goals. Similarly, the success of social systems e. g. organizations or groups is based on relationships and networks. External relations with other market participants ensure access to resources and cooperation in the realization of projects. Internal relationships and social networks between individuals enable effective value creation processes.¹¹⁹ However, social capital is only of value if it can be accessed via the relationship. However, this is again only conceivable if the respective member grants this access. The member is prepared to do so if she/he expects a realistic, appropriate consideration, i.e. reciprocity is assumed. The assumption of a reciprocal exchange relationship presupposes trust in exchange partners, since in most cases the exchange is carried out with a time delay due to different situations of need. For this reason, trust is „*the basis of all well-functioning networks*“.¹²⁰

Due to the variety of explanatory approaches and definitions of social capital and social support,¹²¹ it is very difficult to define social support in a definitive way or to distinguish it clearly from social capital.¹²² Social capital can be seen as the value of each individual's existing relationships to resources and experiences, of making networks individually usable for themselves and, underlying this, of having the necessary knowledge about which networks exist for overcoming specific problems and, accordingly, of being able to select individually beneficial systems. Social capital is thus inherent in the structure of a network and in a certain sense also reflects aspects of the quality, quantity and intensity of relationships, as well as reciprocity immanent to relationships. Similarly, formal characteristics such as duration or proximity of the social relationship can be included in the concept of social capital, as well as various forms of social support that are made accessible by embedding them in social structures.¹²³

For the further approach, it can be summarized: Social capital is identified as the individually perceived support potential for instrumental and emotional actions, from the employee's personal social network.

¹¹⁸ Holzer, B. (2006): Netzwerke (Einsichten. Themen der Soziologie). Bielefeld: Transcript, p. 15.

¹¹⁹ Riemer, K. (2005): loc. cit., p. 59.

¹²⁰ Friedschrüder, Thomas (2005): Spielanleitung für Netzwerker. Wien: Facultas, p. 36.

¹²¹ Haug, S. (1998): Soziales Kapital - Ein kritischer Überblick über den aktuellen Forschungsstand. Mannheimer Zentrum für Europäische Sozialforschung, Arbeitsbereich II / Nr. 15, Mannheim, p. 26.

¹²² Diewald M. & Sattler S. (2010): loc. cit., p. 689.

¹²³ Vonneilich, N. (2016): Sozialer Status, soziale Beziehungen und subjektive Gesundheit - Ergebnisse auf Basis längsschnittlicher Analysen. Berlin: LIT, pp. 37 & 38.

1.5. The Composition of Social Support as a personal Resource and Meta-constructure, embedded in social Networks

Social networks and social support, which help to avoid stress, to reduce the effects of stress and stress damaging to health, to cope with crises and illnesses that have occurred or to overcome long-term impairments of well-being and mental health, have long been important aspects of sociological, psychological and medical research. As a psychosocial resource, social support has a significant impact on mental health. Among other things, it can improve mental well-being, reduce stress and mitigate the effects of adverse living conditions.¹²⁴ Significant influences are attributed to community psychology,¹²⁵ social psychiatry,¹²⁶ social therapy,¹²⁷ attachment theory¹²⁸ and stress and coping theory.¹²⁹ Furthermore, some authors, e. g. KLUSMANN¹³⁰ describe the catalogue of social needs postulated by WEISS as an early example of research on social support.¹³¹

Research on social support focuses on social networks and the support services that are effective within them. Such networks include, for example, families, friends, acquaintances and neighborhoods as well as cultural or religious communities in which people come together, but also networks in the work context. Ideally, social networks are used in relationships to open up and make effective the most diverse forms and services of social support. These include, for example: Information about possibilities of help, advice on problems and decision-making, care in case of illness or need of care, practical help in life, material help and sociability, joint undertakings and discussions. In relationships that are at best characterized by reciprocity, feelings of belonging, personal esteem, security and orientation also arise. The effectiveness of social support services can be illustrated by means of different models that apply alongside each other. Social support that is granted or denied can have a direct effect (positive and negative) on people's

¹²⁴ Borgmann, L-S.; Rattay, P. & Lampert, T. (2017): Soziale Unterstützung als Ressource für Gesundheit in Deutschland. *Journal of Health Monitoring* 2017.2(4), Berlin: Robert Koch Institut, p. 117.

¹²⁵ Barrera, M. (2000): Social Support Research in Community Psychology. In: Rappaport J. & Seidman, E. (Eds.) *Handbook of Community Psychology*. New York: Kluwer Academic - Plenum Publishers, p. 215.

¹²⁶ Keupp, H. (1982): Soziale Netzwerke. In: Keupp, H. & Rerrich, D. (Eds.), *Psychosoziale Praxis*. Ein Handbuch in Schlüsselbegriffen. München: Urban & Schwarzenberg, pp. 43-53.

¹²⁷ Schwendter, R. (2000): Einführung in die Soziale Therapie. Tübingen: dgvt, pp. 264-270.

¹²⁸ Bowlby, J. (1969): *Attachment and Loss*, Vol. 1: Attachment. New York: Basic Books. Bowlby, J. (1973): *Attachment and Loss*, Vol. 2: Separation: Anxiety and Anger. New York: Basic Books. Bowlby, J. (1980): *Attachment and Loss*, Vol. 3: Loss, Sadness and Depression. New York: Basic Books.

¹²⁹ Lazarus, R. & Folkman, S. (1984): *Stress, Appraisal, and Coping*. New York: Springer, pp. 259-260 & 296.

¹³⁰ Klusmann D. (1989): Methoden zu Untersuchung sozialer Unterstützung und persönlicher Netzwerke. In: Angermeyer M. C. & Klusmann, D. (Ed.). *Soziales Netzwerk*. Ein neues Konzept für die Psychiatrie. Berlin: Springer, pp. 17-63.

¹³¹ Weiss, R. (1974): The Provisions of social Relationships. In: Rubin, Z. (Ed.), *Doing unto Others*. Englewood Cliffs: Prentice Hall, pp. 17-26.

well-being. In a positive sense, it promotes health and/or helps in coping with illness.¹³² In the second chapter of this study, the effects of social support are discussed in more detail.

Social Support - a „Meta-Construct“

If the term social network is used to describe structures of social relationships, the term social support, on the other hand, includes central functions of emotional relationships that are mediated via network structures. KAHN & ANTONUCCI's Convoy Model, metaphorically describes the relationship between the two concepts. Social networks are the vehicle through which social support is exchanged.¹³³

In the mid-1970s, the question of the significance of social relationships in the etiology of mental disorders began to be addressed. The best known and most widely acclaimed publications on this topic were the articles of CASSEL and COBB. These two researchers showed that people with few or even harmful social relationships are more likely to be ill than those with more rewarding relationships. CASSEL formulated the term social support from a social-epidemiological perspective and based on animal experiments. In his view, social support can be taken for granted simply by the presence of „other members of the same species“. In the definition, neither the quality of the relationship nor the type of interaction is important.¹³⁴ A further conceptual interpretation according to COBB focuses social support on information „[...] leading the subject to believe that he is cared for and loved, esteemed, and a member of a network of mutual obligations.“¹³⁵ Since the mid-1980s, social support has been understood as a „multidimensional paradigmatic construct comprising different levels, components and perspectives.“¹³⁶ BARRERA mentions social embeddedness, perceived social support and enacted social support as distinguishing features.¹³⁷ VAUX conceptualizes social support with three dimensions: [1] support network resources, [2] supportive behavior and [3] subjective appraisals of support.¹³⁸ HOUSE defines social support through the support content as: „[...] an interpersonal transaction involving one or more of the following: [1] emotional concern (liking, love, empathy), [2] instrumental aid (goods or services), [3] information (about the environment) or [4] appraisal (information relevant to self-evaluation).“¹³⁹

¹³² Marquardsen, K. (2012): Aktivierung und soziale Netzwerke. Wiesbaden: Springer VS, pp. 70-73.

¹³³ Kahn, R. L. & Antonucci, T. C. (1980): Convoys over the Life Course: Attachment, Roles and social Support. In: Baltes, P. B. & Brim, O. (Eds.), Life-Span Development and Behavior, 3, New York: Academic Press, p. 269.

¹³⁴ Cassel, J. (1974): The Contribution of social Environment to Host Resistance. In: American Journal of Epidemiology, 104, pp. 479.

¹³⁵ Cobb, S. (1976): Social Support as Moderator of Life-Stress. Psychosomatic Medicine, 38, p. 300.

¹³⁶ Lairaiter, A.-R. (2009): Soziales Netzwerk und soziale Unterstützung. In: Lenz, K. & Nestmann, F. (Ed.), Handbuch persönliche Beziehungen. Weinheim: Beltz Juventa, p. 87.

¹³⁷ Barrera, M. (1986): Distinctions between social Support Concepts, Measures, and Models. American Journal of Community Psychology, 14, pp. 415-417.

¹³⁸ Vaux, A. (1990): An ecological Approach to Understanding and Facilitating social Support. Journal of Social and Personal Relationships, 7(4), Thousand Oaks: Sage Publications, p. 508.

¹³⁹ House, J. W. (1981): Work Stress and social Support. Reading: Addison-Wesley, p. 39.

Due to the multidimensionality of this complex phenomenon, the terms meta-construct or umbrella-term¹⁴⁰ and as a result there is a corresponding abundance of attempts at definition, which in German-speaking health research often include the terms „sozialer Rückhalt“¹⁴¹ and „soziale Rückendeckung“¹⁴² as synonyms for social support.¹⁴³ More generally, COHEN & SYME define social support as „[...] resources provided by other persons.“¹⁴⁴

The definition of KAPLAN, CASSEL & GORE emphasizes the different dimensions of the concept of support. Social support is defined as „[...] the degree to which a person's basic social needs are gratified through interaction with others basic social needs include affection, esteem, or approval, belonging, identity and security. These needs may be met either by the provision of socioemotional aid (e.g. affection, sympathy and understanding, acceptance and esteem from significant others) or the provision of instrumental aid (e.g. advice, information, help, with family or work responsibilities, financial aid“.¹⁴⁵ According to VEIEL social support can be understood as a function of a person's social environment in satisfying their needs.¹⁴⁶ A definition emphasizing the interactive aspect describes social support as „[...] those social interactions or relationships that provide individuals with actual assistance or that embed individuals within a social system believed to provide love, caring, or a sense of attachment to a valued social group or dyad.“¹⁴⁷ This definition is limited to the different types of social support. The special feature is the use of the phrases actual assistance and believed to provide, both of which indicate that in this case the determination of what can be called social support cannot be based on a subjective assessment of the recipient of the assistance.¹⁴⁸

However, various aspects of the social support concept are controversially discussed in the research literature.¹⁴⁹ For example, there is disagreement as to whether social support can be regarded as a special case of social interaction that produces both, positive and negative effects

¹⁴⁰ Gusy, B. (1995): Stressoren in der Arbeit, soziale Unterstützung und Burnout. Eine Kausalanalyse. München: Profil, p. 10.

¹⁴¹ Siegrist, K. (1989): Sozialer Rückhalt und Normalität sozialen Handelns. In: Angermeyer M. C. & Klusmann, D. (Ed.). Soziales Netzwerk. Ein neues Konzept für die Psychiatrie. Berlin: Springer, pp. 64.

¹⁴² Prümper J., Hartmannsgruber, K. & Frese M. (1995): KFZA-Kurzfragebogen zur Arbeitsanalyse. Zeitschrift für Arbeits- und Organisationspsychologie, 39, Göttingen: Hofgreffe, pp. 125-132.

¹⁴³ The synonyms could be best translated as „back-up“ or „backing“.

¹⁴⁴ Cohen, S. & Syme, S. L. (1985): Issues in the Study and Application of Social Support. In: Cohen, S. & Syme, S. L. (Eds.), Social Support and Health. San Diego: Academic Press, p. 4.

¹⁴⁵ Kaplan, B. H., Cassel, J. & Gore, S. (1977): Social Support and Health. Medical Care, 15, Riverwoods: Wolters Kluwer Health, pp. 47.

¹⁴⁶ Veiel, H. O. F. (1987): Einige kritische Anmerkungen zum Unterstützungskonzept. Zeitschrift für klinische Psychologie, 16. Göttingen: Hofgreffe, pp. 397-399.

¹⁴⁷ Hobfoll, S. E. (1988): The Series in Health Psychology and behavioral Medicine. The Ecology of Stress. Washington, Hemisphere Publishing Corp., p. 121.

¹⁴⁸ Bachmann, N. (1998): Die Entstehung von sozialen Ressourcen abhängig von Individuum und Kontext. Ergebnisse einer Multilevel-Analyse. Texte zur Sozialpsychologie, Band 3. Berlin: Waxmann, p. 21.

¹⁴⁹ These aspects will only be briefly mentioned in this dissertation.

or whether it should be reserved for positive influences.¹⁵⁰ Due to the processualism and ambivalence of social relationships it seems „[...] *quite possible and reasonable to ask about negative side effects*“.¹⁵¹ Initially, little attention was paid to these negative side-effects in research, but more recent literature on support research refers more strongly to this problem.¹⁵² There is also cause for discussion on the question of whether social support should only be spoken of in crisis situations or also in everyday life, or only in the case of informal relationships (spontaneous help) or also with formal helpers (organized help).¹⁵³

Further questions about this train of thought arise from the inclusion of the helper perspective¹⁵⁴ in the support process: Social support can be well-intentioned but inadequate due to different ideas between helper and supported person and is therefore only to be seen as an attempt at support. Considerations that support is apparently helpful, but actually has the opposite effect, can also justify the introduction of an observer and thus a third perspective.¹⁵⁵

Despite all the contrasts between the approaches and definitions available, there seems to be widespread agreement that there is not generally valid and generally definable supportive behavior. Each definition contains a core that seems essential to explain the construct. Rather, it seems to be the interaction of structural characteristics of the social environment, personality traits, experiences with socially supportive behavior and last but not least cognitive processes that play an important role in the context of experiencing social support.¹⁵⁶

¹⁵⁰ Haß, W. (2002): Soziale Unterstützungsnetzwerke von Menschen mit chronischer Polyarthritits - Eine explorative, netzwerkanalytische Studie. Dissertation. Köln: Wirtschafts- und Sozialwissenschaftlichen Fakultät, Universität Köln, p. 100. URL: <https://kups.ub.uni-koeln.de/683/1/11v4582.pdf>. Last accessed: 17.04.2019.

¹⁵¹ Diewald, M. (1991): Soziale Beziehungen: Verlust oder Liberalisierung? Soziale Unterstützung in informellen Netzwerken. Berlin: Edition Sigma, p. 81.

¹⁵² Baumann, U.; Humer, K. & Thiele, C. (1998): Die Vielschichtigkeit sozialer Unterstützung. In: Markgraf, J.; Siegrist, J. & Neumer, S. (Ed.), Gesundheits oder Krankheitstheorie? Saluto- versus pathogenetische Ansätze im Gesundheitswesen. Berlin Springer, pp. 103.; Fydrich, T. & Sommer, G. (2003): Diagnostik sozialer Unterstützung. In: Jerusalem, M. & Weber, H. (Ed.): Psychologische Gesundheitsförderung. Göttingen: Hogrefe, pp. 79-104.

¹⁵³ Social relationships are divided into informal and formal ones. Social support from friends, acquaintances, neighbors and relatives are called informal emotional relationships. Formal social support, on the other hand, is provided by professional helpers such as doctors, pastors, nurses and physiotherapists, etc. More details can be found at: Wagner, M., Schütze, Y. & Lang, F. R. (1996): Soziale Beziehungen alter Menschen. In: Mayer, K. U. & Baltes, P. B. (Ed.), Die Berliner Altersstudie. Berlin: Akademie Verlag, p. 311.

¹⁵⁴ Dunkel-Schetter C. & Lobel M. (1991): Psychological Reactions to Infertility. In: Stanton, A. L. & Dunkel-Schetter, C. (Ed.), Infertility: Perspectives from Stress and Coping Research. New York: Plenum Press, pp. 29-57.

¹⁵⁵ Haß, W. (2002): loc. cit., p. 100.; Shumaker, S. A. & Brownell, A. (1984): Toward a Theory of social Support - Closing conceptual Gaps. Journal of Social Issues, 40(4), Hoboken: Wiley, pp. 11-36.

¹⁵⁶ Ksienzyk, B. (2006): Sozial unterstützendes Verhalten im Arbeitskontext. Potsdam: Humanwissenschaftlichen Fakultät, Universität Potsdam. p. 37. URL: https://publishup.uni-potsdam.de/opus4-ubp/frontdoor/deliver/index/docId/666/file/ksienzyk_diss.pdf. Last accessed: 18.04.2019. See also: Veiel, H. O. F. & Baumann, U. (1992): The Meaning and Measurement of social Support. New York: Hemisphere.

HAß argues that „[...] *the offered support in the sense of a person-environment-fit should also fit the specific social and psychological conditions and needs of an individual*“.¹⁵⁷ and refers to SOMMER & FYDRICH, who in this case speak of the specificity of social support.¹⁵⁸ Thus, individual needs can change over time and often no longer match the resources available in the network.¹⁵⁹ Since the subjective evaluation of relations and acts of support is based on the satisfaction with social support, it is of little use if it does not meet the needs of the individual.¹⁶⁰ The type and extent of support and contact required depends on personal and situational characteristics and the proximity and nature of the relationship.¹⁶¹ Due to the natural dynamics of social networks in the life course, the available support resources are not necessarily stable over time.¹⁶²

The basic idea of the convoy concept according to KAHN & ANTONUCCI, which has already been mentioned and which introduces this paragraph, is that constant and changing relationships are distinguished, which must be considered differentiated according to areas of life. According to this view, convoys initially consist of the family (parents and siblings). Later on, friends from the same age cohort join them and, as the socialization theory shows, the influence of the parents decreases during adolescence. While the time of the parents ends sometimes around the middle of adulthood (generational turnover), siblings and friends often accompany the individual for life. It is therefore assumed that support networks act as a kind of convoy, so that a stability of at least basic support functions is given, even if the composition of the network changes.¹⁶³

Content and Taxonomies of Social Support

There is a consensus today that the construct of social support is not a one-dimensional construct, but a complex and multifaceted phenomenon. Many different classification systems have been developed since the 1980s in order to better understand the nuances of social support.¹⁶⁴ However, it must be noted that, due to the diversity of research approaches and theoretical postulates, there is a lack of consensus on the theoretical conceptualization of the object of social support and the possible conceptualization, which has not yet been broken even today.¹⁶⁵ In other

¹⁵⁷ Haß, W. (2002): loc. cit., p. 26.

¹⁵⁸ Sommer, G. & Fydrich, T. (1989): *Soziale Unterstützung: Diagnostik, Konzepte*, F-SOZU. Tübingen: Deutsche Gesellschaft für Verhaltenstherapie, p. 10.

¹⁵⁹ Haß, W. & Petzold, H. G. (2011): *Die Bedeutung der Forschung über soziale Netzwerke, Netzwerktherapie und soziale Unterstützung für die Psychotherapie diagnostische und therapeutische Perspektiven*. In: Petzold, H. G. (Ed.). *Polyloge. Materialien aus der Europäischen Akademie für psychosoziale Gesundheit*, 22, FPI-Publikationen, Verlag Petzold + Sieper Hückeswagen, p. 206.

¹⁶⁰ Vaux, A. (1990): loc. cit., p. 508.

¹⁶¹ Bachmann, N. (1998): loc. cit., p. 29.

¹⁶² Haß, W. (2002): loc. cit., p. 27.

¹⁶³ Kahn, R. L. & Antonucci, T. C. (1980): loc. cit., 269; Haß, W. (2002): loc. cit., p. 27.

¹⁶⁴ A holistic overview of the different conceptual approaches to social support research is given in the anthology: Cohen, S.; Underwood, L.G. & Gottlieb, B.H. (Ed.) (2000): *Social Support Measurement and Intervention: A Guide for Health and Social Scientists*. New York: Oxford.

¹⁶⁵ Schwarzer, R. & Leppin, A. (1989): *Sozialer Rückhalt und Gesundheit*. Göttingen: Hogrefe, p. 12.

words, it is still unclear what content is considered socially supportive. „*Some approaches are based on needs theory, while others are more pragmatic, only a few are empirical*“¹⁶⁶ This paragraph is intended to provide a brief overview of selected approaches. Among the best-known taxonomies of social support are those of WEISS and COBB. WEISS distinguishes six qualities of support: [1] attachment and closeness, [2] belonging, sociability, contact, [3] esteem support [4] being able to rely, [5] leadership, guidance, orientation, and [6] being needed. Many of the more recent classifications have been based on this taxonomy.¹⁶⁷ COBB names five categories: [1] esteem support, [2] emotional support, [3] material support, [4] active help and [5] the integration into a network of important people.¹⁶⁸

A very detailed description of the content of social support is provided by DIEWALD by attributing typologies of content to social relationships. These typologies are first [1] divided into concrete interactions,¹⁶⁹ [2] mediation of cognitions and [3] mediation of emotions. DIEWALD ascribes to the typologies of concrete interactions, among other things, support services such as personal and goods-related work aids, care, material support (benefits in kind, money), intervention and information, factual and personal counselling and sociability.¹⁷⁰ in the field of teaching cognition, the support services of recognition, orientation, the mediation of belonging, the expectability of help and the acquisition of social skills are of essential interest.¹⁷¹ The typology of emotion mediation includes support services such as the mediation of security, love and affection and motivational support. It is a very detailed taxonomy of social support contents, which has not been carried out in this detail by other authors. Basic categories were formed, but subsequently no longer operationalized. The number of named categories varies considerably depending on the author.

SCHWARZER & LEPPIN highlight the struggle for an appropriate definition of social support in the 1980s and propose a division of the construct into five categories: [1] Emotional support; [2] Togetherness, positive social contact; [3] Instrumental support; [4] Informational support; and [5] appraisal support. Emotional support includes esteem, sympathy and belonging as well as the attempt of a friend to give comfort in a difficult situation.¹⁷² But the general realization of a positive social relationship can also be understood as a form of emotional support.¹⁷³ The category of being together, positive social contact includes voluntary, desired and positively perceived social contacts that offer a balance to everyday burdens. The category of instrumental support

¹⁶⁶ Lairaiter, A.-R. (2009): loc. cit., p. 89.

¹⁶⁷ Bachmann, N. (1998): loc. cit., p. 23.

¹⁶⁸ Cobb, S. (1976): loc. cit., 300 & 311

¹⁶⁹ Diewald also speaks of the „behavioral aspect“.

¹⁷⁰ Diewald, M. (1991): loc. cit., pp. 70-73.

¹⁷¹ Diewald, M. (1991): loc. cit., pp. 73-75.

¹⁷² The authors also include other intimate relationships, e. g. partners and in the wider circle also relatives and work colleagues that the supporting group of people includes. These are voluntary, desired and positive contacts for a positive balance from the stressful everyday life.

¹⁷³ Schwarzer, R. & Leppin, A. (1989): loc. cit., p. 14.

includes concrete activities that „*directly promote life management or restore or re-establish a certain target state.*“¹⁷⁴ These are consistently concrete actions, such as lending financial resources or active assistance. In the case of informational support, the focus is solely on giving hints and advice. The person concerned should be enabled to view the situation from a new perspective and „to look for completely new approaches to solving the situation or to make an alternative stress assessment“. appraisal support includes information and actions that help a person to better assess his or her own abilities, interests and needs.¹⁷⁵

LAIRAITER first distinguishes between everyday and stress-related support. Everyday support is divided into psychological and instrumental help and comprises a total of 10 individual functions. LAIRAITER ascribes to psychological support the functions [1] bonding (closeness, security, trust), [2] esteem support (self-esteem building and strengthening), [3] contact (sociability, interaction, belonging to networks), [4] emotional support (pronunciation, encouragement) and cogitative support (clarification, orientation, problem solving). Institutional support includes according to LAIRAITER [5] information, advice, [6] financial support, [8] contributions in kind, [9] practical support and [10] interventions.¹⁷⁶

SOMMER & FYDRICH propose five categories of social support (emotional support, practical support, problem-solving, social integration and relationship safety).¹⁷⁷ Due to the variety of content taxonomisations and the fact that there is a broad consensus at least on the content dimensions of emotional, instrumental, informational and appraisal support, this work refers to the definition of HOUSE and follows the model of SCHWARZER & LEPPIN.

DIEWALD notes that the individual categories cannot be clearly separated. Social relations are multifunctional, i. e. social relations are usually not limited to a single type of support. The closer the relationships, the more multifunctional are the support services. In addition, interactions themselves have a multifunctional character and overlap. Thus, certain interactions can transport several meanings and therefore fulfil several support functions.¹⁷⁸

The following is relevant for the further course of this work: In a personal support network, the focus is on intensity and proximity. Trusting social relationships must be available to a sufficient degree. The strength of close networks, especially that of a personal support network, lies in their sustainable help in the case of permanent stress, as will be discussed in more detail in the further course of this work.

¹⁷⁴ Schwarzer, R. & Leppin, A. (1989): loc. cit., p. 19.

¹⁷⁵ Schwarzer, R. & Leppin, A. (1989): loc. cit., p. 20.

¹⁷⁶ Laireiter, A.-R. (1993): *Soziales Netzwerk und Soziale Unterstützung: Konzepte, Methoden und Befunde*. Bern: Huber, p. 27.

¹⁷⁷ Sommer, G. & Fydrich, T. (1989): *Soziale Unterstützung: Diagnostik, Konzepte, F-SOZU*. Tübingen: Deutsche Gesellschaft für Verhaltenstherapie, p. 6.

¹⁷⁸ Diewald, M. (1991): loc. cit., p. 76.

1.6. The Conceptual Classification of Support Networks

In the light of the foregoing, a social network can now be understood in the differential view as a kind of matrix that provides the infrastructure for the production and distribution of a broad spectrum of support services, which in turn represents the social resources or social capital of a person.

It should be noted: In this thesis, a support network is understood as a specific segment, that subset of the personal network (which is generally defined as a network of social relationships) from which an individual has received one or more forms of social support or, if their subjective assessment is taken as a basis, believes they will receive it when needed. RÖHRLE, speaks of sectors or zones, since support networks are normatively defined subunits of networks. These closed network zones have a high resource density and thus represent a high level of social capital for the supported person. Members do not necessarily have to be in a relationship with each other, as is the case with a group. The members are interchangeable or are replaced by the supported person as needed. The members of a person's personal support network normally do not know anything about that membership. Therefore, a personal support network is not self-regulating.

Compared to personal networks, personal support networks do not have proportions of neutral relationships, which do not provide any kind of support. LAIRAITER argues in this context: First, a (social) network does not only consist of supporting persons. Only about one third to half of the members of a personal network are perceived as supporting or described as such. Accordingly, personal networks include not only supportive, but also indifferent, unsupportive, and stressful and conflictual relationships.¹⁷⁹ PETZOLD & MÄRTENS also come to the conclusion, that meshes of relationships should not be viewed exclusively in a positive light and are a component of personal resources.¹⁸⁰ It must also be taken into account, that social relationships and thus also personal support networks are multifunctional in nature. This additionally prohibits equating them with a function like social support.

¹⁷⁹ Lairaiter, A.-R. (2008): Soziales Netzwerk in der Psychologie. Forum Gemeindepsychologie, 13(1), München: Deutsches Jugendinstitut. URL: http://www.gemeindepsychologie.de/fg-1-2008_06.html.

¹⁸⁰ Petzold, H. & Märtens, M. (2013): Wege zu effektiven Psychotherapien. Wiesbaden: Springer VS, p. 19 & 198, referring to: Wellman, B. (1982): Studying Personal Communities. In: Marsden, P. V. & Lin, N. (Eds.), Social Structure and Network Analysis, Beverly Hills: Sage, p. 79.

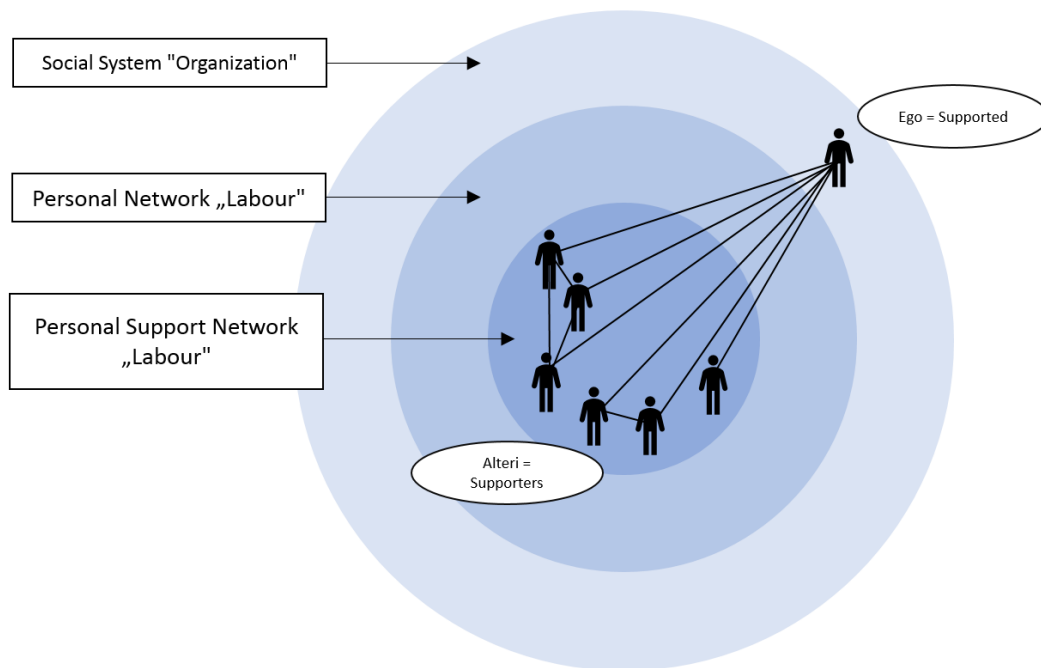


Fig. 3: Embedding a (possible) personal Support-Network in a social System using the Example of an Organization

Source: Author's construction.

Consequently, in the further course of this work, the concept of personal support network is clearly to be distinguished from a general social network concept and is also not to be equated with the concept of social support.

1.7. Summary of the first Chapter

In the first chapter, the dissertation topic was approached in two ways. In the area of management theory (organizational health management) and the theory of social networks (systems theory). Both approaches form the link with the concept of social support, which is important for this dissertation.

In a first focus, this chapter makes clear that organizational health management enables holistic organizational health promotion as well as health- and support-oriented leadership. The „Three-Columns-Model of Corporate Health Management“ according to OPPOLZER shows the interfaces to the topic of health- and support-oriented leadership, which forms the basis of this dissertation. In particular, the third pillar of the model makes this clear. It includes the integrated management. Here, the topic of „health“ is included as a cross-sectional task in all management processes in order to maintain and promote the professional performance of employees as a factor of economic activity.¹⁸¹ In this context, people represent the values of the company and

¹⁸¹ Oppolzer, A. (2010): loc. cit., p. 23.

not mere inventory, such as machines and buildings.¹⁸² According to this, the employees are the actual potential carriers of the organization. The company top-management, but also direct supervisors at middle management level, are therefore in a position to protect the health of employees through active social support, over and above target setting and control. The first focus of this chapter thus makes it clear, that social support by supervisors in the framework of health- and support-oriented leadership (as a tool of organizational health management) is an effective solution that should enable employees to access personal resources.

The second focus of the first chapter lays the foundations for understanding social networks, embedded in social systems, as a framework condition for social support from personal support networks. This knowledge base serves to understand the further theses of defense: The quality of such personal support networks can buffer poor social support by supervisors and mitigate burnout among employees, representing a valuable resource for the better processing of stressors and burden by addressing the problem and receiving emotional support.

Due to the large number of publications on the topic of networks and the different understanding of the concept of networks in the various scientific disciplines, the reception of network perspectives in social sciences had to be examined. Subsequently, the concept of social networks was discussed and adopted for the present research topic. The differential consideration of a social network makes it possible to initially describe it as a matrix¹⁸³ within which patterns of relationships between actors develop. A more detailed look at the network reveals the infrastructure responsible for the production and distribution of a broad spectrum of support services, which in turn represents the social resources, or rather part of the social capital of an employee, organization, group or community. For the further procedure and the research model, which includes personal support networks, in the second chapter, a distinction had to be made between the last two terms and the network concept.

For the structural and content-related analysis of social networks, additional criteria are of interest. In a further paragraph, the grouping of characteristics according to RÖHRLE (structural, relational, and functional characteristics) as well as the three levels according to GOTTLIEB (macro level, meso level, and micro level) were presented and outlined as a theoretical basis.

Due to the different uses of the concept of social capital and resources of employees, it was necessary to explain its use in the context of social support. For this purpose, selected classical

¹⁸² Tempel J. & Ilmarinen, J. (2013): *Arbeitsleben 2025. Das Haus der Arbeitsfähigkeit im Unternehmen bauen*. VSA, Hamburg, p. 75 & 76.

¹⁸³ In addition to the sociogram, network data can also be displayed as a matrix, in a so-called socio-matrix or affiliation matrix. The rows as well as the columns of the socio-matrix present the actors of the network in a square matrix. An existing or non-existing relationship or relation is represented by 1 or 0. In affiliation matrices the actors are in the pre-column and the affiliations in the header. Affiliations can be organizations and associations, but also events such as family celebrations or conferences. Affiliations and non-affiliations are also symbolized here with 1 and 0. See: Jansen, D. (1999): loc. cit. pp. 98-103.

and more recent definitions of social capital were highlighted and related to the research set. Ultimately, social capital could be defined as the value in each individual of existing relationships to resources and experiences that contribute to the fact that, for example, success, power and career are not exclusively based on individual performance, but also on group affiliations and other beneficial connections in the sense of strong contacts. This value is a prerequisite for social support, as it is part of the structure of a network and reflects the quality, quantity and intensity of relationships.

Furthermore, social support was defined as a specific function of social relations in a social network. The concept of support is based on the content and quality of relationships, while the concept of network refers to the formal characteristics of relationships and networks. By establishing positive functions in social networks, social relations represent a resource that is expressed in the opening of options for action. In the context of this work, the content dimensions of social support are of interest to emotional, instrumental, informational and appraisal support, which have been determined based on a review of different classification systems and their intersections.

The previous discussed characteristics of social support make it clear that for social support in the organization, all measures must be taken to improve the conditions for cooperation. This explicitly includes aspects of supportive and healthy employee management - in other words, conditions that supervisors must create so that the development of loose units into functional departments can take place at all. In the process, supervisors are often exposed to group dynamic processes in which their employees consciously or unconsciously assume certain roles and influence the actions of other team members. If it is possible to make targeted use of these dynamics as well as the individual strengths of the individual within the framework of network-building management measures, i.e., to establish informal relationships in the network in addition to formal ones, synergies can be exploited, but also creativity, commitment, motivation, (mental) health and ultimately the efficiency of the organization can be strengthened.

In this context, an individual employee can also benefit. It is important for managers to recognize the value of a good network, because this is the basis for establishing and maintaining good and sustainable contacts and drawing resources from them. Any employee who is not interested in other will have a hard time developing professionally and privately. No matter how well an employee act as a lone wolf: Success, but also resource building, is always dependent on other colleagues who can give opportunities, open possibilities and provide social support. Without a functioning colleague support network, social pressure increases, communication difficulties arise, or colleagues tend to influence rather than support. Such situations are not conducive to personal development or health. Psychological problems, such as burnout, inhibiting factors for further cooperation and ultimately costs for the organization can be the result.

Promoting „personal network engagement“ as a tool is therefore, and this is also supported by the findings of the first chapter, a possibility of health-oriented leadership within the framework

of organizational health management. Like the other professional networks, in (collegial) support networks there is also a mixture of different employees and the sense of belonging and togetherness unites the members of support networks, making them particularly strong.

2. Impact of perceived Supervisor Support on Burnout and the main and moderating Effects of personal Support Networks and Personality Traits

This chapter paves the way for the empirical investigation in chapter three. In the following, the interrelationships of social networks, their characteristics and mental health, stress and burnout are considered from psychological, organizational (management) and system-theoretical perspectives. It is important to understand that burnout is not officially declared as a disease by the WHO. However, there are large intersections between mental illness and stress. Because of the latter, burnout is also related to the construct of social support.

2.1. Freudenbergers organizational Implementation of the Term Burnout

For the first time the term „burnout“ is used by FREUDENBERGER in his article „Staff-Burn-out“ in the context of a psychological phenomenon. At that time FREUDENBERGER is working as a volunteer in a free clinic movement. He himself observed tendencies of fatigue and boredom among volunteers. In the end, he also experienced this change in himself. FREUDENBERGER describes this process as follows: *„The dictionary defines the verb „burn-out“ as to fail, wear out, become exhausted by making excessive demands on energy, strength, or resources. And that is exactly what happens when a staff member in an alternative institution burns out for whatever reasons an becomes inoperative to all intents and purposes.“*¹⁸⁴

Since this definition, it becomes clear that at that time the term burnout existed in everyday language. Consequently, the phenomenon may have been known, but not specifically recognized as a clinical picture due to the existing name. FREUDENBERGER continues his outline by sketching a certain behavior of burnout sufferers: *„A staff member's quickness so anger and his instantaneous irritation and frustration responses are the signs. The burn-out candidate finds it just too difficult to hold in feelings. He cries too easily, the slightest pressure makes him feel overburdened and he yells and screams. With the ease of anger may come a suspicious attitude, a kind of suspicion and paranoia.“*¹⁸⁵

However, according to the current state of medical science, it is difficult to distinguish FREUDENBERGER's description of burnout symptoms from the symptoms of a depression. According to diagnostic criteria for depression, the main symptoms consist of a change in mood or affectivity. This change of mood can be present with or without accompanying anxiety and is usually accompanied by a change in the general level of activity. Most other symptoms are secondary. Many depressions tend to recur. The beginning of each episode is often associated with stressful events or situations. Depression and burnout are both characterized by an aversive,

¹⁸⁴ Freudenberger, H. J. (1974): Staff Burn-Out. Journal of Social Issues, 30. Hoboken: Wiley, pp. 159.

¹⁸⁵ Freudenberger, H. J. (1974): loc. cit., p. 160.

negatively tinted emotional experience and are accompanied by similar complaints. Burnout is seen as the result of constant strain caused by excessive and prolonged stress.¹⁸⁶

What is also interesting about Freudenbergers explanations is his attempt to explain the origin or background of these symptoms. FREUDENBERGER asks himself the question: „*Who is prone to burn-out?*“ Which he answers: „*The dedicated and the committed.*“ He then adds: „[...] *it is precisely because we are dedicated that we walk into a burn-out trap. We work too much, too long and too intensely. We feel a pressure from within to work and help and we feel pressure from the outside to give.*“¹⁸⁷

Perhaps it is precisely this understanding of burnout, right from its beginnings, which makes it impossible to consider the problem in isolation from the world of work and the performance associated with it. Burnout is often linked to the unreflected argument: „*In order for a person to burn out, she/he needs to have been on fire at one time.*“¹⁸⁸

In addition to these theoretical basics, the following will be clarified in the further course of this work why employees in the same position burn out and others not. It is open to question whether those employees who are not affected are better able to regulate themselves or have never entered a long-term overwhelming work phase. It is further possible that recourse to social support plays a significant role in stable mental health. It is important to consider these issues for the remainder of this dissertation.

2.2. Approaches, Definitions and Connections between Burnout, Stress and Mental Health

There are disagreements in psychology regarding the definition and delimitation of burnout. Within the current classification system ICD-10 (International Statistical Classification of Diseases and Related Health Problems) of the WHO, burnout is not listed under mental illnesses (group F), but under the classification Z73.0 with the designation „being burnt out“ and the sub-items „burn-out“ and „state of vital exhaustion“. The diagnostic group Z73 is titled as: „Problems associated with difficulties in coping with life“. Allocation group Z is noted in the ICD-10 as: „Factors influencing health status or contact with health services“ and is generally considered an additional diagnosis. The burnout problem could also be covered by the number Z73.1 „Accentuation of personality traits“, i. e. Type A behaviour pattern (characterized by unbridled ambition, a need for high achievement, impatience, competitiveness, and a sense of urgency), or also with the number Z56 which describes the diagnosis „Problems related to employment and unemployment“ in more detail.¹⁸⁹

¹⁸⁶ Hillert, A. & Marwitz M. (2006): Die Burnout-Epidemie. München: Beck, p. 98.

¹⁸⁷ Freudenberger, H. J. (1974): loc. cit., p. 161.

¹⁸⁸ Burisch, M. (2006): loc. cit., p. 24.

¹⁸⁹ Berger, M; Berner, M. M. & Schramm, E. (2018) Burnout. In: Berger, M. (2018): Psychische Erkrankungen: Klinik Und Therapie. Amsterdam: Elsevier Health Sciences, p. 27.

The German Society for Psychiatry, Psychotherapy and Neurology (DGPPN) has already taken a position on this in 2012. They list several reasons why it makes sense not to classify burnout as a disease: There is no uniform, standardized definition of what burnout is. More than 160 complaints have already been published as individual symptoms. Burnout is a diffuse term, and it is not possible to say how it should be defined. Due to the lack of diagnostic possibilities, it is also difficult to determine statistically how many people suffer from burnout. However, it is a fact that this additional diagnosis has already become a major problem of the health care system.¹⁹⁰

An example is SCHAUFELI & ENZMANN who define burnout as „[...] a persistent, negative, work-related state of mind in „normal“ individuals that is primarily characterised by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviors at work. This psychological condition develops gradually but may remain unnoticed for a long time by the individual involved. It results from a misfit between intentions and reality in the job. Often burnout is self-perpetuating because of inadequate coping strategies that are associated with the syndrome,“¹⁹¹ This definition prompted BURISCH to ask whether the core symptom of exhaustion is sufficient or which accompanying symptoms must be present for a diagnosis. For BURISCH, the burnout term therefore remains a „fuzzy set“. To define this term is equivalent to the task of describing the boundaries of a large cloud.¹⁹² This is understandable, because on the one hand it is assumed that burnout is not a disease, as the previous, common definition of SCHAUFELI & ENZMANN makes clear, on the other hand the most severe psychological symptoms of illness such as depression, suicidality, severe concentration and memory disorders or existential despair are cited. In this respect, burnout complaints are found in the literature, which are often classified in three dimensions.¹⁹³

1. *Emotional Exhaustion* as the basal dimension. It includes the feeling of being overstrained and exhausted with regard to one's own psychological and physical reserves. The lack of energy is associated with symptoms such as tiredness and depression as well as the occurrence of tension. In the further course of the disease, disorientation and hopelessness, feelings of helplessness, inner emptiness can occur, which can even lead to suicidal thoughts and suicidal tendencies. In this context, an inability to relax in leisure time and sleep disorders are also frequently observed. Physical complaints include gastrointestinal symptoms, headaches and backaches and an increased susceptibility to infections.

¹⁹⁰ Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde (2012): Positionspapier der Deutschen Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde (DGPPN) zum Thema Burnout. Berlin: DGPPN, p. 2. URL: http://www2.psychotherapeutenkammer-berlin.de/uploads/stellungnahme_dgppn_2012.pdf. Last accessed: 26.03.2020.

¹⁹¹ Original definition/quote published in: Schaufeli, W. B. & Enzmann, D. (1998): *The Burnout Companion to Study and Practice*. London: Taylor & Francis, p. 36. Taken from: Burisch, M. (2006): *Das Burnout-Syndrom. Theorie der inneren Erschöpfung*. Berlin: Springer, p. 16.

¹⁹² Burisch, M. (2006): loc. cit., p. 15.

¹⁹³ Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde (2012): loc. cit., p. 2 & 3; Maslach, C., Schaufeli, W. B. & Leiter, M. P. (2001): loc. cit., p. 402.

2. *Cynicism/Distancing/Depersonalization*. From the idealized relationship to work, which was usually started with positive expectations, frustration with subsequent distancing from work increasingly develops. This is connected with blame for the changed experience of work and a bitterness towards working conditions. This frustration ultimately leads to a devaluation of work and to cynicism, which is often directed against work colleagues and clients. This in turn causes feelings of guilt in the person concerned. A loss of feelings (depersonalization) is also frequently observed.
3. *Reduced Working Performance*: The self-assessment gives the impression of a lasting reduction in work performance, competence and creativity, among other things due to concentration problems and lack of job satisfaction.

There is no doubt that there is a close connection between burnout and stress. The term was introduced into the literature by SELYE, who is regarded as the founder of stress research: stress is to be understood as a non-specific reaction of the organism to any kind of demand made on it. Stressors can be experienced either as a positive challenge or as a threatening restriction in everyday working life.¹⁹⁴ Burnout can be seen as a long-term consequence of stress. However, high stress does not automatically lead to burnout. A significant difference between burnout and stress lies in the subjective evaluation of the possibilities of coping with stress situations. Thus, burnout can be seen as the last stage of a failed process to cope with negative stress conditions.

In detail, a distinction is made between three theoretical models:¹⁹⁵

Differential-psychological Person-Centered Approaches

Differential-psychological person-centered approaches consider burnout primarily from a personal perspective, whereby environmental factors are largely ignored. As mentioned in the previous paragraph, the representatives of this approach are FREUDENBERGER and SCHMIDBAUER. Both see the reason for the burnout development in the exaggerated helper motivation of those affected. SCHMIDBAUER coined the term „helper syndrome“, which since the 1970s has been widely spread and has found its way into everyday language. SCHMIDBAUER sees an insufficient satisfaction of needs in early childhood as a formative experience of the helper personality. The motive to want to receive help causes the helper to give help. The personality structure outlined is susceptible to burnout, as the need for attention is very high and can hardly be satiated. SCHMIDBAUER comments on the helper syndrome as „*an incapacity to express one's own feelings and needs that has become a personality structure, coupled with an apparently omni-potent, unassailable façade in the area of social care.*“¹⁹⁶ He further describes the helper syndrome as „*[...] helping as a defence against fears and inner emptiness [...]*“¹⁹⁷ and that it would interfere

¹⁹⁴ Selye, H. (1975): Confusion and Controversy in the Stress Field. *Journal of Human Stress*. 1(2), pp. 37-44.

¹⁹⁵ Burisch, M. (2006): loc. cit., p. 76.

¹⁹⁶ Schmidbauer, W. (1977): *Das Helfer-Syndrom*. Hamburg: Rohwolt, p. 15.

¹⁹⁷ Schmidbauer, W. (1977): loc. cit., p. 215.

with the entire life. The lack of empirical findings for SCHMIDBAUER's theses on the helper syndrome is, however, criticized by BURISCH.¹⁹⁸ Besides these two theories, the approaches of EDELWICH & BRODSKY are worth mentioning, which will not be discussed in detail here.¹⁹⁹

Work- and Organization-related Approaches

Work- and organization-related approaches are designed to survey the diversity of burnout-relevant characteristics. Studies in this field of research are often based on transactional models of stress research. The close connection between burnout and stress has already been explained. Representatives of this research approach are BARTH; ARONSON, PINES & KAFRY; BÜSSING & PERRAR; ENZMANN & KLEIBER and HARRISON as well as BURISCH. The central work and organization-related influencing factors are: limited scope of activity and action, lack of social support, Excessive responsibility, lack of opportunities to influence the outcome of work, overburdened by factors such as working hours, underchallenge, limited career opportunities.²⁰⁰

Sociological-Social Science Approaches

Sociological-Social Science approaches describe social components in the development of burnout. Representatives of this orientation are KLEIBER & ENZMANN²⁰¹ and FREUDENBERGER.²⁰² Social factors include increased expectations of flexibility and mobility of employees, increasing social isolation and anonymity as well as changed forms of communication and the current problem of permanent accessibility in this context.²⁰³

Overall, it can be concluded that monocausal approaches are obviously unable to capture the complexity of this phenomenon and the factors influencing it. For this reason, a holistic approach will be pursued in this dissertation. As a conclusion at this point remains: Burnout is an interplay of personality traits and a threatening environment, as well as a non-matching of the person with the social system(s) she/he belongs to.

¹⁹⁸ Burisch, M. (2006): loc. cit., p. 205.

¹⁹⁹ Edelwich, J. & Brodsky, A. (1980): *Burn-Out: Stages of Disillusionment in the helping Professions*. New York: Rawson.

²⁰⁰ Körner, S. C. (2002): *Das Phänomen Burnout am Arbeitsplatz Schule - Ein empirischer Beitrag zur Beschreibung des Burnout-Syndroms und seiner Verbreitung sowie zur Analyse von Zusammenhängen und potentiellen Einflußfaktoren auf das Ausbrennen von Gymnasiallehrern*. Erfurt: Erziehungswissenschaftliche Fakultät, Universität Erfurt. Last accessed: 29.03. 2020, URL: <https://d-nb.info/966450779/34>. p. 51.

²⁰¹ Kleiber, D. & Enzmann, D. (1990): *Burnout. Eine internationale Bibliographie*. Göttingen: Hogrefe.

²⁰² Freudenberger, H. J. (1974): *Staff Burn-Out*. Journal of Social Issues, 30. Hoboken: Wiley.

²⁰³ Körner, S. C. (2002): loc. cit., p. 52.

The Connection between Burnout, Stress and Mental Health in this Work

In the context of the debate on mental health in the world of work, there is a wide range of terminology. In this context, the occupational health- and safety uses the terms mental stress and strain: The German standard DIN ISO 10075-1 defines mental stress in a value-neutral way as the totality of all measurable influences that come from outside and have a psychological effect on people. According to the above-mentioned standard, strain is defined as the effects of mental stress on the individual, including his or her individual coping strategy.²⁰⁴ If the individual resources are not available in sufficient quantities, this can lead to unfavorable strain, which can manifest themselves in the form of psychosomatic and mental disorders or the burnout syndrome.

For the presentation in this dissertation, it should be noted that although according to the WHO burnout is not called a disease in the actual ICD-10, burnout is declared as a disease here, since there are large intersections with mental illness. Especially stress and strain are directly related to burnout. Physical and mental disorders that require the use of the health care system can still be considered as illness or disease in the sense of social science analysis, contrary to medical recommendations.

From January 2022, when the new ICD is released as ICD-11, burnout will be defined as a syndrome due to „stress at work that cannot be successfully processed“. Burnout is then characterized by 3 dimensions: [1] feelings of energy depletion or exhaustion; [2] increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and [3] reduced professional efficacy.

2.3. Burnout and Diseases from a Systems Theory Perspective and the Need for a systemic as well as pathological Approach to Burnout in this Study

The three theories or currents presented in paragraph 2.2 concentrate exclusively on the individual despite the different emphasis. Although organizational context factors are considered as causes, this is done from an organizational psychological perspective and not from an organizational theory perspective. While burnout has been a psychologically established term for about 30 years, it was still a black box in the field of organizational theory until the 1990s. Not only burnout, but emotions in general - the irrational, uncontrollable and dangerous in a sense - was not considered, seemingly banned, in organization theory during this time. According to HAHNE, this „emotional analphabetism“ is due to the postulate of reality of traditional business administration, which demands a balanced nature, fairness, objectivity and good manners from

²⁰⁴ Deutsches Institut für Normung (2017): Ergonomic Principles related to mental Workload – Part 1. General Issues and Concepts, Terms and Definitions. (ISO 10075-1:2017); German Version EN ISO 10075-1:2017, pp. 1-9.

the members of the organization. Emotional aspects, such as spontaneity, sensitive expressions of feelings or dramatic acting are left out.²⁰⁵ However, the increasing attention paid to emotions in recent organizational research also has its problematic sides. As BERGNAPP, for example, critically notes, some of the newer approaches „do not deal with the broad spectrum of human feelings, but [only] with the sub-area that can be exploited organizationally, with the emotional work capacity“.²⁰⁶

Regarding theories of classical organizational theory and organizational sociology, emotions in an organizational context and also burnout can be explained theoretically.

In the following, the construct burnout will be projected onto LUHMANN's sociological systems theory presented in the first chapter.

From the point of view of system theory, as BEUSHAUSEN, who refers to WILKE, argues, a system is pathological²⁰⁷, to the extent that it deviates from the state of „optimal integration“.²⁰⁸ The term pathology does not mean a characteristic of the members of social systems, but characterizes the relationship patterns of the elements of the system and their relations. It is to be considered how the process structure of a self-organization process can be kept upright. At the same time, an analysis of the internal and external conditions under which the system realizes this very structure, which is needed to maintain the self-organization processes, is necessary.²⁰⁹ From the perspective of systems-theoretical organization theory, organizations have an independent existence. They relate and focus on their own survival - and, from the perspective of systems theory, not on the well-being and health of their members. To put it in very simplified and provocative terms: organizations are only interested in concrete work management and only consider human needs because this is necessary to attract and retain other psychological systems to increase efficiency. Organizations would simply be overtaxed if they tried to consider the complexity of their members' psychological systems within the framework of their self-organization processes. However, the psychological system is bound to the human being and can only be integrated into the organization together with it.²¹⁰ This poses a risk of unpredictable events (e. g. psychosomatic illnesses or burnout). To counteract this, the organization is forced to reduce the complexity of its psychological systems. Conversely, the psychological system must

²⁰⁵ Hahne, A. (1997): Kommunikation in der Organisation. Grundlagen und Analyse - Ein kritischer Überblick. Opladen: Westdeutscher Verlag, pp. 362 & 363.

²⁰⁶ Bergknapp, A. (2002): Ärger in Organisationen. Eine systemische Strukturanalyse, Wiesbaden: Springer, p. 268.

²⁰⁷ In this dissertation, pathology is defined, without going into detail about the term, as the study of abnormal and pathological processes and conditions in the body and their causes.

²⁰⁸ According to WILKE, integration starts with parts of the overall system and includes a form of organisation that allows interaction between differentiated parts of the system and the connection of a „common whole“ with emergent characteristics.

²⁰⁹ Beushausen, J. (2002): Die Konstruktion von Gesundheit und Krankheit im sozialen System Familie. Theorie und Empirie. Dissertation. Oldenburg: Universität Oldenburg, p. 198. URL: <http://oops.uni-oldenburg.de/263/1/293.pdf>. Last accessed: 08.03.2019.

²¹⁰ Bergknapp, A. (2002): loc. cit., p. 248.

find a way to cope with the complexity of the organizational system in order to remain capable of action. This ability to maintain the ability to act is one aspect of the susceptibility to burnout. In systems theory, diseases are a non-viable system-environment fit, i. e. the system fails in adapting to the changed conditions when perturbations occur. In the short or long term there is a threat to the coherence²¹¹ of the system and thus its survival. Phenomena, symptoms and damage known as disease can thus be understood as disturbances of developmental processes in which the constructions of reality are no longer viable.²¹²

SIMON describes diseases as „*structurally determined reactions of the body to internal changes in the network of interactions of the components (structural and functional changes) or to perturbing interactions with the environment, e. g., with bacteria, too cold drinks or too hot bath water, or with colleagues at work or the beloved ones at home.*“²¹³ Disease processes and burnout are therefore parts of developmental and learning processes of living systems; they are crises in which attempts are made to react unsuccessfully to the demands of the environment. If there are environmental changes, the operations of the system must be rebalanced (homeostasis), a new intrinsic value must be negotiated. The process that is followed until a new homeostasis is achieved or the system dissolves is what SIMON calls a disease.

In this interplay of assimilation and accommodation, either [1] a disturbing system-environment interaction is actively tackled (e. g. stressors), [2] or it is passively negated, i. e. the stressor is ignored. In the first case, an attempt is made to maintain the integrity of the system and to close the boundary. In the second case, on the other hand, the boundary is changed by integrating the stressor. Another way to exclude incomprehensible behavior, i. e. behavior that has fallen out of communication, is to exclude disturbing phenomena in (public) perception. This is done according to the motto: What is not observed does not disturb and what does not disturb does not need to be explained.²¹⁴

Social Systems are living systems and autopoietically closed - they work in their own modes, according to their own rules, generate themselves and react to themselves. The internal operations that take place always only connect to their own operations and not to other systems. Systems attain originality through their own forms of networking, linking and the different characteristics of the respective elements. In the body, the biological system, cells die, others renew themselves, substances and hormones circulate, biochemical processes change due to perceptions and their

²¹¹ In the model of Salutogenesis ANTONOVSKY took up thoughts and results of stress research and developed a new definition of health and illness and postulating the so-called „sense of coherence“ or „coherence“ as a salutogenic factor. The striving for coherence is a superordinate principle - probably inherent in all living beings - which ensures that organisms can organize themselves from chaos in a complex and healthy way, contrary to the physical laws of entropy.

²¹² Beushausen, J. (2002): loc. cit., p. 196 & 197.

²¹³ Simon, F. B. (1995): Die andere Seite der Gesundheit. Ansätze einer systemischen Krankheits- und Therapietheorie. Heidelberg: Springer, p. 66.

²¹⁴ Simon, F. B. (1995): loc. cit., p. 178.; Beushausen, J. (2002): loc. cit., 197.

evaluation - organic, physical life takes place. The body is the condition of possibility for psyche and communication. Without it, the psyche could not feel, because feeling requires the transformation of bodily events into psychic phenomena. The psychic system cannot exist without the body.

In the mental system, perception is organized into conscious perception of the self and the world.²¹⁵ According to BEUSHAUSEN, for a phenomenon to become a symptom, it must first be perceived and marked as a symptom.²¹⁶ Whether the burnout symptoms are strong or weak, for example, is usually determined by social agreements.

This means that in a communication process, for example, employees and supervisors are observers who have different perspectives, perceive different phenomena and have different prior knowledge. The decoding of the pattern of subjectively and intersubjectively determined symptoms leads to the diagnosis burnout as a characteristic of differentiation. This happens via communication processes. In the quantitative survey in the context of this dissertation, the author takes the role of the second observer and uses a validated scale for the recording (observation) and assessment of the intensity of burnout symptoms, which the respective interviewee (the first observer) assesses on the basis of his perceived symptoms (by means of a textualization of the communication).

At this point and the brief differentiation of the biological, mental and social system, it becomes clear that the emphasis and focus on the different modes of operation of the respective differentiated systems is, and should be, in the foreground. Quantifiable results on the psychological system of the interviewed employees is only possible through measurement with diagnostic tools, in this case from the field of work- and organizational psychology and cannot be explained or derived systemically, on the basis of communication. LUHMANN primarily described the social system in its functional differentiation, the biological and mental system he regarded as relevant environments that must be assumed, and which are not accessible through their intransparency, i. e. through communication. Without the use of the instruments mentioned above, this would mean a separation from practical action and would reduce the dissertation to a purely descriptive work. In this context, one could raise the question, of what a sociological theory, that does not provide concepts and possibilities of generating results for acting people, is good for. The descriptive function is still fulfilled by systems theory in the context of this thesis.

²¹⁵ Buser, K.; Schneller, T. & Wildgrube, K. (2007): *Medizinische Psychologie - medizinische Soziologie*. München, Jena: Urban & Fischer, p. 93.

²¹⁶ Beushausen, J. (2002): loc. cit., 197.

2.4. Effect of Network Characteristics and Social Support on mental Health, Stress and Burnout and the Mobilization of Social Support as a Coping Strategy

This paragraph shows up the *structural* characteristics and *relational* characteristics of the effect of different network characteristics on mental health, stress and burnout in a first step, followed by a second, which clarifies the *functional* characteristics of the impact of social support on stress and burnout. In a third step it is shown up, how social support can be used as a coping strategy by the employees.

The effect of different Network Characteristics on mental Health, Stress and Burnout (structural Characteristics and relational Characteristics)

The *composition* of the network of both, strong and weak relationships, has been shown to be beneficial to mental health. While strong relationships provide integration into a stable social core-network, which offers individuals a social localization (e. g. identity, sense of belonging & routines) and fulfils basic support needs, the latter have proven to be beneficial for new contacts across network boundaries and thus resource generating.

Regarding *heterogeneity*, RÖHRLE & SOMMER emphasizes the necessity of the diversity of networks: The more diverse a network is in its role composition, the more differentiated and comprehensive an individual's needs for support within these different relationships can be perceived. Moreover, long-term relationships increase the probability of receiving adequate and sufficient situation-specific support.²¹⁷

There is a negative correlation between *network size* and perceived stress. It is assumed that with the number of relationships, the potential for conflict in the network also increases.²¹⁸ WAGNER & WOLF also prove a connection between mental health and network size.²¹⁹ As part of the Alameda County study BERKMAN & SYME prospectively demonstrated a negative correlation between the level of social inclusion and mortality after 9 years, regardless of initial health status.²²⁰ In addition, it shows that people have a very limited ability to navigate organizations in which they must interact with more than 150 people.²²¹ However, this limit is often exceeded in

²¹⁷ Röhrle, B. & Sommer, G. (1994): Social Support and Social Competences: Some Theoretical and Empirical Contributions to Their Relationship. In: Nestmann, F. & Hurrelmann, K. (Eds.): Social Networks and Social Support in Childhood and Adolescence. Berlin, New York: De Gruyter: Berlin, New York. pp. 120-122.

²¹⁸ Antonucci, T. C., Akiyama, H., & Lansford, J. E. (1998): Negative Effects of close social Relations. Family Relations: An Interdisciplinary Journal of Applied Family Studies, 47(4), pp. 379-384.

²¹⁹ Wagner, M. & Wolf, C. (2001): Altern, Familie und soziales Netzwerk. Zeitschrift für Erziehungswissenschaft, 4(4), p. 543.

²²⁰ Berkman, L.F. and Syme, S.L. (1979): Social Networks, Host Resistance, and Mortality: A Nine-Year follow-up Study of Alameda County Residents. American Journal of Epidemiology, 109, p. 186.

²²¹ Hill, R. A. & Dunbar, R. I. M. (2003): Social Network Size in Humans. Human Nature, 14. Luxembourg: Springer Science & Business Media, pp. 53-72.

organizations. There is also a kind of „emotional maximum“ that limits our ability to empathise with other people. When this is reached, protective mechanisms are put in place which automatically distance oneself from the suffering and unhappiness of other people. This emotional distancing is also known as the burnout dimension „depersonalization“ and can be accompanied by indifference or even cynicism.

Some opinions also suggest that network *density* is closely related to the size of the network, because the larger the individual network, the less likely it is that the members of that network will be interconnected. LAIREITER claims that both, very and barely dense networks can be a burden for the person concerned. As a rule, very dense systems run the risk of social isolation from the environment, since social systems are segregated from the outside world.²²²

The correlation between network size and mental health also depends on other variables such as age, gender, social integration factors and, in particular, the *quality of support*.²²³ „It is generally agreed that the existence of social relationships is relieving and that many relationships reduce the likelihood of feeling lonely.“²²⁴ However, the size of the network is a comparatively inaccurate indicator of individual satisfaction, since, for example, the existence of a best friend is more likely to contribute to a better mental health than many acquaintances. UENO, who measured the size of the network - and thus the degree of integration over the number of friends - found that the size of the network correlated negatively with the number of depressive symptoms. He explains this correlation largely by the mediative effect of the sense of belonging.²²⁵ HAINES & HURLBERT found that the size of the network places a certain burden on the individual. It was shown that with increasing size of the network, due to the increasing stress, there can also be an increased occurrence of general complaints.²²⁶

The size of the social network and the *frequency of contact* are also considered essential for the development of self-esteem and social competence, which in turn can have a positive effect on the mental health of individuals.²²⁷ Integration into a network of social relationships (or the support one receives in more open systems or from external supporters) leads to more health and less disease.²²⁸ In dense systems the exchange with the wider social context is interrupted, so that needs and conflicts cannot be regulated through external contacts. Thus, such a non-regulation leads to a concentration of smoldering conflicts that break out at any time. Such a tense network

²²² Laireiter, A.-R. (1993): loc. cit., p. 105.

²²³ Hass, W. & Petzold, H. G. (2011): Loc cit. p. 156.

²²⁴ Hollstein, Betina (2001): Grenzen sozialer Integration - Zur Konzeption informeller Beziehungen und Netzwerke, Opladen: Leske+Budrich, p. 51.

²²⁵ Ueno, K. (2005): The Effects of Friendship Networks on Adolescent depressive Symptoms. *Social Science Research*, 34(3), p. 484.

²²⁶ Haines, V. A., & Hurlbert, J. S. (1992): Network Range and Health. *Journal of Health and Social Behavior*, 33(3), p. 254.

²²⁷ Röhrle, B. (1994): *Soziale Netzwerke und soziale Unterstützung*. Weinheim: PVU, p. 17&21.

²²⁸ Hass, W. & Petzold, H. G. (2011): loc. cit. p. 194, See also Nestmann, F. (2000a): loc. cit., p. 136; Röhrle (1994): loc. cit., p. 40 & 83.

climate can have a very depressing effect.²²⁹ The relationships between the density of a network and mental health are also heterogeneous. On the one hand, high-density networks correlated with a positive mental state and apparently have a stress-reducing effect.²³⁰ Networks of low density consist of many unconnected individuals but also of dense zones. Such network segments can serve as a protective shield against stress, burnout and problems in other segments.²³¹

As a further characteristic of social networks, their percentage composition by sub-groups, the so-called *relations*, has been investigated. Large personal networks do not automatically mean the provision of much support. Social networks would, for example, try to prevent contradictory behavior of system members by their own values and norms. In general, it seems that incriminating relationships are linked to unintentional contacts.²³² PEARSON believes that percentages for different subgroups, whether high or low, should not always be associated with specific consequences or reasons.²³³ LAIREITER describes the lack of close and important reference persons and the lack of regular, superficial contacts or good acquaintances as a burden.²³⁴

Regarding the characteristic *uniplexity* or *multiplexity*, GERHARDTER argues that uniplex networks have a special feature when it comes to coping with loads: Loads can be distributed among several people and information can be obtained from different sides. Thus, a larger repertoire of behavioral alternatives would be available.²³⁵ Multiple contacts, on the other hand, are usually lasting relationships.²³⁶ Multiplex relationships can lead to considerable social pressure, especially when there are no alternatives in the relationship potential.²³⁷ RÖHRLE argues that multiplex contacts - due to the different role references - allow different perspectives of a network member on a problem. The higher the multiplexity, the lower the fear and depression. He also confirmed reduced multiplex relationships in mentally ill patients.²³⁸

*„Multiplex relationships constitute critical linkages in social support networks - both, within and outside the organization.“*²³⁹ Hence, they can improve their buffer function and minimize burnout.

²²⁹ Laireiter, A.-R. (1993): loc. cit., p. 102.

²³⁰ Petzold, H. & Märtens, M. (2013): loc. cit., p. 202.

²³¹ Petzold, H. & Märtens, M. (2013): loc. cit., p. 203.

²³² Laireiter, A.-R. (1993): loc. cit., p. 105.

²³³ Pearson, R. E. (1997): *Beratung und Soziale Netzwerke*. Weinheim: Beltz, p. 87.

²³⁴ Laireiter, A.-R. (1993): loc. cit., p. 102.

²³⁵ Gerhardter, G. (2001): *Netzwerkorientierung in der Sozialarbeit*. Gossmannsdorf: ZKS Verlag für psychosoziale Medien, URL: http://pantucek.com/diagnose/netzwerkkarte/gerhardter_netzwerk.pdf. Last accessed: 09.09.2019, p. 3.

²³⁶ Petermann, S. (2002): *Persönliche Netzwerke in Stadt und Land*. Wiesbaden: Springer VS, p. 129.

²³⁷ Schenk, M. (1995): *Soziale Netzwerke und Massenmedien. Untersuchungen zum Einfluss persönlicher Kommunikation*. Tübingen: Mohr, p. 20.

²³⁸ Röhrle, B. (1994): loc. cit., p. 164.

²³⁹ Stohl, C. (1995): *Organizational Communication: Connectedness in Action*. Interpersonal Communication Texts, Thousand Oaks, Sage Publications, p. 84.

The important characteristic of *accessibility* of system members is related to various health variables of a person. Accessibility, according to RÖHRLE, is intended to say something about „[...] *how quickly and directly members of a social network can reach a target person.*“²⁴⁰

The search for research results is correspondingly more successful if the aspects of the *inclusion* or *social integration* of the individual are taken into account. Research done by ANDERSON & GRAY-TOFT shows, that nurses with high burnout level were strongly *integrated* in a organizational network, whereas those with lower burnout scores were not.²⁴¹

In network analysis, it is common practice to further record the characteristic of accessibility.²⁴² Although LAIREITER & BAUMANN see describe integration as a generic term, or rather as a construct that offers the possibility of viewing relationships on an individual and social level, the term „social integration“ is not a generic one. However, it also includes access to interpersonal resources²⁴³ and can therefore represent the accessibility feature as far as possible. From the perspective of empirical research, social integration is today considered the best protection for mental health. Social integration has a positive effect on health and burnout symptoms regardless of a concrete stress situation and thus functions as a defense mechanism against stress. In HÜNING, BÖHM & FUGLI's research, social integration showed significant correlations with health-related quality of life and work ability.²⁴⁴ GOTTLIEB mentioned, that the degree of availability and accessibility of support largely results from the structure of ties organization members have with each other. In the same context noted HOUSE: „*Flows of social support occur primarily in the context of relatively stable social relationships rather than fleeting interactions of among strangers.*“²⁴⁵ DECI & RYAN see the need for integration and belonging (alongside the need for autonomy and competence) as innate. The satisfaction of these needs is essential for the psychological growth, health and well-being of the human being.²⁴⁶ Generally defined as the extent to which people are socially connected with others, social integration has consistently been shown to have positive effects on a wide range of physical and mental health problems - including cancer,

²⁴⁰ Röhrle, B. (1994): loc. cit., p. 19.

²⁴¹ Gray-Toft, P. A. & Anderson, J. G. (1982): Stress among Hospital Nursing Staff: Its causes and Effects. *Social Science and Medicine*, 15(5), 15(5), pp. 639-647.

²⁴² The integration or isolation of network actors is usually measured via the closeness centrality - taking indirect connections into account.

²⁴³ Lairaiter, A.-R. & Baumann, U. (1992): Network Structures and Support Functions: Theoretical and empirical Analyses. In: Veiel, H.; Baumann, U., (Eds.). *The Meaning and Measurement of Social Support*. Washington, DC: Hemisphere, p. 37. Lairaiter, A.-R. (1993): loc. cit., p. 15.

²⁴⁴ Hüning, L.; Böhm, S. & Fugli, U. (2018): Die Auswirkungen von Autonomie, Kompetenz und sozialer Eingebundtheit auf die Gesundheit und Arbeitsfähigkeit von Mitarbeitern. In: Badura, B.; Ducki, A.; Schröder, H.; Klose, J. & Meyer, M. (2018): *Fehlzeiten Report - Sinn erleben – Arbeit und Gesundheit*. Wiesbaden: Springer, p. 272 & 277.

²⁴⁵ House, J. W. (1981): loc. cit., p. 29.

²⁴⁶ Deci, Edward L. & Ryan, Richard (2000): The “What” and “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behavior. In: *Psychological Inquiry*, 11(4), pp. 227-268.

myocardial infarction, depression, burnout and even colds.²⁴⁷ In addition to the structural and relational characteristics, the next paragraph will take a closer look at social support as a functional feature.

Impact of Social Support on Stress & Burnout (functional Characteristic)

Social networks have become much more important in the scientific discussion as a matrix for support services and thus in social support research. In order to describe the effects of social support, it is first necessary to take a look at social epidemiological research. This can be considered the origin of support research.²⁴⁸ Social epidemiology has studied in great detail which social factors are involved in the development and management of disease and which factors keep people healthy.²⁴⁹ This is based on the thesis that people can be influenced in their cognitions, emotions and behavior which leads to different effects of social support for mental health²⁵⁰ as well as for counteracting burnout symptoms.²⁵¹

There is a lot of empirical evidence about the positive as well as the negative consequences, which will be presented in the following paragraphs.

The positive effects of social support affect mental health and burnout symptoms through a complex process. *„We know, for example, that chronic diseases are easier to bear and liveable forms can be found if social support is available. Depression occurs less frequently or is overcome more quickly if a trustful*

²⁴⁷ Reference is made here to the meta research of Cohen, S., Gottlieb, B. H., & Underwood, L. G. (2000): Social relationships and Health. In S. Cohen, L. G. Underwood, & B. H. Gottlieb (Eds.), *Social Support Measurement and Intervention: A Guide for Health and social Scientists*. Oxford: Oxford University Press, pp. 3-25. House, J. S.; Landis, K. & Umberson, D. (1988): *Social Relationships and Health*. Washington D. C, American Association for the Advancement of Science, New Series, 241(4865), pp. 540-545.

²⁴⁸ Hass, W. & Petzold, H. G. (2011): loc. cit. p. 194: Social epidemiology was for a long time mixed with the concept of support uncritically and only emerged from its shadow because of the repeated demand for a more precise theoretical formulation and empirical differentiation of the concepts. In studies of social epidemiology in the 1950s, it was found that when people were exposed to severe stress, not all those affected reacted in the same way to stressful events. As an explanation, in addition to psychological mechanisms (e. g. coping or ego-strength), social resources, i. e. integration into a social relationship system, and perceived and received support were used. See also Kaplan, B. H., Cassel, J. & Gore, S. (1977).

²⁴⁹ Badura, B. (1981): Zur sozialepidemiologischen Bedeutung sozialer Bindung und Unterstützung. In: Badura, B. (Ed.): *Soziale Unterstützung und chronische Krankheit. Zum Stand der sozialepidemiologischen Forschung*. Frankfurt am Main: Suhrkamp, pp. 13-40. In contrast to this comprehensive, integrative concept, the handling of the concepts of health and illness in the field of health sciences is in contrast. Here, concepts have become established which emphasise smooth transitions between health and disease or the simultaneous existence of health and disease in a person, e. g. the concept of salutogenesis.

²⁵⁰ Schwarzer, R. (1997): *Gesundheitspsychologie: Ein Lehrbuch*. Göttingen: Hogrefe, p. 264, 294, 322, 467. Jungbauer-Gans, M. (2002): loc. cit., p. 59. Schwarzer, R., & Leppin, A. (1989b): *Social Support and Health: A Meta-Analysis*. *Psychology & Health*, 3(1), pp. 1-15.

²⁵¹ Lambert, E. G.; Altheimer, I. & Hogan, N. L. (2010): *Exploring the Relationship Between Social Support and Job Burnout Among Correctional Staff*. *Criminal Justice and Behavior*, 37(11), pp. 1217-1236.

*network of close social relationships is in place. And this applies to a number of other stressful and crisis situations. If positive social support is available, there are fewer complications, longer and more positive phases of breastfeeding, successful mourning after the death of important caregivers, better coping with expected crises (normal crisis) and transitional situations (such as school enrolment, career changes, retirement), divorce or separation from a partner, stress at work or unemployment“.*²⁵²

This is due to several factors.²⁵³ The mere assumption of being supported or the perception of the existence of a support network can increase the general well-being of the supported person (perceived social support).²⁵⁴ According to KAHN, HESSLING & RUSSEL, subjective conviction to have a high degree of support leads to the greatest degree of personal well-being - regardless of whether the perceived support can be taken advantage of.²⁵⁵

In order to understand this mechanism in more detail, the transactional stress processing model of LAZARUS & FOLKMAN should be examined more closely. LAZARUS & FOLKMAN see individual coping efforts first of all in connection with different assessment processes against the background that each person assesses situations differently: If a certain event occurs, the relevance of the situation is evaluated in a first phase (primary evaluation). The situation can be irrelevant, positive or stressful for the person. Only situations that are assessed as stressful require a corresponding coping process. In the secondary assessment (secondary evaluation), the person concerned deals with personal and social resources that are available to cope with the situation, as well as with the selection of appropriate coping strategies and adequate coping behavior. It is at this level that the individual decides whether the situation has value as a positive challenge, threat or loss.²⁵⁶

Social support can now be effective in the evaluation processes mentioned above but can also influence concrete coping behavior. Whether a particular event is experienced as stressful (primary assessment) depends first of all on the initial situation in which a person finds herself/himself. Even a generally effective coping strategy is not easy to identify, since its effectiveness depends on the content and characteristics of the stress situation, on personal characteristics of the person affected or dispositional coping preferences. As has already been

²⁵² Keupp, H. (1987): loc. cit., p. 30.

²⁵³ Due to the different factors, different definition approaches emerged and the realization that social support is a multi-dimensional, paradigmatic construct that includes different levels, components and perspectives.

²⁵⁴ Barrera, M. (1986): loc. cit., pp. 415-417. Haber, M. G.; Cohen, J. L.; Lucas, T. & Baltes, B. B. (2007): The Relationship between self-reported received and perceived Social Support: A meta-analytic Review. *American Journal of Community Psychology*, 39(1-2), pp. 133-144.

²⁵⁵ Kahn, J. H., Hessling, R. M. & Russell D. W. (2003): Social Support, Health, and Well-Being among the Elderly: What is the Role of negative Affectivity? *Personality and Individual Differences*, 35(1), pp. 5-17.

²⁵⁶ Lazarus, R. & Folkman, S. (1984): *Stress, Appraisal, and Coping*. New York: Springer.

shown, social support can act as a protective shield for the arising of stress situations. In this way it can be prevented in advance that stresses occur at all - and if so, then to a lesser extent.²⁵⁷

Social support thus indirectly influences whether a situation or event is perceived as a burden or not. According to REITHMEYR, this evaluation process is an individually. Even objectively equally describable stressful situations can be classified subjectively very differently as stressful.²⁵⁸

However, social support in this phase can directly contribute to a more positive primary evaluation of the stressful situation in terms of harmfulness, loss and challenge, in that the threat to a situation is perceived as less through emotional support or distraction.²⁵⁹ When assessing a stressor in terms of coping, social support can also have a positive influence on the person. As an indirect influencing factor or partial aspect of the evaluation of the event, the subjective assessment of the availability of support is essential. Initial coping attempts can thus gradually lead to the initial situation changing and new information and resources being gained.

This can lead to a reassessment of the situation. Reevaluations do not differ in content from the primary and secondary evaluation; they are only carried out later, for example, when new information about the person-environment relationship becomes available. A person reevaluates whether the changed person-environment relationship threatens their well-being and whether sufficient resources are available to deal with it.²⁶⁰ In numerous studies (including recent ones), it has been proven that social support is one of the most effective resources for people to counteract stressful life events.²⁶¹

For example, social support is related to improved physical fitness.²⁶² BOUTIN-FOSTER investigated what kind of social support was most helpful to heart patients in changing their lifestyle. In particular, the types of social support that enabled patients to maintain a healthier

²⁵⁷ Drössler, S.; Steputat, A.; Schubert, M.; Euler, U. & Seidler, A. (2016): *Psychische Gesundheit in der Arbeitswelt - Soziale Beziehungen*. Dortmund: Bundesanstalt für Arbeitsschutz und Arbeitsmedizin 2016, p. 13.; Reithmayr, K. (2008): loc. cit, p. 36.

²⁵⁸ Reithmayr, K. (2008): loc. cit, p. 36.

²⁵⁹ Rothland, M. (2007): *Belastung und Beanspruchung im Lehrerberuf: Modelle, Befunde, Interventionen*. Wiesbaden: Springer VS, p. 237.; Reithmayr, K. (2008): loc. cit, p. 36.

²⁶⁰ Jerusalem, M. (1990): *Persönliche Ressourcen, Vulnerabilität und Streßerleben*. Göttingen: Hogrefe, p. 13.; Reithmayr, K. (2008): loc. cit, pp. 36-37.

²⁶¹ Cohen S.; Mermelstein R.; Kamarck T. & Hoberman H. M. (1985): *Measuring the Functional Components of Social Support*. In: Sarason, I. G., Sarason, B. R. (Eds) *Social Support: Theory, Research and Applications*. NATO-ASI Series (D: Behavioural and Social Sciences), 24. Dordrecht: Springer, pp. 75. Thoits, P. A. (1995): *Stress, Coping, and social Support Processes: Where are we? What next?* *Journal of Health and Social Behavior*, 35, pp. 53-79. More recent studies show similar results, e. g. Borgmann, L. S.; Rattay, P. & Lampert, T. (2017): loc. cit., pp. 117-123.

²⁶² A comprehensive review on this topic was created by Scarapicchia, T. M. F.; Amireault, S.; Faulkner, G. & Sabiston, C. M. (2017): *Social Support and physical Activity Participation among healthy Adults: A systematic Review of prospective Studies*. *International Review of Sport and Exercise Psychology*, London Taylor & Francis, 10(1), pp. 50-83.

lifestyle and mitigate stressful events were identified as helpful.²⁶³ In the area of health effects or protective effects of social support, particular attention is paid to changes in psychosocial functions such as depressive symptoms and burnout. In general, good social support is associated with fewer symptoms of depression.²⁶⁴ For the adult population living in Germany, for example, MÜTERS, HOEBEL & LANGE was able to show that low perceived social support among women and men in all age groups is associated with a significantly increased prevalence of depression.²⁶⁵ DRELL, PEPLIES, LÜBS & BAMMANN report similar findings. They showed that people who perceived the emotional support they received as sufficient were less likely to develop depression than people who considered the support insufficient. In contrast, instrumental support (e. g. in the form of material support) did not show any influence on the risk of depression.²⁶⁶

LAMBERT, ALTHEIMER & HOGAN explored the effects of family-and-friends support, coworker support, management support, and supervisor support on emotional exhaustion, depersonalization, and personal accomplishment (ineffectiveness). The results revealed that different types of social support influenced different dimensions of burnout.

Each dimension of job burnout was influenced by at least one type of social support. VÄÄNÄNEN, BUUNK, KIVIMÄKI, PENTTI & VAHTERA investigated the connection between sources of social support, life events and psychiatric morbidity. They showed that low support from partners and colleagues was positively associated with psychiatric morbidity, while support from a friend after death or serious illness in the family reduced the risk of morbidity.²⁶⁷ PLAISIER, DE BRUIJN, DE GRAAF, TEN HAV, BEEKMAN, & PENNINGSS found in a study on depression and anxiety disorders, caused by poor workplace conditions, that social support - in this case increased emotional support - provides protection against the occurrence of these symptoms..²⁶⁸ A 14-year long-term study by HEPONIEMI, ELOVAINIO, KIVIMÄKI, PULKKI, PUTTONEN & KELITKANGAS-JÄRVINEN proves that perceived social support,

²⁶³ Boutin-Foster, C. (2005): Getting to the Heart of social Support: a qualitative Analysis of the Types of instrumental Support that are most helpful in motivating cardiac Risk Factor Modification. *Heart & Lung, Amsterdam, Elsevier, 34(1), pp. 22-29.*

²⁶⁴ Heller, K. & Rook, K.S. (2001): Distinguishing the theoretical Functions of social Ties: Implications for Support Interventions. In: Sarason, B. R. & Duck, S. (Eds.), *Personal Relationships: Implications for clinical and Community Psychology.* Chichester: Wiley, pp. 119-139.

²⁶⁵ Müters, S.; Hoebel, J. & Lange, C. (2013): Diagnose Depression: Unterschiede bei Frauen und Männern. Berlin: Robert-Koch Institut, GBE kompakt, 4(2), pp. 1-10.

²⁶⁶ Drell, C.; Peplies, J.; Lübs & Bammann, K. (2016): Der Einfluss sozialer Unterstützung auf das Depressionsrisiko: Eine Fall-Kontroll-Studie bei 65 - 97-jährigen Erwachsenen in Europa. *Gesundheitswesen. Stuttgart: Georg Thieme Verlag KG, 78, A71.*

²⁶⁷ Väänänen, A.; Buunk, B. P.; Kivimäki, M.; Pentti, J. & Vahtera, J. (2005): When it is better to give than to receive: Long-Term Health Effects of perceived Reciprocity in Support Exchange. *Journal of Personality and social Psychology, 89(2), pp. 176-193.*

²⁶⁸ Plaisier, I.; de Bruijn, J. G.; de Graaf, R.; ten Hav, M.; Beekman, A. T. & Penninx, B. W. (2007): The Contribution of Working Conditions and social Support to the Onset of depressive and Anxiety Disorders among male and female Employees. *Social Science and Medicine, 64, pp. 401-410.*

independent of personal characteristics such as hostility or anger, is a „*long-term protection factor*“ with regard to the probability of depression.²⁶⁹ SCHWARZER & LEPPIN show in a meta-analysis results of various studies also pointing in the same direction, in connection with the outcomes of coping attempts in severe diseases.²⁷⁰ According to FYDRICH & SOMMER, the following health-promoting factors can be assigned to social support: [a] the development and stabilization of self-esteem, [b] social integration in a group, [c] help in coping with concrete burdens and tasks through concrete practical assistance and increasing individual competence, and [d] regulation of affects through activities in social contact.²⁷¹

Over the last decades, due to the question of how social support is effective, various models have emerged, most of which link social support to the variables stress in the form of a debilitating event and distress as an indicator of stress.²⁷²

The main-effect (direct-effect) model²⁷³ states that social support contributes to the satisfaction of basic social needs (e. g. bonding, contact, sociability) and thus also to mental health and burnout prevention. Because a person is involved in a system of social relationships, there are direct effects on general well-being.²⁷⁴

NESTMANN considers the direct effects to be unintentional „*by-products and side effects of everyday life*“. Social support is thus ascribed an effect on individual well-being that goes beyond specific situations.²⁷⁵ The existence of a concrete stress situation is not necessary for the direct-effect thesis. The direct effect is therefore based on being socially embedded and being able to count on the support of others, which has a positive effect on the mental health of those affected.²⁷⁶

²⁶⁹ Heponiemi, T., Elovainio, M., Kivimäki, M., Pulkki, L., Puttonen, S., & Keltikangas-Järvinen, L. (2006): The longitudinal Effects of social Support and Hostility on depressive Tendencies. *Social Science & Medicine*, 63(5), pp. 1374-1382.

²⁷⁰ Schwarzer, R. & Leppin, A. (1989b): Social Support and Health: A Meta-Analysis. *Psychology & Health*, 3(1), pp. 1-15. Schwarzer, R., & Leppin, A. (1991): Social Support and Health: A theoretical and empirical Overview. *Journal of Personal and Social Relationships*, 8, pp. 99-127.

²⁷¹ Fydrich, T. & Sommer, G. (2003): Diagnostik sozialer Unterstützung. In: M. Jerusalem & H. Weber (Eds.), *Psychologische Gesundheitsförderung*, pp. 81.

²⁷² Smith, C. A.; Tong, E. M. W. & Ellsworth, P. C. (2014): The Differentiation of positive emotional Experience as viewed through the Lens of Appraisal Theory. In: Tugade, M.; Shiota, M.; Kirby, L. D. (Eds.), *The Handbook of Positive Emotions*, New York: Guilford, pp. 11-27. For the first time, SELYE differentiated between eustress and distress. Selye, H. (1975): Confusion and Controversy in the Stress Field. *Journal of Human Stress*. 1(2): pp. 37–44.

²⁷³ There are other terms in the literature for the Main-Effect Model, i. e. Direct-Effect Thesis, Main-Effect Thesis or Direct-Effect Model, which are used as a synonym.

²⁷⁴ Cohen, S. & Wills, T. A. (1985): Stress, social Support, and the buffering Hypothesis. *Psychological Bulletin*, 98(2), pp. 310-357.

²⁷⁵ Nestmann, F. (1988): Die alltäglichen Helfer. Theorien sozialer Unterstützung und eine Untersuchung alltäglicher Helfer aus vier Dienstleistungsberufen. Berlin: De Gruyter, p. 80.

²⁷⁶ Cohen, S., & Wills, T. A. (1985): loc. cit., p. 311 & 312.

Social support can have also positive effects on the processing of stress (moderator-effect).²⁷⁷ Social support is ascribed a positive influence on situations in which specific stressful circumstances or events are alleviated or buffered in their effect. According to this thesis, social support is able to reduce burdens directly on the one hand, and indirectly on the other hand by expanding the resources for dealing with the burden (e. g. maintaining a positive self-esteem, strengthening coping skills), which in turn can have a stress-relieving effect. However, it is essential that the extent of the buffer effect depends on the stress-level.²⁷⁸ COHEN & WILLS, in their meta-analysis on the significance of the direct effect and buffer effect, state that both the buffer model and the direct effect model can be considered as backed empirically. In the meantime, research agrees that it is not a question of an „either-or“ relationship between the two effects, but that both models have their justification, but that it depends on certain framework conditions which of the two effects comes into play.²⁷⁹ However, as the analysis of various studies shows, social support has a non-specific effect in various stressful situations and on different population groups. It is important to note that the stress buffer model could only be confirmed if the social support received was adequate for the stress situation, whereby the subjective perceived adequacy was more important than the actual adequacy.²⁸⁰

In support research, there are further models of the mechanism of social support besides the main-effect and buffer-effect. SCHWARZER & LEPPIN argue that it is not possible to explain the construct of social support using the direct-effect and buffer-effect model solely, or to depict the complex real world. In addition to the two models mentioned, the prevention model (shield-model), the mobilization model (trigger-model) and the reduction-model should be mentioned. Based on the consideration that social support can become effective even before a stressful situation occurs, the prevention model assumes that adequate social integration and integration into a social network acts as a „protective shield“ for the occurrence of stressful situations or reduces the extent of the stress. Corresponding integration into a social network therefore has a positive effect on mental health.²⁸¹ The mobilization-model states that only a burden can lead to the mobilization of social support potentials. Due to a stress situation, social support is mobilized, which in turn contributes to a reduction of the effect of the stress. According to this model, stress is the trigger for social support, either by actively mobilizing social support, or by network members themselves perceiving the need. Finally, the reduction-model assumes a reduction in social support as a result of increased stress. It assumes a coincidence of stress and social support,

²⁷⁷ Synonyms are also used in the literature for the term Moderator-Effect Model, i. e. Buffer-Model, Buffer-Thesis and Buffer-Effect Hypothesis.

²⁷⁸ Cohen, S., & Wills, T. A. (1985): loc. cit., p. 312-313.

²⁷⁹ Cohen, S., & Wills, T. A. (1985): loc. cit., p. 348. See also Nestmann, F. (1988): loc. cit., p. 85 & 86.

²⁸⁰ Nestmann, F. (1988): loc. cit., p. 86 & 87.

²⁸¹ Schwarzer, R. & Leppin, A. (1988): Social support: The many faces of helpful social interactions. *International Journal of Educational Research*. Amsterdam: Elsevier, 12(3). pp. 333-345.

such as can occur for the stressor of a divorce, where the stress event not only increases the distress, but implicitly results in a reduction of social support.²⁸²

The goal of support research is to describe and research the positive effects of social support. However, the fact that social support can also have burdensome and negative consequences was initially largely neglected. LAITTEITER pleads for more attention to be paid to negative social support, since factors of negative support are associated with poorer coping success, lower self-esteem and a worse state of health.²⁸³ Due to this ambivalence, possible dysfunctional effects should always be considered. A frequently repeated demand in the literature on social support therefore refers to the need to consider not only possible gains, but also the consequential costs of social support in empirical studies, or to include cost-benefit considerations of the persons involved, instead of considering the general effect of social support. On the basis of various empirical findings, LAIREITER & LETTNER even claim that „[...] *burdens from social relationships may have a greater health-related effect than positive elements.*“²⁸⁴ LAITTEITER & LETTNER name six aspects of stress for a socially supported person: [1] stressful aspects of normal support, [2] inadequate support, [3] disappointed support expectations, [4] excessive help, [5] problematic relationships between supporters and [6] stress-related ineffectiveness.²⁸⁵ Adequate social support can not only strengthen a person's self-esteem, but the fact of having to be supported or being dependent on the help of others can also make social support self-esteem threatening. Support produces feelings of shame, guilt, loss of self-esteem and the creation of dependencies.²⁸⁶

However, LAIREITER & LETTNER limit, that these effects are moderated by other factors. The extent to which these aspects have a restrictive effect depends on personality traits, the extent of support received, the perceived motives behind a support service and the relationship between the person giving and receiving support.²⁸⁷ In this context, SCHWARZER & LEPPIN mention, that such failed attempts at support occur mainly in the case of serious life crises or after experiencing a critical life event. The reasons often lie on the side of the helper: a lack of social skills as well as the inability to react adequately to massive emotional problems in others often leads to stereotypical behavior, clichés, trivialization and trivialization of the problem. Those affected experience this as inappropriate and insensitive, which leads to additional distress.²⁸⁸

²⁸² Reithmayr, K. (2008): loc. cit. p. 31.

²⁸³ Laireiter, A.-R. (2007): Negative Soziale Unterstützung bei der Bewältigung von Lebensbelastungen. Eine konzeptuelle und empirische Analyse. Zeitschrift für Gesundheitspsychologie. Göttingen: Hogrefe, 15, pp. 43-56.

²⁸⁴ Laireiter, A. & Lettner, K. (1993): Belastende Aspekte Sozialer Netzwerke und sozialer Unterstützung. Ein Überblick über den Phänomenbereich und die Methodik. In: Laireiter, A. (Ed.), Soziale Netzwerke und Soziale Unterstützung. Konzepte, Methoden und Befunde. Bern: Huber, p. 101.

²⁸⁵ Laireiter, A. & Lettner, K. (1993): loc. cit., p. 108.

²⁸⁶ Nestmann, F. (1988): loc. cit., p. 91.

²⁸⁷ Laireiter, A. & Lettner, K. (1993): loc. cit., p. 108-111.

²⁸⁸ Leppin, A. & Schwarzer, R. (1997): Sozialer Rückhalt, Krankheit und Gesundheitsverhalten. In: R. Schwarzer (Ed.), Gesundheitspsychologie. Ein Lehrbuch. Göttingen: Hogrefe, pp. 349-373.

Another reason is, that helpers are usually not experts and have a lay idea of the „normal“ course of coping efforts. The helpers are thus expected to follow a normative course in the coping process. If the person concerned deviates from this pattern, he or she is assessed as abnormal, which triggers feelings of guilt on the recipient side. The feeling of not being understood can cause further isolation and loneliness. It should also be noted that it is precisely the closest caregivers who make mistakes. Due to the strong emotional bond and the feeling of responsibility for the other, there is a lack of the necessary discipline and objectivity to help adequately. Overprotection and hope of the helpers put additional pressure on the person concerned. The probability of such negative effects occurring depends on the duration and degree of the stress situation, the attitude towards the situation, the relationship to the person, the responsibility for the situation and the ability of the network to provide support to the individual.²⁸⁹

Inadequate support services can also lead to frustration and offending and thus to an intensification of feelings of strain, negative coping experiences and a deterioration in well-being.²⁹⁰ Excessive aid must also be regarded as a form of inadequate support. If an excess of support is made available, this can lead to dependency. Often, this behavior is backed up by an emotional over-commitment, which is also referred to under the terms „overprotection“ and „overinvolvement“.²⁹¹ In relationships, social support is not only granted or exchanged, but there are also power inequalities, conflicts are fought and burdens are transferred. Thus, social relationships do not necessarily have to have a positive effect and can represent more of a burden than support for the people involved. This is made clear, for example, by a meaningful study of WELLMAN, in which around a quarter of the relationships mentioned were qualified by the interviewees as ties to persons who were categorized as unsympathetic.²⁹²

As a result, personal networks are never unconditionally supportive or helpful. They can also create stress and conflicts.²⁹³ A supportive relationship can be experienced as burdensome if, among other things, it is characterized by a lack of reciprocity. „*Lack of reciprocity is particularly problematic because it contradicts the striving for balance as a basic moment in social relationships [...]*.“²⁹⁴ If social support cannot be reciprocated in any form (lack of reciprocity), this also leads to dependence. If the exchange situation is balanced, the assistance provided is evaluated as positive. According to the equity theory, people strive for a balance in their social relationships. Hence, imbalances lead to negative emotions.²⁹⁵

²⁸⁹ Röhrle, B. (1987): loc. cit., p. 253.

²⁹⁰ Surma, S. (2012): Selbstwertmanagement. Wiesbaden: Springer Gabler, p. 36.

²⁹¹ Laireiter, A. & Lettner, K. (1993): loc. cit., p. 109.

²⁹² Wellman, B. (1982): loc. cit., p. 29.

²⁹³ Herz, A. (2014): Strukturen transnationaler sozialer Unterstützung. Wiesbaden: Springer VS, p. 68.

²⁹⁴ Laireiter, A. & Lettner, K. (1993): loc. cit., p. 109.

²⁹⁵ Greenberg, J. (1987): A Taxonomy of organizational Justice Theories. *Academy of Management Review*, 12(1), p. 11 referring to Walster, E.; Berscheid, E. & Walster, G. W. (1978): *Equity: Theory and Research*. Boston: Allyn & Bacon.

The role of social support in the coping process can also be described in terms of „coping assistance“, which influences coping behaviour,²⁹⁶ in addition to the approach of the transactional stress processing model of LAZARUS & FOLKMAN.²⁹⁷ In stress coping research, social support is regarded as the result of mobilizing resources. According to this approach, the mobilization of social support represents an option of coping behavior that a person can choose to cope with a stressful situation.²⁹⁸ RÖHRLE describes social support as the result of an active search for help or activation by a close person, a work colleague or a supervisor.²⁹⁹ If the individual, targeted activation of social resources is taken into consideration as an important factor, social-communicative skills and confidence in one's own ability to ask others for help and support also come into play on the side of the person seeking help and support. A person who has a high level of trust in his or her own ability and is not afraid to ask others for help and support or, more generally - to activate social resources - will also receive a higher degree of social support³⁰⁰ KLAUER & WINKELER propose to place the mobilization of social support conceptually next to problem-solving and emotionally oriented coping behavior: „*In this sense the mobilization of social support is the attempt of a (partial) delegation of coping tasks to the social immediate environment*“³⁰¹ The term mobilization emphasizes that willingness to support is available in social networks as a potential resource, that must be activated in appropriate situations. However, social support is not an automatic product of social networks, but rather a benefit, the creation of which often requires the active involvement of its recipients.³⁰²

The term coping describes the process of consciously dealing with the burdens directly or indirectly caused or expected by a stressful situation and the attempt to absorb, master or process these burdens through purposeful action. Health disorders are accordingly understood as the result of a suboptimal coping with stress situations.³⁰³ Whether a person in a stressful situation mobilizes social support is influenced by various determinants. A number of personal and environmental factors must be taken into account. The mobilization of social support requires, for example, several assumptions from the point of view of the supported person: The dimensions refer to the [1] willingness to realize and accept the need for help, to [2] express problem situations, [3] to the factuality of actively seeking help in the first place, [4] to the forms, intensities and addressees of expressing one's own needs and requesting assistance, [5] and last but not least to the different views on what timing is appropriate with regard to seeking help.

²⁹⁶ Thoits, P. A. (1986): loc. cit., pp. 416-423.

²⁹⁷ Lazarus, R. & Folkman, S. (1984): Stress, Appraisal, and Coping. New York: Springer.

²⁹⁸ Reithmayr, K. (2008): loc. cit, p. 114.

²⁹⁹ Röhrle, B. (1994): loc. cit., p. 94.

³⁰⁰ Rothland, M. (2007): loc. cit., p. 239.

³⁰¹ Klauer, T. & Winkeler, M. (2005): Mobilisierung sozialer Unterstützung. Konzepte, Befunde und Interventionsansätze. In: Otto, U & Bauer, P. (Ed.), Mit Netzwerken professionell zusammenarbeiten. Band I: Soziale Netzwerke in Lebenslauf- und Lebenslagenperspektive. Tübingen: dgvt, p. 163.

³⁰² Klauer, T. & Winkeler, M. (2005): loc. cit, p. 174.

³⁰³ Haß, W. (2002): loc. cit., p. 3.

Therefore, in order to mobilize support, first of all an assessment or evaluation of the situation as a problem must be made. This assessment can be very different from person to person. What one person experiences as a threat is a challenge for the other. Depending on how the situation is perceived, mobilization efforts vary.³⁰⁴ RÖHRLE argues that people who experience a stressful situation as harm, are more likely to mobilize support than those who see the situation as a challenge. Persons who see the situation as a loss, on the other hand, rarely seek social support.³⁰⁵ This was also proven by DUNKEL-SCHETTER, FOLKMAN & LAZARUS. They conducted one of the first empirical studies on social support and coping behavior and found, that the more stressful different events are perceived, the more social support people mobilize.³⁰⁶ SCHWARZER & LEPPIN describe the effect as follows: In the delayed mobilization model, the stressor increases the distress, but not or only to a small extent the social support; only the observed increased stress of the individual leads to the activation of the social network and the support. The long-term mobilization model extends the delayed model in that the increased social support at a later point in time reduces further distress. The reduction model assumes a conflicting of stress and social support, whereby the stress event not only increases the distress but implicitly results in a reduction of social support.³⁰⁷ Thus, experiencing and assessing the extent of a stress situation plays a significant role in mobilizing social support.

Another way to mobilize support is for the person to reveal his or her situation in need of support to others. Sharing about problems is an essential condition for the quality of support. However, the self-revelation of one's own sensitivity and the mobilization of social support is not always self-evident. This certainly applies even more to relationships with outsiders. In this context, social comparative processes also play a role. The higher the social consensus about the fact that it is normal to seek help in the event in question, the higher the willingness to express a need for help and to accept help.³⁰⁸ According to KLAUER & WINKELER, this self-revelation does not have to happen exclusively verbally - the mobilization of social support can take place in five ways: [1] request for advice and feedback, [2] open expression of emotions, [3] confrontational demand for support, [4] search for physical attention and [5] as ostentatious, i. e. emphasized retreat.

It is interesting that the different mobilization behavior of the recipients does not trigger support to the same extent as KLAUER & WINKELER empirically prove. For example, asking for advice and feedback may be followed by emotional and informational support, whereas confrontational demanding triggers almost the opposite. It is therefore also a matter of how one

³⁰⁴ Reithmayr, K. (2008): loc. cit, p. 39.

³⁰⁵ Röhrle (1994): loc. cit., p. 134.

³⁰⁶ Dunkel-Schetter, C., Folkman, S., & Lazarus, R. S. (1987): Correlates of social Support Receipt. *Journal of Personality and Social Psychology*, 53, pp. 71–80.

³⁰⁷ Schwarzer, R. & Leppin, A. (1989): loc. cit., p. 34.

³⁰⁸ Snyder, C. R., & Ingram, R. E. (1983): The Impact of Consensus Information on Help seeking for psychological Problems. *Journal of Personality and Social Psychology*, 45, pp. 1118-1126.

„presents“ one's own need for help.³⁰⁹ In the process of creating and developing social support relationships, the individual has an active role in mobilizing and providing social support.

Support must therefore be regarded as an interactive event,³¹⁰ because, conversely, the individual's behavior is also of decisive importance for whether he or she is perceived by others as needing their help.³¹¹

Two essential aspects should be noted. Firstly, the coping process does not necessarily have to be positive but can be disrupted on several levels. On the one hand, at the level of primary assessment, there is the danger that the event will not be adequately assessed by the person and that the event cannot be distinguished as a challenge or threat. On the other hand, at the level of secondary assessment, there is a risk of inappropriate resource assessment due to environmental conditions or lack of social skills. Ultimately, misunderstandings can arise between action and experience, i. e. action does not correspond to the person's feelings or intentions.³¹²

In summary, the concept of social networks with their main function of social support is very diverse and comprehensive. There is no clear theory, but a multitude of possible explanations. Common to all theoretical approaches is that network relationships have different functions and effects, which must correspond to the situation in order not to be perceived as a burden and obstacle. It is important to maintain relationships of varying intensity because, depending on the situation, sometimes close relationships and other times more casual relationships have a supportive effect.

2.5. Strengthening Employees' Perception of Support and Health as an exemplary Organizational Health-Management Intervention Measure

Based on the theoretical foundations discussed so far in the first and second chapters, it can be concluded that social support in the work context is of great importance with regard to individual health. However, the question arises at this point as to how these findings can be implemented in an intervention. Two strategies can be used for this purpose, which are presented in this paragraph - the condition-related or the person-related intervention. Both approaches can also be combined. These concepts can be located within organizational health-management in the area

³⁰⁹ Klauer, T. & Winkeler, M. (2005): Mobilisierung sozialer Unterstützung. Konzepte, Befunde und Interventionsansätze. In: Otto, U & Bauer, P. (Ed.), Mit Netzwerken professionell zusammenarbeiten. Band I: Soziale Netzwerke in Lebenslauf- und Lebenslagenperspektive. Tübingen: dgvt-Verlag, pp. 157-180. Reithmayr, K. (2008): loc. cit, p. 40.

³¹⁰ Rothland, M. (2011): Aktivierung und Erleben sozialer Unterstützung. Eine vergleichende Untersuchung bei Studierenden des Lehramts, der Humanmedizin und der Rechtswissenschaft. *Psychologie in Erziehung und Unterricht*, 4/2011. München: Ernst Reinhardt, p. 241.

³¹¹ Philipp, S.-H. & Aymanns, P. (1987): Die Bedeutung sozialer und personaler Ressourcen in der Auseinandersetzung mit kritischen Lebensereignissen. *Zeitschrift für Klinische Psychologie* 16 (4), pp. 384.

³¹² Reithmayr, K. (2008): loc. cit, p. 40.

of organizational health promotion and can be implemented through organizational development measures. Work design measures are condition-related interventions, i. e., relationship-oriented. They aim at changing the given conditions in systems or groups and represent social support in their components. In a classical way, they focus on the conditions of environment and execution or on the contents of the work. In this context, for example, it is appropriate to deal with processes of cooperation and communication, information transfer, transparency in decision-making, but also professional support systems. The counterpart to this are the person-related, behavior-oriented interventions. These relate to a person's individual behavior. An example of this could be stress management training or participation in a training program for the back. These are referred to as internal measures. External measures can be used to promote resources that people can draw on to cope with their daily tasks (e. g. mobilization of social support).³¹³ Interventions that focus exclusively on the individual level are usually effective but tend to have short-term effects on individuals. In practice, these are also likely to be widespread because the causes of existing problems are usually still more likely to be sought in the individual. Studies show that the combination of interventions to promote individual health (e.g. stress management seminars, individual coaching, etc.) with interventions to improve working conditions (e.g. job rotation) is the most effective way to promote mental health.³¹⁴

The question arises as to which aspects should be taken into account when developing an intervention in order to ensure its usefulness and success. The field of action of mental health includes all measures that strengthen resources, help to reduce, limit or completely avoid mental stress and support employees. There are numerous measures that promote the mental health of employees in the company. It is always important to note that there is no one intervention or standardized package of measures that fits every company. The implementation of mental health promotion in a high quality, for example, involves a bundle of measures to be developed in a participatory manner, which must be tailored to the respective company based on the analysis of the current situation.

As an example, in the area of condition-related, relationship-oriented measures, health-promoting task design can be mentioned at this point. Tasks should be set for employees in such a way that they are able to react flexibly to stressors and expand their professional and social skills. In order to achieve this, it is important that work tasks are holistic and thus contain planning, organizing, executing and controlling elements as far as possible. Another important issue is that the completion of the task should require the use of different skills, abilities and knowledge, as this avoids one-sided stress and provides incentives for personal development. The work task should also provide the opportunity for social interaction and be set in such a way that the employees

³¹³ Ulich, E. & Wülser, M. (2009): Gesundheitsmanagement in Unternehmen. Wiesbaden: Springer, p. 15-28.

³¹⁴ Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (2012). Kein Stress mit dem Stress - Eine Handlungshilfe für Führungskräfte. Paderborn: Bonifatius. URL: <http://psyga.info/ueberpsyga/materialien/handlungshilfe-fuer-fuehrungskraefte/> Last accessed: 01.01.2021.

have a certain degree of freedom regarding its content, temporal and spatial structuring. It is also important for workers to be able to relate their own actions to higher-level activities when carrying out their tasks.³¹⁵

Further measures include the optimization of work organization and work processes. Starting points are, for example, work extensions, work changes, flexible working hours, restructuring of activities in order to reduce administrative tasks. Proportionate measures should also focus on involving employees in decision-making processes. This can take the form of employee surveys, team meetings or workshops. Linked to this can be an expansion of the scope for action and decision-making, which gives employees the opportunity to independently determine the sequence of their own work tasks and to jointly agree on goals with their supervisors. Improving communication and feedback, developing a culture of appreciation and recognition involves developing new communication structures or through training to establish a healthy and supportive leadership style. Clear definition of roles and responsibilities is the last example of relationship-oriented measures at this point. This includes clear, unambiguous and up-to-date job descriptions, reasonable expectations of employees, and the necessary qualifications for employees to be able to perform their job role effectively.

In addition to creating a healthy working environment, the mental health of employees and managers can be promoted by strengthening their stress management skills and personal resources. This can be achieved through individual measures for the employee or in the form of group training. In the field of group training, there are now many different formats and approaches. However, empirically tested group offers are often based on similar basic assumptions. Five content-related components can be identified, which can either be combined with each other or offered as independent programs and trainings.³¹⁶ These belong to the personal, behavior-oriented interventions. First and foremost, [1] information should be mentioned. Many training programs begin by imparting knowledge about stress and stressors, since it is assumed that knowledge about stress already has a positive effect on dealing with stress. [2] Cognitive-behavioral methods focus on stress evaluation processes and how to change them. Cognitive techniques are learned that are intended to lead to a reassessment of stressors or stressful situations and the individual's ability to cope with them. Likewise, person-oriented, behavioral interventions focus on [3] relaxation and mindfulness. This is based on the assumption that a physiologically relaxed state is incompatible with psychological tension and anxiety or anger components. Relaxation techniques work primarily on the physiological level. Well-known examples of relaxation techniques include progressive muscle relaxation, autogenic training and fantasy journeys. In [4] competence training, the goal is to strengthen individual coping strategies and improve personal competencies. Examples are seminars and trainings in the areas of burnout

³¹⁵ Bartholdt, L. & Schütz, A. (2010): Stress im Arbeitskontext. Ursachen, Bewältigung und Prävention. Weinheim: Beltz, p. 155-157.

³¹⁶ Bartholdt, L. & Schütz, A. (2010): loc. cit., p. 131.

prevention, resilience, time management, problem solving (methodological skills), conflict management, communication and work-life balance. In [5] individual-centered work situation change training, participants are taught strategies, knowledge and skills to work directly toward changing stressors at work (e.g., mobilizing social support). Individual interventions include individual counseling in occupational psychology, biofeedback and coaching sessions, work coping coaching, regular endurance sports, and medical-psychological counseling with the aim of identifying psychological risk factors through health checks and initiating early prevention. The effectiveness of measures is also determined by how need- and target group-oriented they are and whether they are implemented only selectively in the form of individual measures or are offered on a longer-term and permanent basis in the company.³¹⁷

In an organizational context, accordingly it is advisable to take an approach that involves both employees and supervisors in terms of personnel. Interventions in which employees and supervisors work together on the weaknesses identified are promising. In terms of content, the intervention is not only about health-promoting changes, but at the same time also about change measures in the area of social support and supervisor behavior. Central to both is the examination of an important job-related resource, which has an influence on the perception of stress and social support.

2.6. Conceptual Framework, Scientific Relevance and Research Gaps emerging from the Analysis of previous Studies and the Derivation of the Research Model from the Conceptual Framework

The following paragraph provides a detailed derivation and definition of support networks used for this work and their composition. This step is important, because the quantification of relevant investigation characteristics in the design of the questionnaire and its evaluation aims to ensure the comparability of the data and to make them accessible for statistical evaluation procedures with regard to possible comparisons and dependencies. With the transformation into calculable quantities, a rationalization effect is also aimed at, since in this way also extensive data material can be reduced to its core.

Methodological Delimitation of Support Networks

The demarcation of a social network, in this case a social support network, from its environment is a particular challenge in this dissertation. In classical network analysis, empirical surveys usually begin by narrowing down the set of possible actors (e. g. in terms of a geographical region or an organization). Within this set, it is then determined which actors belong to the network under investigation, either on the basis of the characteristics of the actors (nominalistic methods) or on

³¹⁷ Bamberg, E.; Busch, C. & Ducki, A. (2003): Stress- und Ressourcenmanagement. Strategien und Modelle für die neue Arbeitswelt. Bern: Huber.

the basis of the defined relations (rationalistic methods).³¹⁸ The network composition is found in the literature once on an interactional level as dichotomy „strong vs. weak relationships“ and once on a network level as „open vs. closed networks“. A high proportion of strong relationships (i. e. those that are close to employees and those that employees see frequently) constitute largely „closed“ networks of high density. These networks are usually characterized by their local centering, relatively homogeneous settings and values as well as a high frequency of contact. A high proportion of weak (i. e. rather volatile and rather instrumental) relationships, on the other hand, constitute loosely connected, open networks, which are characterized by greater heterogeneity, a low proportion of relationships as well as a larger regional extension with a correspondingly lower frequency of contact. This again makes clear how important a clear delineation of the support networks is for the present study.

The present study focuses on networks that surround a single person. These ego-centered networks (ego networks for short) are defined; on the one hand, by the named person (a focal actor (ego), a set of further actors (alteri) related to this person, and the specification of the relationships that the actors have with each other, on the basis of which the network is defined.³¹⁹ If a study such as this one only includes the direct relationships of a focal ego to its alteri - without considering their interrelationships - this network structure is often referred to as the focal actor's relationship portfolio.³²⁰ In this model conception, volume and density are in an inverse relationship, i.e. the larger the support network, the lower the probability that ego and alteri know each other well. Thus, a core network can be well separated from the overall network by a relationship portfolio limited by its size. This understanding has already been surveyed in various studies, but is operationalized differently. ANTONUCCI & ISRAEL name the personal closeness and the importance of a person as an efficient operationalization feature.³²¹ The core network is to be operationalized with a question combining various aspects. [1] people who are important; [2] with whom personal matters can be discussed [3] and with whom there is trust. In many classical studies, the size of the core network was found to be between four and six persons.³²² The core network should also not exceed this maximum size in this study and is operationalized with the term „small number“.

³¹⁸ Jansen, D. (1999): loc. cit., pp. 71-73.

³¹⁹ Herz, A. (2012): Erhebung und Analyse ego-zentrierter Netzwerke. In: Kulin, S., Frank, K., Fickermann, D. & Schwippert, K. (Ed.): Soziale Netzwerkanalyse. Theorie - Praxis - Methoden. Münster: Waxmann, p. 134.

³²⁰ Reiners, F. (2008): Networking in Organisationen. Schriftenreihe Organisation und Personal. Mering: Hampp, p. 51. Hoffman, W. H. (2007): Strategies for Managing a Portfolio of Alliances. Strategic Management Journal, 28., p. 828.

³²¹ Antonucci, T. C., & Israel, B. A. (1986): Veridicality of social Support: A Comparison of Principal and Network Members' Responses. Journal of Consulting and Clinical Psychology, 54(4), pp. 432-437.

³²² Hammer, M. (1983): „Core“ and „extended“ Networks in Relation to Health and Illness. Social Science and Medicine, 7, pp. 405-411.

The empirical study in the third chapter focuses, among other things, on the quality of support networks. While classical network analysis captures both structural and personal characteristics, the empirical part of this dissertation generally focuses on the quality of interaction processes between actors who are connected by communication and distinguishable from other social systems or support networks by a sense boundary.³²³ These are support networks with recurring face-to-face interactions between ego and its alteri, both in personal spheres (family, friends) and in organizational spheres (colleagues). The assessment of quality should fit in with the systemic-constructivist way of thinking by capturing characteristics of social systems through several equally important descriptions from the perspective of ego. In addition, as few normative ideas as possible about how a functional system should look like should be used.

The definition and classification of support networks for this study will be made in the following:

Derivation of Characteristics and Definition of the Support Network „Colleagues“

Work colleagues are a source of support with a high degree of availability for professionals. Support services depend on the quality of the relationship in each individual case.³²⁴ In a team, a department, etc. there are quite different characters and therefore usually also quite diverse relationships between the individual members. HENDERSON & ARGYLE distinguish four different types of working relationships: [1] rather intimate, [2] positive but superficial, [3] neutral and [4] negative.³²⁵ As already mentioned, due to the empirical research design and in view of the larger sample, it was not possible to systematically and individually survey all network characteristics for each individual employee. The interviewees themselves determined how their colleagues or network members should be classified in the respective given support subnetwork and with regard to the quality of the relationship. It can be assumed that colleagues who see each other daily and also talk to each other about private matters (and not only about professional matters) „know each other well“ (classic density measure). The focus of this investigation is on the according to HENDERSON & ARGYLE close, familiar relationships, as they are most relevant for the quality of a support network (measure of relationship strength).

The question should explicitly ask about the strength of the relationship with the network partners and whether this applies to the respective support network. Furthermore, the operationalization characteristics apply. In the questionnaire, the instruction for the collegial support network is formulated as follows:

³²³ Kneer, G. & Nassehi, A. (2009): Niklas Luhmanns Theorie sozialer Systeme: Eine Einführung. Stuttgart: UTB, p. 46.

³²⁴ Haß, W. (2002): loc. cit, p. 53.

³²⁵ Henderson, M. & Argyle, M. (1985): Social Support by four Categories of Work Colleagues: Relationship between Activities, Stress and Satisfaction. Journal of Occupational Behavior, 6, pp. 229-239.

“In the following your work colleagues are in the foreground. If there is a small number of trusted people in your organization, who are important to you and with whom you can have a close, trusting relationship, discuss personal matters and receive social support, how would you rate the quality of this support network?”

The support network „colleagues“ is correspondingly different from a „team“. Teams in the form of a group consist of a small, manageable number of members. They are characterized by a superordinate, common goal. This can be a long-term project within a company. The performance of the team can then be measured by the result of this project. In order to be able to complete its unifying task, an internal structure of the team is required, because within the team the members take over different tasks. Teams are deliberately composed of different members who have different qualifications and cover different areas of performance. However, this naturally creates tension when different views collide. The team as a group is not defined by a certain homogeneity like a support network.

Possible Effects of the Quality of the Support Network „Colleagues“ on Burnout and mental Health.

Social relationships and interactions with colleagues and supervisors are an important part of everyday working life for many employees and, depending on their characteristics, can be a support or a burden, i. e. can have a favorable or unfavorable effect on their health and well-being.³²⁶ ELFERING, SEMMER, SCHADE, GRUND & BOOS compare different constellations of supervisors and collegial support, asking what effects result when a person feels supported by both sources of support to a high degree or when only one source is experienced as supportive. They argue that support from a close colleague, combined with little support from the supervisor, can lead to poor health outcomes. The reason for this they see in the danger that the situation „builds up“. This effect results from the increased empathy and involvement in the difficult situation as well as a possible helplessness.³²⁷ Contrary to the attempts at clarification in the present study, ELFERING, SEMMER, SCHADE, GRUND & BOOS concentrate exclusively on the protective effect of the behavior of close colleagues. The lack of supportive behavior on the part of the supervisor, the compensatory effect of positive collegial relationships and other personality variants of the person seeking support, which could clear up a not inconsiderable variance, remain unnoticed. However, the chosen methodology does not allow any statements to be made in this regard.

According to STADLER & SPIEß, a high level of collegial support is usually associated with physical and mental illness. Employees who receive good support from their colleagues are more resistant to stress and are significantly less affected in their well-being than colleagues who are either not supported at all in the long term or whose support varies greatly. Employees who do

³²⁶ Jungbauer-Gans, M. (2002): loc. cit., 67.

³²⁷ Elfering, A.; Semmer, N. K.; Schade, V.; Grund, S. & Boos, N. (2002): Supportive Colleague, unsupportive Supervisor: The Role of provider-specific Constellations of social Support at Work in the Development of low Back Pain. *Journal of Occupational Health Psychology*, 7, pp. 130-140.

not feel supported by their colleagues have two and a half times the risk of developing back problems and suffer more frequently from cardiovascular diseases. Low social support also often goes hand in hand with shoulder and neck complaints.³²⁸ Poor quality relationships in the workplace, including those characterized by incompatible goals, poor communication and hostility, are associated, according to KANSKY & DIENER, with lower job satisfaction, more stress and anxiety, less commitment to work and lower satisfaction and confidence in decision-making in the workplace.³²⁹ BLAIR & LITTLEWOOD believes that the quality of work relations is a potential factor in employees' perception of stress. Thus, employees who work in quality labor relations have significantly more instrumental resources and emotional support from work colleagues, which contribute to the improvement of mental health.³³⁰

Derivation of Characteristics and Definition of the Support Network „Family“

After marital or partnership relationships, the family is of the greatest supportive importance.³³¹ Family relationships are by their very nature built to last, which is an essential prerequisite both for the willingness to help and for their acceptance, and thus their success. A lack of reciprocity has less of an effect on the current structure of the relationship, since it can be restored in the long term, or because there is a perception that, over the entire course of one's life, comparable preliminary work has already been carried out for one's self by any other person in the kinship system, or can be expected in the event of one's own future needs.³³²

After the (marriage) partnership, parents and children take the most important position in this ranking, followed by siblings and finally other relatives. DIEWALD speaks of a „*hierarchical structure in terms of normative solidarity obligations*“. Overall, regular interactions and shared life experiences also shape the individual significance of individual kinship relationships (also beyond the nuclear family) and can further increase the perceived quality of support. In this study, the term „family“ is to be understood as the core family, which includes some selected relatives of both parents (bilateral: both sides). The support network is part of the social system „(entire) family“³³³ and consists only of preferred relatives with whom the person actively maintains relationships, is in close contact and receives social support.

Because a person's support network involves some family members of both the mother and father (patrilateral and matrilateral), not all members of the person are related to all others, but all are

³²⁸ Stadler, P. & Spieß, E. (2004): Mitarbeiterorientiertes Führen und soziale Unterstützung am Arbeitsplatz. Grundzüge und Beispiele eines Informations- und Handlungskonzepts. Dortmund: Bundesanstalt für Arbeitsschutz und Arbeitsmedizin, p. 4 & 10.

³²⁹ Kansky, J. & Diener, E. (2017): Benefits of Well-Being: Health, Social Relationships, Work, and Resilience. *Journal of Positive Psychology and Wellbeing*, 1(2): pp. 143.

³³⁰ Blair A. & Littlewood M. (1995): Sources of Stress. *Journal of Community Nursing*, 40, pp. 38 & 39.

³³¹ Diewald, M. (1991): loc. cit., p. 107.

³³² Diewald, M. (1991): loc. cit., p. 108.

³³³ Note here the definition of kinship according to TÖNNIES (1988).

closely or distantly related to the person. For the purposes of this study, it is irrelevant whether all members of the support network of the individual live in different places, meet regularly, or whether the support network is made up of one or both lineage groups.³³⁴

The decisive factor for the investigation is that there is a close emotional connection between ego and its alteri. In addition, the operationalization characteristics of a support network apply to this investigation.

In the questionnaire the instruction for the support network „family“ is formulated as follows:

“Think of your family now. If there is a small number of trusted people in your family, who are important to you and with whom you have a close, trusting relationship, discuss personal matters and receive social support; how would you rate the quality of this support network?”

Possible Effects of the Quality of the Support Network „Family“ on Burnout and mental Health

Through its central position in the personal support network, the family has a decisive influence on the extent to which life events and everyday experiences are experienced as burdens and to what extent resources are available in the social environment.³³⁵ The quality of family relationships, including that of social support, but also that of stress, can affect the health of employees in psychosocial, behavioral and physiological ways. Like other social networks, the family is an instance of social support, which acts as a protective factor in two ways. Firstly, it exerts a buffer effect by shielding against threatening and impairing environmental factors; secondly, it exerts a general health-promoting main effect in that integration into a social network and the experience of social support also enhances a feeling of well-being, independent of burdens and stress, and thus promotes confidence and a positive mood³³⁶ Family members are connected in an important and very special way at every stage of life. These relationships are an important source of social support and social influence for the individual.³³⁷ Social relationships within the family can influence well-being not only in the short term, but also over the entire life cycle.³³⁸ Family relationships can provide a greater sense of purpose and social as well as tangible resources

³³⁴ The ancestors consist only of the close blood relatives of the mother and/or father and forms an effective social network.

³³⁵ Hurrelmann, K. (1994): Lebensphase Jugend. Eine Einführung in die sozialwissenschaftliche Jugendforschung. Weinheim, München: Juventa, p. 75.

³³⁶ Nestmann, F. (2000b): Gesundheitsförderung durch informelle Hilfe und Unterstützung in sozialen Netzwerken. In: Sting, S. & Zurhorst, G. (Ed.), Gesundheit und Soziale Arbeit. Gesundheit und Gesundheitsförderung in den Praxisfeldern Sozialer Arbeit. Weinheim, München: Juventa, p. 136.

³³⁷ Umberson, D.; Crosnoe, R. & Reczek, C. (2010): Social Relationships and Health Behavior across Life Course. Annual Review of Sociology, 36, pp. 145, 148, 150 & 153.

³³⁸ Umberson, D. & Montez, J. K. (2010): Social Relationships and Health: A Flashpoint for Health Policy. Journal of Health and social Behavior, 51, pp. 60.

for the well-being and (mental) health of individuals.³³⁹ Family members who receive support from other family members develop greater self-esteem, which is a psychological resource that promotes optimism, positive affectivity and mental health.³⁴⁰

A dense network, such as the core network „family“ described above, also has negative implications such as the exercise of a high degree of normative control or a relative isolation from the wider social environment. Family (self-)help in particular proves to be an ambivalent complex, especially in an intergenerational context, since instrumental support is often also associated with psychological stress, i. e. often one cannot have one without the other, especially since one is ultimately dependent on the other. In dense networks, a reluctance can arise to turn to others with one's problems - for fear of becoming dependent. Then the possibility of exchange with the wider social environment is limited due to isolationist tendencies. In the case of family conflicts and problems, this can lead to destructive developments such as avoidance behavior, hidden hostility, emotional tension, negative dependencies and pressure to adapt³⁴¹ and thus to health problems.

WOLF quotes FOSSON who, in the context of stressful aspects, details [1] role overburdening, [2] negative feelings shared by a distant family member, [3] unrequited or negatively responded love and affection, [4] discordant expectations and performance, [5] ambiguous communication, and [6] inadequately drawn boundaries. Stress occurs when the family has a poorly functioning organizational pattern, when it has members with generally too different personality traits and attitudes, when it has members with difficult personal characteristics, when it is involved in interactions that hurt the emotions between members, and when there is a disagreement about roles.³⁴² However, the relevance of the family context as a supportive coping resource is linked to a localization of the stressor outside the family system. Thus, if the source of stress is located within the family, family coping in this sense can only be designed at a subordinate level, e. g. at the level of a subsystem of the family.³⁴³

However, the role of a family support network and its effect on health outcomes, resulting of he lack of supportive behavior by the supervisor, as well as other personality variants of the support

³³⁹ Hartwell S. W. & Benson P. R. (2007): Social Integration: A Conceptual Overview and Two Case Studies. In: Avison, W. R., McLeod, J. D. & Pescosolido, B. A. (Eds.), *Mental Health - Social Mirror*. New York: Springer, pp. 332 & 333.

³⁴⁰ Thomas, P. A.; Liu, H., & Umberson, D. (2017): Family Relationships and Well-Being. *Innovation in Aging*, 1(3), p. 2.

³⁴¹ Petzold, H. & Märten, M. (2013): loc. cit., 202 & 203.

³⁴² Wolf, I. A. (1998): *Effekte von Stress, sozialer Unterstützung und Persönlichkeitsvariablen auf psychisches Befinden*. Dissertation. Marburg: Phillips-Universität Marburg, p. 27. URL: <http://archiv.ub.uni-marburg.de/diss/z1998/0120/pdf/diw.pdf>. Last accessed: 16.12.2019. Fosson, A. (1988): Family Stress. In: Fisher, S. & Reason, J. (Eds.), *Handbook of Life Stress, Cognition and Health*. Chichester: Wiley.

³⁴³ Schöbi, D. (2004): *Konfliktregulation im Alltag von Familien: Konflikte in Familien als Prozesse sozialer Belastungsbewältigung*. Berlin: Tanea, p. 88.

seeker, remain completely unclear. There are only few studies in this field of research. CORONA, CAMPOS & CHEN found that in terms of general benefits, „familism“ was negatively associated with loneliness, depression, and physical symptoms. In terms of stress-buffering benefits, the combination of high familism with high stress was associated with higher self-esteem and subjective health than the combination of low familism with high stress.³⁴⁴ In familism, the clan (kinship) or, in a narrower sense, the (extended) family, take on the function of an authority that secures the existence of the individual and supports the cohesion of society as a whole. However, according to the understanding of this work, this is terminologically a community in the sense of a tradition-based, purpose-bound social structure into which family members are born, rather than an affect-related, selected, family support network. THOMAS, LIU & UMBERSON give an insight of the main effects of family support that have an important influence on well-being. The authors highlight the quality of family relationships as well as diversity of family relationships in explaining their impact on well-being - however, the moderating or mediating characteristics of social support in this context are not addressed.³⁴⁵

In a recent study, CHEN & HARRIS establish the connection between family relationships during adolescence to midlife. Strong family relationships can help reduce stress during the teenage years and maintaining such relationships can have the potential to ward off depression later in life. Males reported having better family relationships than females. Among females, levels of depressive symptoms were high during early adolescence, declined until the age of 30 and then increased again. Among males, levels of depression were stable into the 30s and increased thereafter. The results of this longitudinal study can only give an indication in comparison with the present study.³⁴⁶

Derivation of Characteristics and Definition of the Support Network „Friends“

According to DIEWALD, friendly contacts are „[...] *primarily of importance for sociability, for conveying recognition and esteem, for acquiring new skills and orientations, for conveying norms and information, and for motivational support*“. They are not as strongly regulated by rules and obligations as relationships within the family but are characterized by a freedom of action. This of course also means that they must be maintained or renewed again and again.³⁴⁷ Friendships protect from the feeling of

³⁴⁴ Corona, K., Campos, B. & Chen, C. (2017): Familism is associated with psychological Well-Being and physical Health: Main Effects and Stress-Buffering Effects. *Hispanic Journal of Behavioral Sciences*, 39(1), pp. 46-65.

³⁴⁵ Thomas, P. A.; Liu, H. & Umberson, D. (2017): loc. cit., pp. 1-11.

³⁴⁶ Chen, P. & Harris, K. M. (2019): Association of positive Family Relationships with mental Health Trajectories from Adolescence to Midlife. *JAMA Pediatrics*. URL: <https://jamanetwork.com/journals/jamapediatrics/article-abstract/2752557>. Last accessed: 17.12.2019.

³⁴⁷ Haß, W. (2002): Soziale Unterstützungsnetzwerke von Menschen mit chronischer Polyarthritits - Eine explorative, netzwerkanalytische Studie. Dissertation. Köln: Wirtschafts- und Sozialwissenschaftlichen Fakultät, Universität Köln, p. 52 referring to: Beck, Ulrich (1986): Die Risikogesellschaft. Auf dem Weg in eine andere Moderne. Frankfurt: Suhrkamp.

isolation³⁴⁸, strengthen self-esteem³⁴⁹ and convey a feeling of personal acceptance³⁵⁰, especially because, unlike family relationships, friendships are formed through free choice and their very existence allows the individual to feel socially attractive.³⁵¹

Friendships are considerably more sensitive to asymmetries in interactions (e. g. in terms of social recognition), and assistance provided through them is more strongly linked to the reciprocity principle compared to that of relatives. Friendships are more likely than other relationships to convey personal acceptance and social attractiveness as well as a positive attitude towards life. Friendships are characterized, in particular, by sympathies, similarities, common lifestyles or interests, as well as mutual trust, understanding and support. As a result, their everyday social life is often limited to certain spheres and areas of life (such as leisure time, joint activities, etc.). They additionally have a central function in dealing with conflicts and psychological crises, which often result from family difficulties. However, even close friendships are more likely to be called into question than family relationships in the event of prolonged crises or emergency situations. They reach their limits more quickly because they are oriented towards a relatively timely reciprocal exchange.³⁵² Friends are also more likely to contribute to life satisfaction than relatives. In addition, they have proven to be particularly important for emotional support and leisure activities and are often consulted as trusted persons when making life decisions. Accordingly, it was shown empirically that friends are obviously preferred over relatives. And while the former tend to mediate more to professionals, relatives seem to offer lay solutions more often.³⁵³

Possible Effects of the Quality of the Support Network „Friends“ on Burnout and mental Health

It is generally assumed that diseases and their management are a function of social stressors (life-changing events), psychosocial resources (personal skills and competences), social resources (the social network of an individual) and stress reactions (short-term mental and physical disorders).³⁵⁴ For this reason, friendships, as part of the social resources of individuals, can be attributed a protective and intervening influence on psychophysical well-being and consequently on mental and physical health.

³⁴⁸ Laursen, B.; Bukowski, W. M.; Aunola, K. and Nurmi, J. (2007): Friendship Moderates Prospective Associations Between Social Isolation and Adjustment Problems in Young Children. *Child Development*, 78: pp. 1395-1404.

³⁴⁹ Keefe, K. & Berndt, T. J. (1996): Relations of Friendship Quality to Self-Esteem in Early Adolescence. *The Journal of Early Adolescence*, 16(1), pp. 110–129.

³⁵⁰ Bishop, J. A. & Inderbitzen, H. M. (1995): Peer Acceptance and Friendship: An Investigation of their Relation to Self-Esteem. *The Journal of Early Adolescence*, 15(4), pp. 476-489.

³⁵¹ Rapsch, A. (2004): *Soziologie der Freundschaft: Historische und gesellschaftliche Bedeutung von Homer bis heute*. Stuttgart: Ibidem, p. 110.

³⁵² Nestmann, F. (1988): loc. cit., pp. 124-126.

³⁵³ Haß, W. (2002): loc. cit., p. 52.

³⁵⁴ Nötzoldt-Linden, U. (1994): *Freundschaft: Zur Thematisierung einer vernachlässigten soziologischen Kategorie*. Opladen: Westdeutscher Verlag, p. 20.

Close relationships with friends have been found to stimulate people to fight diseases and make them less vulnerable to disease.³⁵⁵ A large number of friends, as well as more contact with these friends and a low heterogeneity of the friendship network, are related to more social trust, less stress, and better health.³⁵⁶ Besides the presence of friends themselves, the frequency of contact with them has also been shown to be important for one's health.³⁵⁷ Also VAN DER HORST & COFFÉ suggested, that a faithful frequency of contacts with friends, together with positive satisfaction with friendship relationships, connects individuals to a range of extra benefits, including a higher sense of belongingness, better health, and more support.³⁵⁸

The fact that the meaning of friendships and the value attached to these relationships are highly individual underlines the importance of defining the term „friendship“ and the term „friends“ as precisely as possible before the questionnaire is prepared and before the empirical survey in the third chapter of this dissertation. In the case of the support network „friends“, too, the questionnaire should explicitly ask for the strength of the relationship to the network partners and whether this applies to the respective support network. In this case, the operationalization characteristics apply as well.

In the questionnaire the instruction for the support network „Friends“ is formulated as follows:

“Please think of your friends now. If there is a small number of trusted people in your circle of friends who are important to you and with whom you can have a close, trusting relationship, discuss personal matters and receive social support, how would you rate the quality of this support network?”

Ideally and conceptually, a distinction can be made between two types of friendly relationships: Friendship and acquaintance. While the former is characterized by mutually high costs and benefits, the latter is associated with low costs and low rewards for both sides.³⁵⁹ The differentiation is based on mutually equal costs and benefits in the sense of absolute reciprocity, which is hardly to be found. There are smooth transitions in between. For the present study, only friendship is decisive.

³⁵⁵ Myers, D. G. (2000): The Funds, Friends, and Faith of happy People. *American Psychologist*, 55, p. 62.

³⁵⁶ Amati, V.; Meggiolaro, S.; Rivellini, G. & Zaccarin, S. (2018): Social Relations and Life Satisfaction: The Role of Friends. *Genus*, 74(1), p. 5.

³⁵⁷ House, J. M.; Landis, K. R. & Umberson, D. (1988): Social Relationships and Health. *Science*, 241, p. 542.

³⁵⁸ Van der Horst, M. & Coffé, H. (2012): How Friendship Network Characteristics Influence Subjective Well-Being. *Social Indicators Research*, 107(3), p. 510.

³⁵⁹ Diewald, M. (1991): loc. cit., p. 109.

Operationalization of the Quality Composition of Support Networks

The shared reality of interaction is determined by subjective experiences, beliefs and categories, which can vary greatly between members. Individuals perceive and interpret every kind of stimuli, which in turn evokes a certain behavior towards each other. These connections make it clear that in the context of this study the quality of social support networks does not have to be described solely in terms of communication, but includes various dimensions.

We know today that social networking of individuals has a decisive influence on their emotional balance. Within a network, JOAS attributes a quality relevance to the [1] *network climate*, which can significantly influence the inner behavior, i. e. cognition, motivation, emotions and biochemical reactions of the network members. But also, external behavior, e. g. social behavior, is dependent on the network climate. It can also be assumed that [2] *common rules, values and convictions* provide a sense of purpose, facilitate cooperation and allow a high degree of predictability in the world of living and working. According to JOAS, they counteract insecurity, uncertainty and disorientation, which in turn has a positive effect on mental health outcomes, since stress is avoided, and its management is made easier.³⁶⁰

Burnout is also related to this second factor. MASLACH speaks of burnout as the „*erosion of values*“. Burnout is the index of dislocation between what people are and what they have to do. „It [*burnout*] represents an erosion in values, dignity, spirit, and will - an erosion of the human soul. It is a malady that spreads gradually and continuously over time, putting people into a downward spiral from which it's hard to recover.“³⁶¹ The second point can thus also be attributed to the quality of a support network.

Particularly familiar and manageable support networks such as the close circle of friends, family or colleagues have a high support potential. However, this only applies if common interests, opinions, or the rules, values and convictions already mentioned are shared and [3] *decisions* are made together. In order to go the right way [4] the *goals* have to match, resulting in the intellectual connection of the network members.

Social networks and communication are inseparably linked. Networks are created through communication and in turn structure communication. The formation and maintenance of social relationships is inconceivable without the communicative exchange between actors. Communication is the prerequisite for information to spread along relationships in a network or for resources to be activated through relationships. And the breaking off of relationships can also be attributed to communication - for example, if it is conflictual or even non-existent. Repeated interactions over time in turn create relatively stable structures. The interactive process of information displacement thus implies that [5] *communication* always takes place and is an important component of the quality of social systems and networks. Among other things, it serves [6] *to work on problems, deal with problems and find solutions together*. This means not to push problems that

³⁶⁰ Joas, H. (2007): Lehrbuch der Soziologie. Frankfurt: Campus, p. 403.

³⁶¹ Maslach, C. & Leiter, M. P. (1997): The Truth about Burnout. San Francisco: Jossey-Bass, p. 24.

arise in a relationship aside, because otherwise they will keep coming back and the probability is high that they get worse and multiply. Problems cannot be avoided in a network and in relationships; in every relationship, sooner or later challenges come to the partners, small or even bigger problems. Then it is necessary to solve problems and, in the case of „eternal“ problems, to find a way to deal with them together. Helpful basic principles for dealing with problems, whether solvable or eternal, are those already described: knowing each other, sharing values, respecting each other. A solution, a compromise or even a temporary solution is easier to find if partners show that they accept each other, have understanding and accept other's perspective. The common handling of problems and the common way to find solutions can therefore be seen as a single quality feature of personal support networks.

It was explained that *social support* [7], which is a functional feature of social networks, is crucial for preventing burnout and maintaining mental health. It can therefore be attributed to the quality of social support networks. The operationalization characteristics (importance of a person, trust, emotional bond) could be summarized in general terms under the term [8] *cohesion*, which describes the sense of community or togetherness, the „we-feeling“ as an emotional field of bonds and unity between the people involved.

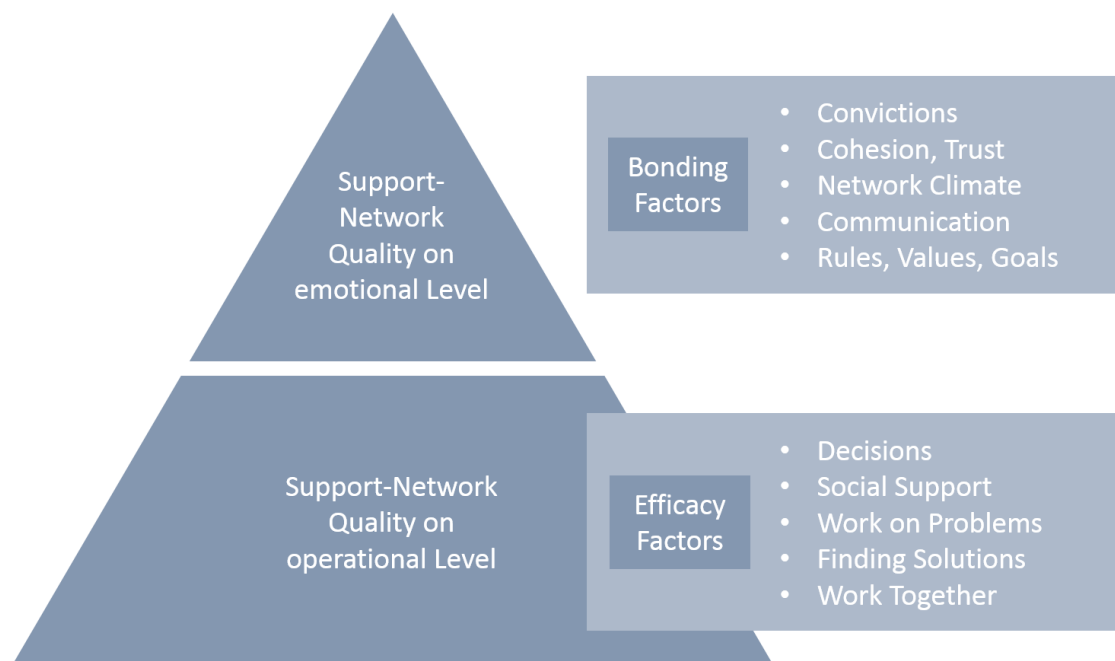


Fig. 4: The Quality Pyramid of Support Networks consisting of an emotional Level with bonding Factors and an operational Level containing efficacy Factors

Source: author's construction.

When looking at the Quality Pyramid of Support Networks in Figure 4, we see that the nature of qualities within a work relationship but also within private relationships is shown in a very simple way. They are divided into two different levels - the *emotional level* and the *operational level*.

The physical function of a support network is equivalent to the functional and structural (morphological characteristics) of social networks. This can be understood as all goals of individual, instrumental action; this level is primarily concerned with objective help and how this is perceived and evaluated by the recipient within the network – „efficacy factors“. Taken by itself, this level does not yet denote a theory, nor a social mechanism, but it leads to a thought of human needs. The quality aspects of the efficacy factors of social support networks are immediately followed by the need for social relationships and belonging. The „bonding factors“ are found in the highest level, the emotional level. Behind this is the basic idea that a person in general, or an employee, only perceives a certain higher quality of the support network when she/he sees the „bonding factors“ at a higher rate present. The model approximates the concept of social capital much better, since many more aspects of interpersonal relationships are considered.

The quality characteristics of social support networks (quality of support networks) mentioned in this paragraph and shown in Figure 4 are covered in the empirical part by the measuring instrument EVOS (Evaluation of Social Systems), which provides information on the quality of relationship and social efficiency in its two dimensions.

Possible Mechanisms for seeking Help in a personal Support Network Pool

As there is no rigid determinism between the relationship character of the network members and different forms of social support, the mechanism of seeking help or even the perception of social support is difficult to understand. One of the most important models which illustrates this process is the „hierarchical-compensatory model“ of CANTOR's informal network help. If a need for help is perceived and the person concerned decides to ask others from his or her support networks for help, she/he will first consult her/his close relatives according to this model and try to activate their knowledge, experience, advice and assessments and possibly also their active support to solve his/her problem. If these efforts are not successful, for example, if the nature of the problems requires more specific knowledge than is available in the primary social networks, help will be sought outside these boundaries and, for example, family members will be displaced by those persons from whom a higher level of expertise is expected. In a quasi-centrifugal movement out of the primary environments, more and more distant persons are thus contacted. According to this view, professionals are the last link in a chain of seeking help, which is reached when the previous instances are exhausted. At the same time, a decrease in emotional closeness or familiarity with these persons could be expected. CANTOR makes it clear that it is not so much the characteristics of the support services to be provided that determine whether they are accepted or perceived, but rather the quality of the relationship with the persons or groups of persons providing support. At the top of the model and the hierarchy described are relatives and here as a universal help instance, the partner is the first and foremost.³⁶² This is followed by the

³⁶² According to CANTOR, the partner is the closest confidant and is consulted in practically all matters.

adult daughter, son and siblings, as well as the extended family circle and friends approximately equal.³⁶³

The thesis of functional specificity according to LITWAK does not focus on the persons in a social support network or their social positions, but on the nature of the support services.³⁶⁴ The support services can be defined in more detail on the basis of various parameters (e.g. the amount of time required or the need for spatial proximity).³⁶⁵ The thesis postulates that different people have different functions, which are necessary support services for ego.³⁶⁶ The intimacy of a person A can thus be balanced by a person B. The loss of persons who share different areas of life is particularly difficult to substitute because he or she provides many forms of social support, especially in the instrumental area. Both concepts have led to numerous research projects with very different results, which sometimes speak for CANTORS, sometimes for LITWAKS concept and sometimes for the combination of both. HOLLSTEIN emphasizes methodological deficiencies and the problem of adequate operationalization in these studies.³⁶⁷ It remains to be seen whether these two theories from family and age research and the practice of family support relationships can be easily transferred to organizations. However, these two approaches make it clear that family relationships are complex forms of social interaction. Elasticity limits of communication, the psychological state of the actors and the potential for socialization are determined by the family as a social system.

Following CANTOR and also LITWAK, the preferred support persons come from the core family, because parent-child relationships and partnerships, for example, are characterized by a high emotional and usually also spatial proximity and often look back on a long relationship and exchange history.³⁶⁸

Connection between Personality Traits and the Perception of Social Support

The personality of a person is understood to be the totality of all his/her permanent and psychologically relevant characteristics - such as temperamental traits, attitudes, values, motives and aspects of self-concept - which distinguish him/her from other people. The most important aspects of a person's personality are therefore the persons individual peculiarity in contrast to

³⁶³ Cantor, M. H. (1980): The informal Support System: Its Relevance in the Lives of the Elderly. In: Bor-gotta, E. F. & McClusky, N. G. (Ed.), Aging and Society. Beverly Hills: Sage, pp. 131-144.

³⁶⁴ Litwak, E. (1985): Helping the Elderly: The Complementary Roles of informal Networks and formal Systems. New York: Guilford Press.

³⁶⁵ Künemund, H. & Hollstein B. (2005): Soziale Beziehungen und Unterstützungsnetzwerke. In: Die zweite Lebenshälfte - Gesellschaftliche Lage und Partizipation im Spiegel des Alters-Survey. Springer: Wiesbaden, p. 216.

³⁶⁶ Hollstein, B. (2001): loc. cit., p. 57.

³⁶⁷ Hollstein, B. (2001): loc. cit., p. 59.

³⁶⁸ Klaus, D. & Tesch-Römer, C. (2011): Pflege und Unterstützung bei gesundheitlichen Einschränkungen: Welchen Beitrag leisten Personen in der zweiten Lebenshälfte für andere? In: Mahne, K.; Wolff, J. K.; Simonson, J. & Tesch-Römer, C. (Ed.), Altern im Wandel - Zwei Jahrzehnte Deutscher Alterssurvey (DEAS). Wiesbaden: Springer VS, p. 187.

other people and his/her relative temporal stability. At present, personality traits of various kinds are usually located within the framework of the 5-factor model of personality. According to this model, extraversion, neuroticism, conscientiousness, agreeableness and openness - or the so-called Big Five - are the basal areas of the personality which are represented in the everyday psychological life of most people in western, but also in other cultures.³⁶⁹

Regarding the connection between perceived support and the personality of an individual there is very little evidence. In the 1980s, research was conducted which supported the finding that there is a consistent relationship with the subjective perception of social support and a wide range of health indicators. HENDERSON's thesis is that the correlation between perceived social support and mental health is due to a third variable. Specifically, he postulated that both mental health and the perception of social support of the social environment are determined by a person's neuroticism. Whereby neuroticism in general tends to oppose a social relationship. Neuroticism shows consistently negative associations with initiating social interactions and relationships. Neuroticism also correlates negatively with the general satisfaction with existing relationships.³⁷⁰ Reasons could be a lack of assertiveness in social relationships, especially with regard to the assertion of personal rights and the ability to criticize other people. RÖHRLE further confirms the influence of various personality traits or dispositions such as self-confidence, introversion and self-esteem on the establishment and maintenance of social contacts.³⁷¹

In a recent study, SWICKERT, HITTNER & FOSTER found that extraversion, neuroticism and openness interacted to predict perceived social support. In other words, with a low degree of extraversion, a low degree of neuroticism was associated with greater perceived support, regardless of the degree of openness. However, with a higher degree of extraversion, the combination of low neuroticism and low openness was associated with the highest level of perceived support. At a high level of extraversion, high neuroticism and low openness were associated with the lowest level of perceived support.³⁷²

SHAGINI & URBANAVICIUTE & ROSSIER investigated how perceived social support affects personality, and how these variables may predict each other over time. To investigate the joint development of personality traits and perceived social support, a cross-lagged path model design was used on a sample of adults (N = 1309) measured twice every 4 years. The results indicated that while emotional stability predicted perceived social support 4 years later, perceived social support also predicted emotional stability, extraversion, agreeableness, openness, and conscientiousness 4 years later. This suggests that perceived social support may be a resource that

³⁶⁹ Neyer, F. J. (2014): Soziale Netzwerke und Persönlichkeit. *Physikalische Medizin, Rehabilitationsmedizin, Kurortmedizin*, 24. Stuttgart: Georg Thieme, pp. 235 & 236.

³⁷⁰ Lopes, P.; Salovey, P. & Straus, R. (2003): Emotional Intelligence, Personality, and the perceived Quality of social Relationships. *Personality and Individual Differences*, 35(3), pp. 654-657.

³⁷¹ Röhrle, B. (1994): loc. cit., p. 160 & 161.

³⁷² Swickert, R. J.; Hittner, B. H. & Foster, A. (2010): Big Five Traits interact to predict perceived social Support. *Personality and individual Differences*. Amsterdam: Elsevier, 48(6), pp. 736.

affects the development of personality traits known to be associated with social skills and the quality and frequency of social interactions in middle adulthood.³⁷³

HELLER & SWINDLE (1983) looked at the experience of support from a personal psychological perspective. They have suggested that perceptions of support have the stability of a personality characteristic.³⁷⁴ SARASON, SARASON & PIERCE are of the same opinion. They argue similarly and describe the „sense of support“ as a relatively stable quality of a person, which is formed through supportive relationships in the course of development. As the case may be that some individuals may see themselves as recipients of considerable support from others, even in the presence of evidence to the contrary. On the other hand, some people may have the tendency to see themselves as receiving minimal or no support from others (again, even in the presence of evidence to the contrary).³⁷⁵ COBB on the other hand argues that social support is perceived differently in different situations. The perception of social support can also be reversed in certain situations.³⁷⁶ COHEN integrates both approaches and hypothesises that part of the explanatory variance in the support experience is probably due to characteristics of the person and part to characteristics of the situation.³⁷⁷

There are also empirical findings speaking against the personality psychological perspective of social resources. LUDWIG-MAYERHOFER & GREIL tested the Henderson hypothesis and examined the inner-psychological connections between neuroticism, extraversion and frustration tolerance with the number of supporting persons as well as with the satisfaction with social support. In their model, personality traits as exogenous variables and support variables as dependent variables, perceived helpfulness and self-efficacy as endogenous variables were inserted between the personality traits as exogenous variables and the support variables as dependent variables. The perceived helpfulness, which correlated strongly with the number of supporting persons and also with the satisfaction with social support, could not be explained by personality traits neuroticism and extraversion.³⁷⁸

³⁷³ Shagini, U.; Urbanaviciute, I. & Rossier, J. (2018): Perceived social Support and Big-Five Personality Traits in middle Adulthood: A 4-Year Cross-Lagged Path Analysis. *Applied Research in Quality of Life*, Amsterdam: Springer Nature, p. 1.

³⁷⁴ Heller, K. & Swindle, R. V. (1983): Social Networks, perceived social Support and Coping with Stress. In: Felner, R. D.; Jason, L. A.; Moritsugu, J. & Farber, S. S. (Eds.), *Preventive Psychology: Theory, Research and Practice in Community Intervention*, New York: Pergamon Press, pp. 89-92.

³⁷⁵ Sarason, B. R.; Sarason, I. G. & Pierce, G. R. (1990): Traditional Views of social Support and their Impact on Assessment. In: Sarason, B. R., Sarason, I. G. & Pierce, G. R. (Eds.), *Social Support: An interactional View*. New York: Wiley, pp. 9-25.

³⁷⁶ Cobb, S. (1976): loc. cit., p. 311.

³⁷⁷ Cohen, S. (1992): Stress, social Support, and Disorder. In: H. O. F. Veiel & U. Baumann (Eds.), *The Series in clinical and Community Psychology. The Meaning and Measurement of social Support*. Washington: Hemisphere Publishing Corp., pp. 109-124.

³⁷⁸ Bachmann, N. (1998): loc. cit., p. 41.; Ludwig-Mayerhofer, W. & Greil, W. (1993): Soziales Netzwerk & Soziale Unterstützung - Zum Verhältnis persönlicher und sozialer Ressourcen. In: Laireiter, A. (Ed.): *Soziales Netzwerk und Unterstützung: Konzepte, Methoden und Befunde*. Bern: Huber, pp. 78-87.

Members connected in social networks through relationships bring with them not only their individual life stories, but also their individual personalities. The personality contributes significantly to the shaping of the specific relationships and the entire network and, conversely, is influenced by them.³⁷⁹ People shape and change their social relationships in accordance with their personality. NEYER sees the reason for this in the comparatively higher stability of personality traits, which are therefore relatively immune to the influences of relationship partners or other social circumstances. In practice, this means that there are no universal rules for shaping relationships, but that they must always be considered in relation to the personality. For example, social support services in crisis situations are not equally suitable for everyone, as they are dependent on the personality and must be designed accordingly. Persons in crisis situations should therefore be advised and supported „individually“.³⁸⁰ NEYER, as well as other research studies, provide a decisive approach that can help to answer the question of whether the personality of an employee is decisive in determining what kind of support networks he or she primarily uses for burnout symptoms due to poor social supervisor support.

Based on the conceptual framework presented in the previous paragraph and the theoretical part of this dissertation, this paragraph is dedicated to defining the role of the research model within the dissertation as described. In a qualitative preliminary investigation in the next step, a preliminary study is conducted to test whether the main research question can be answered using the model. In a next step, the research model is built - based on the underlying constructs and their operationalization in the research literature. Further, main and secondary hypotheses are formulated as a starting point for the empirical investigation.

Requirements made on the Research Model

To conduct the study and to construct a research model that focuses on the relationship between social support from supervisors and burnout symptoms (primary research question), but also includes the quality of personal support networks in the areas of „family“, „friends“ and „(work) colleagues“, as well as the personality variables of middle managers as possible moderator functions (further theses to defend), the following requirements are defined.

- Requirement 1: Use of recognized theoretical bases

The model should be based on a theory that has been validated and accepted in the environment, in order to ensure the best possible stability and generalizability of the results. The same applies to the constructs used.

- Requirement 2: Usability of validated operationalizations & measuring instruments

The research model should be based on validated operationalizations. Self-developed questionnaires have to be validated before they can be used in a study. Due to time

³⁷⁹ Neyer, F. J. (2014): loc cit., pp. 233.

³⁸⁰ Neyer, F. J. (2014): loc cit., pp. 237.

constraints, this procedure is not practicable in the context of this dissertation, so that existing measurement instruments of high reliability and validity are used.

- Requirement 3: Ensuring practical applicability from the perspective of organizational health management

The aim of the research model is to (better) understand the impact of poor supervisor support (supervisor behavior) and the effect on employee health in form of burnout symptoms. These findings are necessary for the practical use of this model. Only then can person responsible initiate appropriate measures within the framework of organizational health management in the form of personnel- and organizational development processes towards health- and support-oriented leadership.

The Role and Structure of the Research Model

The research model justifies the research methodological procedure, in which qualitative work is carried out in the first subsequent step. For the research model, the main effect hypothesis is first used to illustrate the effect of (poor) supervisor support on burnout symptoms among employees. According to MASLACH, burnout can be measured in the dimensions „emotional exhaustion“, „depersonalization“ and „reduced personal accomplishment“. This and the results of the qualitative pre-research lead to the main hypothesis H1. The main-effect (direct-effect) model states that social support contributes to the satisfaction of basic social needs (e. g. bonding, contact, sociability) and thus - in a poor manner - also to precursors of burnout, e. g. stress or strains, as already explained in the theoretical part.

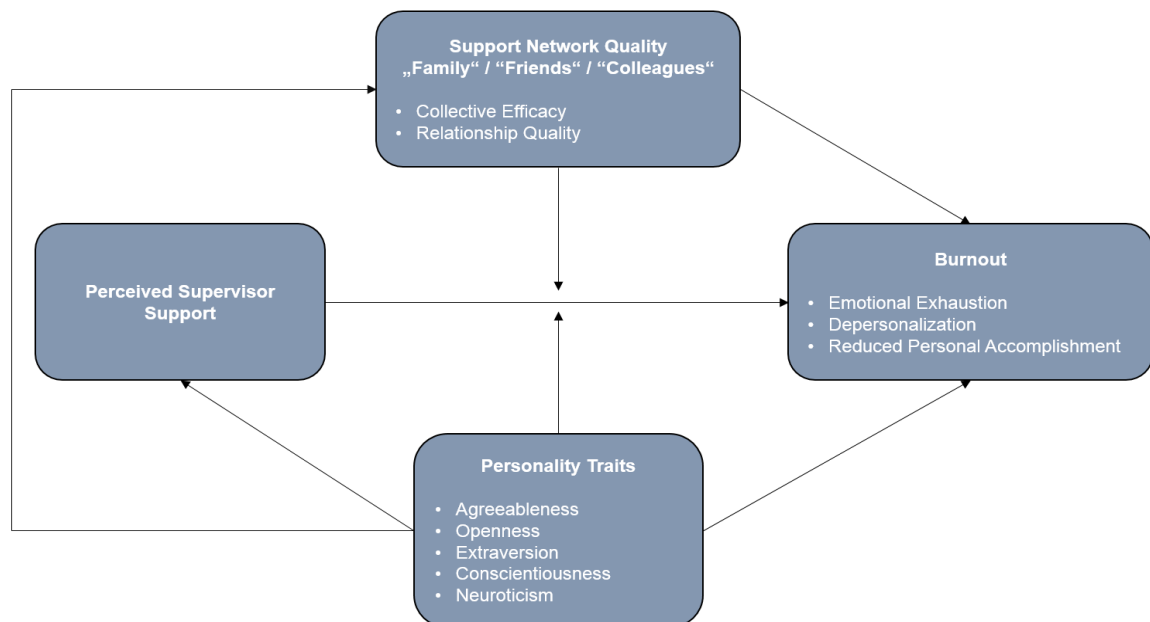


Fig. 5: Research Model with main Effect and Moderator Effects

Source: author's construction.

One circumstance in the positive effect or failure of supervisor support is the distinction between the subjectively perceived and the actually provided social support. Thus, in constructing the research model, the focus must also be on the „nature“ of the support and decide which support to assume, as the choice of tool depends on this. Rationally, it can be assumed that actual received support has more effect than just the thought or the perception. However, most studies show that the protective effect of perceived support is much higher than that of actually received support.³⁸¹ Thus, perceived support from the supervisor in the context of this study is a general and relatively stable expectation that, if help is needed, employees can rely on the supervisor. This expectation has a protective effect. Actual support can also have a protective effect, but in most studies on acute stress situations no or even a negative influence on health was found.³⁸² To operationalize perceived supervisor support, the SPSS scale is used in the quantitative investigation.³⁸³

In the research model, the self-assessed quality of social support networks and the personality of the employees represent external variables that influence the main effect just described. At this point, it would also be possible to consider these points, for example, within the framework of the classic Job Demands-Resources Model, because there it is often spoken of the mediating³⁸⁴ or moderating effects³⁸⁵ of resources in the development of stress and well-being. However, according to the JD-R model, resources are primarily conceived as a starting point (main effect) and not as an influencing factor. This does not explain why external resources, or the lack of them, lead to a better or worse state of health in the employee. The research model in this dissertation therefore assumes that the influence of resources is a moderating one, which influences the relationship between social supervisor support and stress/burnout, but that the external resources are not the cause of the existence of stress (buffer effect model). The moderator variables personality traits as well as the self-assessed support network quality of can be captured by the Big 5 and EVOS instruments.

Thus, it in this paragraph can be confirmed and subsumed for the research model, that the research model is composed of multifaceted different theory constructs, which are embedded in sufficiently researched research areas. Also the operationalization, which is important for the

³⁸¹ Kahn, J. H., Hessling, R. M. & Russell D. W. (2003): loc. cit., 5-17.

³⁸² Bolger, N.; Zuckerman, A. & Kessler, R. C. (2000): Invisible Support and Adjustment to Stress. *Journal of Psychology and Social Psychology*, 79. pp. 953-961.

³⁸³ Kottke, J. L., & Sharafinski, C. E. (1988): Measuring Perceived Supervisory and Organizational Support. *Educational and Psychological Measurement*, 48(4), pp. 1075-1079.

³⁸⁴ Kinnunen, U., Feldt, T., Siltaloppi, M., & Sonnentag, S. (2011): Job Demands-Resources Model in the Context of Recovery: Testingrecovery Experiences as Mediators. *European Journal of Work and Organizational Psychology*, 20, pp. 805-832.

³⁸⁵ Bakker, A. B.; Hakanen, J. J.; Demerouti, E. & Xanthopoulou, D. (2007): Job Resources boost Work Engagement, particularly when Job Demands are high. *Journal of Educational Psychology*, 99(2), pp. 274-284.

research model, is given without a cumbersome validation process of new instruments. The questionnaires are user-friendly and easy to use; the associated manuals are freely accessible; the tools allow meaningful results to be derived (high reliability and validity) and it is therefore also possible to initiate intervention measures based on the results by organizational health management.

2.7. Problem-Centered Group Discussion and the Derivation of the Hypotheses

The derivation of the main hypothesis follows the procedure of qualitative social research. The following paragraph describes the type of data collection and justifies the choice of the survey instrument and the evaluation method. The goal is to first qualitatively test the consequences of a lack of social support by the supervisor on burnout and the possibilities of social support networks (family, friends and colleagues) for their buffer function (moderator function), as determined in the first chapter, by means of a problem centered group discussion. Personality traits are not recorded in this step because they are difficult to capture qualitatively. The information on the perceived social support by the supervisor of formerly affected burnout patients and employees, their effects on burnout symptoms as well as the self-assessed quality of their social support networks serve the comparison with the discussed mechanisms of the literature research in the theory part. Since single case analyses according to MAYRING are a decisive aid in the search for relevant influencing factors and go into the life context of individual subjects very precisely, this method seems suitable.³⁸⁶ On the one hand, the aim is to verify the assumption that poor social support has a negative effect on the three burnout dimensions according to MASLACH. On the other hand, it is to be examined whether high-quality social support networks can alleviate burnout symptoms from the above-mentioned relationship. It should be noted that stress and strain are considered as triggers and companions of burnout.

Background of the qualitative Study

Although informal social contacts are considered to be a fundamental factor for stress reduction, it has not yet been conclusively clarified how exactly this mechanism contributes to relief or coping. Since the topic of support and stress is part of an almost every day interpersonal exchange, the question during the research arose whether and to what extent informal support conversations are perceived and can contribute to stress management and, as a result, to burnout prevention. This understanding, flanked by the findings from the theoretical part, is particularly helpful for deriving further hypotheses.

³⁸⁶ Mayring, P. (2002): Einführung in die qualitative Sozialforschung. Eine Anleitung zu qualitativem Denken. Weinheim: Beltz, p. 42.

In principle, talking about daily problems, stress and the need for help is not an undiscovered phenomenon, as the topics of collegial counseling or coaching, for example, demonstrate. In the discussion of the concept of social support in the first part of this paper, a distinction is made between informal relationships (spontaneous help) or with formal helpers (organized help) in order to address the question of which groups of people can be considered as a source of social support. However, it must be emphasized that research has been able to reveal only little about the exact mechanisms of social support. There is a lack of qualitative results to observe the mechanism of support talks or support perception (feelings, reactions, etc.). In order to narrow down the research field, the target group of middle managers from the automotive industry was deliberately chosen, as the author himself has been working in this industry and thus could benefit from his own experience in conducting the study. However, after an in-depth literature research, there was a lack of a more detailed examination of this target group in order to be able to derive hypotheses. In addition, the target group should be given more attention, since according to current findings, those people are particularly at risk for burnout who are exposed to strong stress and constant pressure when dealing with other people. Sales employees belong to this risk group. Furthermore, the focus on sales employees in the automotive sector is also highly relevant for young professionals, since many graduates of a science degree program start their careers in sales positions, and it would make sense from the point of view of occupational health management to protect this target group through targeted prevention and support measures. By means of an explorative approach, it will first be fundamentally examined whether the topic of support and stress is addressed in an informal setting, spontaneously and more frequently, and in which group of people. Under the assumption that this phenomenon also exists outside the observations of the group discussion, three thematic blocks were examined. The aim is to find out the framework conditions of support conversations, the addressed topics regarding stress, and the fulfilled functions and motives of the conversations.

Description of the Survey Method

A modification of the group discussion method took place by following aspects of the problem-centered interview in order to be able to optimally and deeply illuminate the phenomenon of burnout in connection with social support by the supervisor. Even though this combined and from now on called „problem-centered group discussion“ according to LOOS & SCHÄFFER can be methodically located between a group interview and a group discussion,³⁸⁷ the focus of the group discussion was deliberately chosen because the author also considered the exchange of the group as promising. It was an „investigative form“ of the group discussion, with the goal of capturing attitudes and opinions of individual participants in the discussion, whereby the acquisition of information about the content-related results was in the foreground. The

³⁸⁷ Loos, P. & Schäffer, B. (2001) Das Gruppendiskussionsverfahren. Leske + Budrich, Opladen, p. 12 & 13.

orientation towards the problem-centered interview took place primarily with regard to the design of the guidelines and the planning of the procedure.³⁸⁸

On the one hand, group dynamic advantages and basic stimuli were used to generate discussion. On the other hand, open-ended questions based on presuppositions from the first chapter were used.³⁸⁹ This procedure promised a number of advantages appropriate to the research subject, such as an increased willingness for open discussion among peers and authentic expressions through a natural interaction. A guide was developed for conducting the problem-centered group discussions. The guideline (Appendix C), was developed using the four steps of the SPSS procedure according to HELFFERICH.³⁹⁰

Selection and Description of the Experts

Six adults from the author's personal network who had suffered from burnout in the past were selected for the sample. The three women and three men were all under inpatient therapeutic treatment and subsequently reentered the work life. All of them are practicing the same profession after therapy as before. The intention was to interview people who have experienced burnout themselves and can look back on it from a genetic point of view. The distance to the disease allows a more objective assessment of the characteristics than a survey of current sufferers.³⁹¹ It should be noted that none of the subjects received the diagnosis "burnout", as it is not yet defined in the current ICD-10. A precise definition of the syndrome will not be given until the new version of the ICD-11 comes into force in January 2022. However, all subjects were diagnosed with „exhaustion depression“ (ICD F32.9) and burnout was referred to as a disease during therapy.

Table 1

Description of the Sample of the qualitative Study

Proband	Gender	Date of Birth	Profession	Time of Burnout	Kind of Therapy
A	♂	12/03/79	Key Account Manager	2015	3 months clinic stay, psychopharmaceuticals - discontinued.
B	♂	23/07/74	Sales Manager	2017	2,5 months clinic stay, psychopharmaceuticals - discontinued, further ambulant therapy.

³⁸⁸ Mayring, P. (2002): loc. cit, p. 67-72.

³⁸⁹ Mayring, P. (2002): loc. cit, p. 67-79.

³⁹⁰ Helfferich, C. (2009): Die Qualität qualitativer Daten. Manual zur Durchführung qualitativer Interviews. Wiesbaden: VS-Verlag für Sozialwissenschaften, p. 182-185.

³⁹¹ At this point I would like to thank Mrs. Lena Vollmer, M.Sc. from the Psychological Service at the Augsburg District Hospital (BKH)/Germany for the valuable information.

C	♂	22/01/80	Sales Manager	2017	2 months clinic stay, psychopharmaceuticals - continued, further ambulant therapy - still ongoing.
D	♀	15/12/79	Marketing Manager	2018	2,5 months clinic stay, psychopharmaceuticals - continued, further ambulant therapy - still ongoing.
E	♀	12/02/82	Controlling	2018	2 months clinic stay, psychopharmaceuticals - discontinued, further ambulant therapy.
F	♀	01/09/83	Sales Manager	2018	3 months clinic stay, psychopharmaceuticals - discontinued.

Source: Author's construction

The three male interviewees worked in sales as key account managers and sales managers at the time of their burnout. The female interviewees were a marketing manager, a female employee in controlling and another female employee in sales. Table 1 contains further information on the six subjects.

Data Collection and Data Evaluation

The problem-centered group discussion used for the evaluation was conducted online via Webex on November 15, 2020 with the probands presented in Table 1. It lasted 100 minutes. The online discussion did not present optimal conditions as in face-to-face rounds. All participants agreed due to the currently prevailing corona pandemic and due to the fact that there was no need to travel to the meeting. At the beginning of the group discussion, the participants received a definition of „support conversations“ (Appendix A) as information and handout. In addition, the subjects received a short questionnaire (Appendix D) to facilitate the start of the conversation.

After the round of introductions, which highlighted commonalities among the participants, and a brief guidance to the topic, the introductory question „*How did you experience your personal burnout?*“ stimulated conversation among the participants, with the goal of evoking memories of their personal exhaustion.

Impulsive questions and a subsequent reflection on the discussions formed the basis for further dialog. In order to answer the subordinate research questions, these revolved around the topics of the framework conditions, the contents and the functions of supervisor support. In each case, after an open discussion following a basic stimulus, the topics were specifically explored from different perspectives by keeping the discussion going with pre-formulated matters and follow-

up questions. In the context of the problem-centered group discussions, the author asked specific questions which, through the possibility of free answers, led to an approach of open discussions centered on the problem.

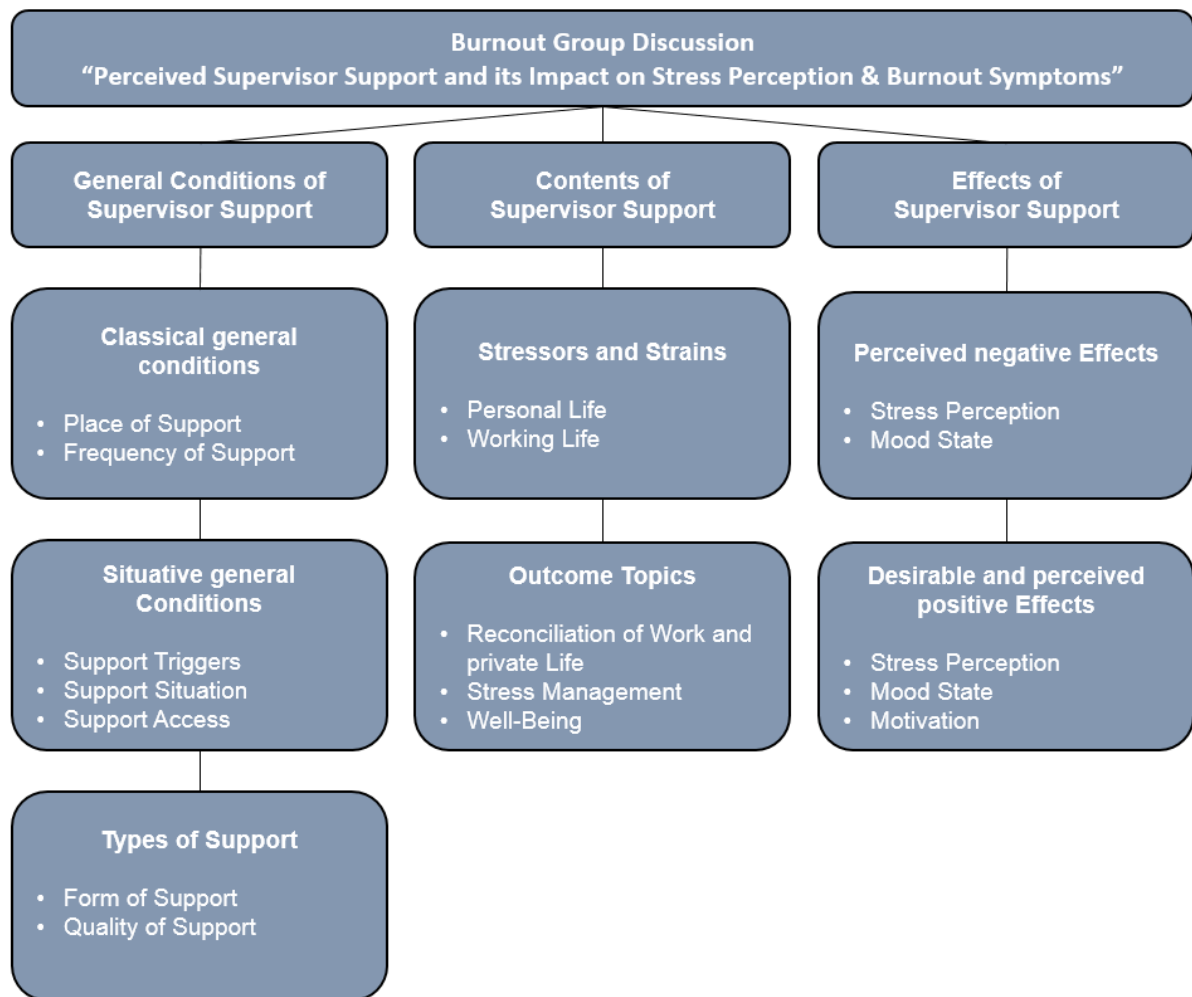


Fig. 6: Overview of the Category System of the Group Discussion within the qualitative preliminary Study

Source: author's construction.

In order to avoid an influencing effect, the author's prior understanding was not communicated to the participants.³⁹² In the course of the group discussions, it could be used profitably with regard to an encounter at eye level.

Description of the Evaluation Method

Following the implementation, transcriptions of the group discussions were made, based on the transcription rules according to KALLMEYER & SCHÜTZE.³⁹³ Sample excerpts of the

³⁹² Mayring, P. (2002): loc. cit, p. 67 & 69.

³⁹³ Kallmeyer, W. & Schütze, F. (1976): Konversationsanalyse. In: Studium Linguistik, 1, pp. 1-28.

transcription in the original German version can be found in appendix E. Based on the transcriptions, the qualitative evaluation was carried out with the help of the summarizing content analysis with inductive category formation according to MAYRING. After the compilation of the preliminary analysis results, the process of content analysis according to MAYRING took place. The steps of content analysis were performed for the subordinate research questions across the group discussion. The resulting analyses were later used to summarize the answers to the main research question about the effects of poor social support from supervisors on burnout symptoms among employees. Through the paraphrasing step, a uniform reduction to the desired level of abstraction was achieved. In the subsequent inductive category formation, category levels were defined, whereby the last, most detailed category level corresponds more to a collection of examples from the transcripts. The entire process of reduction and categorization was circular, so that back-checks on the source material and revisions of the categories took place again and again, whereby, among other things, new intermediate levels were created through structuring. On the basis of the generated material, a detailed interpretation of the category systems took place, whereby both the source material and interview transcripts were consulted in case of ambiguities.

Presentation and Discussion of the Results in short Form

The presentation and discussion of the results of the problem-centered group discussions is divided into three parts. [1] First, the sub-questions formed within the framework of the qualitative study concerning the content, general conditions and effects of (poor) social support from the supervisor on burnout are considered. In order to present the respective results, the developed category systems are explained, illustrated by means of selected examples and interpreted. Due to the explorative nature of this study, references to related theories and other study results are limited and more in terms of drawn parallels. After a detailed presentation and discussion of the results to the sub-questions and a [2] further discussion, a [3] summary of the results is given for the transition into the derivation of hypothesis.

Category 1: General Conditions of Social Support

Classic general Conditions of Social Support from the Supervisor

Classical general conditions include *places of support* and the *frequency of supervisor support*. From the results it becomes clear that places of support can be defined as a concrete setting (also by telephone or e-mail), such as the home office, the workplace, the car or the home. There are dependencies in the stress level. In this context, the diversity of the participants becomes clear, as some of them experience stress at certain locations, while others do not.

It should be emphasized that some participants experience stress when confronted with unclear feedback or unobjective criticism in the workplace as part of day-to-day operations, and these add up to external stressors.

The frequency of perceived support varied widely. Some participants indicated that they tended to have frequent supervisor support contact with low effectiveness, while others generally recorded little support contact (positively and negatively perceived). In addition, it also became clear during the group discussions that support contacts did occur, but that this was done unconsciously or that a lack of support only became apparent as stress levels increased. This aspect is illustrated, among other things, by the fact that the participants only became aware of how often they received inadequate social support in the course of the group discussion.

Situative Conditions of Social Support by the Supervisor

The situative conditions can be divided into *triggers*, *situation* and *access* of/to a stress conversation. Triggers for a stress discussion can be the prevailing situation as well as the personal state of mind. Poor social support or the lack of social support by the supervisor quickly leads to states of exhaustion. It becomes clear that poor support often intensifies critical situations with prevailing emotional states or excessive demands.

In general, a lack of support in tense and stressful situations in day-to-day business leads to burnout symptoms or exhaustion. The participants named work-related contacts with the team or customers on the phone, situations of planning, project-related tasks or calculations that require cognitive effort as the context of the conversation. It is irrelevant whether insufficient, unclear, incomprehensible instructions or feedback in the form of social support happen in person or via different media, e.g. by phone, group chat or short message - or feedback is completely missing when needed.

The access into the cognitive perception of social support can be either externally or self-initiated, and in each case, this can occur directly or indirectly. Direct, externally initiated access can occur via the employee's work reports or by raising the need for support with the supervisor, e.g., when the supervisor actively requests feedback on work issues or processes. Indirect, externally initiated entry can occur through inquiries, e.g., about the employee's state of mind or the course of the day, which often fails to occur if the supervisor provides poor support.

Self-initiated support access can occur indirectly through listing one's own stressors or work-related support needs, or, for example, through provoking or obtaining stress-reducing measures from a supervisor. Overall, however, more ways of external initiation by the participants are mentioned, but most of them are started with a strong time delay.

It is noteworthy that the stressful situations are described by the participants from an ego-centered perspective, as the situations presented mainly refer to conversations about one's own stress and burdens. The perception of the need of others or that of the team members are only rarely mentioned.

Types and Quality of social Support from the Supervisor

In this study, a distinction can be made between emotional support and instrumental support regarding types of social support from the supervisor. In addition, *quality and form* played an important role. With regard to the quality of the support, two categories can be identified among the test persons. Rather superficial, cool emotional support is equated with the mere listing of possibilities for organizing activities related to day-to-day operations. In the case of instrumental support, offers by the supervisor were mentioned, which either came to nothing or were rated as unhelpful. Both categories thus seemed to have rather negative connotations.

Detailed, honest and intensive conversations with the supervisor occurred relatively rarely or not at all among the subjects. Overall, there also seems to be a connection with the length of the conversation. Superficial conversations are described as short and digressive.

With regard to the form, a distinction can be made in this study between conversations within an informal and a formal setting. In the case of the latter, it seemed particularly important that such a formal format should not take place in the context of a team meeting under the point „miscellaneous“, but rather as a personal conversation in private and in a quiet atmosphere, since a certain degree of discretion should be guaranteed. Another focus is on informal conversations, which should take place as a constant exchange and as a dialog on an equal footing.

But stress can also be addressed in small talk. Overall, it is the subjects' wish that these informal support conversations or stress conversations are generally explicit, i.e. direct and conscious. Additionally, they can be situational or indirect. Indirect stress conversations are conducted consciously, but the respondents' own stress is not directly discussed, so that they contain implicit messages that the employees would like their supervisors to perceive as needs.

There are various forms of interaction in support contacts. Despite the freedom that could be created for a support exchange in the team if planned appropriately, these must be classified as critical in addition to the point of lacking discretion, since there is a risk of talking past each other and not addressing each individual employee personally.

Category 2: Contents of Supervisor Support

During the results analysis, it became clear that the content of support discussions can be divided into two main categories. One category relates to stress-triggering factors that can be located in different areas of the employees' day-to-day operations or private life. The associated contents, illness-causing factors, are referred to as *stressors and strains* in the context of this work. In a second category, the contents can be summarized in which the participants in the support interview report personal effects from daily work and stress. The contents of this category are called *outcome topics*. In the following, these two upper categories of content are described descriptively to answer the research question. It should always be noted that these contents are topics that are the subject of support conversations.

Stressors and Strains

The category of stressors acts as a starting point for further content, as these are factors that initially trigger stress. It includes the topics of work and private life. It is noticeable that content and thus stressors from private life are mentioned but are underrepresented in contrast to the other stressors. This indicates that stressors from private life are discussed, but the focus of support interviews is on the area of work, even though the two are directly related in some cases.

In addition to a bad working atmosphere, poor salary and limited participation, unjustified criticism also plays a major role of how support is perceived.

Core working hours are also a content-related aspect, with the lack of breaks being reported in particular. Private content mainly relates to personal restrictions, e.g. time restrictions due to long working hours or overtime.

Outcome Topics

Outcome topics encompassing the personal effects of stress can be divided in this study into work-life balance, personal well-being and coping with stress. In this regard, a content focus of supervisor support appears to be *work or work issues*. It is clear, however, that the double burden of *private matters*, such as family scheduling, as well as presence times and stress in the work context also play a weighty role for the participants and are addressed. In addition, personal well-being, which in turn is closely related to the perception of stress, is of great importance. The participants addressed aspects that includes their state of mind, health effects of stress and interpersonal tensions. It should be emphasized that only negative mood states, including malaise and excessive demands, are addressed.

In the context of support conversations with the supervisor, solution-oriented contents of stress conversations are mentioned only to a limited extent. During the discussion, personal support networks such as the collegial network were mentioned, which serves to exchange strategies such as distraction and reward strategies that take place outside of support discussions with colleagues during breaks. However, support from family and friends in the form of advice was also discussed, as well as fears of burdening supporters with one's own problems.

Category 3: Effects of Supervisor Support

Only by means of the third category, the consequences on health (on the state of mind, the stress perception as well as burnout) and motivation in the sense of poor supervisor support can be described - and thus the contribution of supervisor support and a health-oriented leadership to the stress management of employees or burnout prevention can be recognized.

Regarding the state of mind and the feeling of stress, there are both - possible positive effects from the employee's point of view and negative effects based on experience. The individual

effects will be discussed in detail below, firstly by specifying the effects in each case and secondly by giving some of the reasons for these effects.

Perceived negative Effects

Since talking about personal stress can also have disadvantages and negative effects. This became clear in discussions with the subjects' supervisors on the one hand, and in dialogs within the collegial support network on the other. This can happen, especially when colleagues discuss the same feelings and sensations and do not actively work on the problem as such. The perceived stress can be increased by the fact that one's own stressful tasks become even more conscious as a result of the stress discussion, or a mutual transfer of stress takes place.

One reason for these negative effects on the perception of stress can be that one's own, initially merely subjective perception of stress is confirmed by the other person from the outside, so that it manifests itself and becomes even stronger. However, a downplaying reaction can have equally negative effects, as the stressed person feels that his or her subjective stress perception is not being taken seriously by the counterpart's relativization or even negation of it. As in the case of emotional invalidation, the subjectively perceived stress is devalued or declared invalid by the other party. INGRAM, BETZ, MINDES, SCHMITT & SMITH refer to this behavior, in the context of social support, as „minimizing“.³⁹⁴

Other reasons for negative effects are that the participants compare themselves with others or become stressed by the stressful conversations. In particular, when the conversation partner draws attention to the stressful situation, the subjective stress of the person seeking help seems to intensify.³⁹⁵ This is most often the case when seeking help from the personal support network „colleagues“. Furthermore, the state of mind can deteriorate as a result of stressful conversations, in that there is a loss of pride or a feeling of anger due to the relativization by the discussion partner. Participants also report feeling annoyed or misunderstood. Reliving the stressful situation can lead to negative effects on the state of mind.

Desirable, and perceived positive Effects

Support discussions can have a positive impact on employees' perception of stress. In this context, the participants mention emotional relief or reassessment of the stressful situation. Re-evaluations seem to occur both through the pure verbalization or reflection of the respective situation, as well as through relativization by the conversation partners. For example, verbalization can classify the stressful situation and make it more tangible, which can lead the

³⁹⁴ Ingram, K.M., Betz, N.E., Mindes, E.J., Schmitt, M.M. & Smith, N.G. (2001) Unsupportive Responses from Others concerning a stressful Life Event: Development of the Unsupportive Social Interactions Inventory. *Journal of Social and Clinical Psychology* 20 (2), p. 200.

³⁹⁵ Beehr, T. A.; Bowling, N. A. & Bennett, M. M. (2010): Occupational Stress and Failures of social Support: When Helping hurts. *Journal of occupational Health Psychology*, 15(1), p. 55.

conversation to a problem solution. Also, by a relativization of the situation by the interlocutor the situation can be estimated consequently as less stressful. Overall, these processes can lead to a reduction in stress levels, in line with the transactional stress model.³⁹⁶ Positive effects on stress perception can also occur through self-reflection or receiving advice. According to the interviewees, such discussions with the supervisor would be highly desirable, or there is great potential for improvement.

With regard to „being emotionally cared for“, participants speak of the feeling of relief that comes after talking about stress or the current situation (emotional supervisor support), although their state of mind may also initially worsen during the conversation. However, they ultimately feel understood, confirmed or simply have a good feeling after the exchange.

Overall, it is evident that support discussions can have a predominantly positive impact on the employees themselves, but there is no evidence for a positive impact on interpersonal relationships.

Further Discussion of the Results

From the variety of aspects found, it can be concluded that the phenomenon of perceived support by supervisors and the effect on stress and burnout is a very complex topic and thus a broad field of research. Many general conditions and functions seem to be dependent on the respective context and various cross-connections can be found. In particular, the aspect of complexity will be briefly discussed again in this paragraph.

The results show a high range of different characteristics regarding the effects of perceived supervisor support on the outcome variable. Since the participants suffered from a burnout syndrome, brought experiences into the interview, and burnout developed among other things due to poor social support in the work context - perhaps social support by the supervisor was often experienced as negative, desirable behaviors of the supervisor could be clearly named by the subjects. This can be attributed to the fact that the participants see certain positive functions for themselves in their own conversations, e. g., with members of personal support networks, but that social supervisor support lead to different or less goal-oriented results, which in these cases have negative health-related effects for themselves. This complexity is also made clear by the fact that various expectations that are not addressed are often not met because the concrete, personal needs are not known to the supervisor. This lack of fit can lead to misunderstandings and dissatisfaction and ultimately to stress. Because of the opacity of different needs and expectations of the supervisor the issue is very complex. In contrast, test subjects seem to run a lower risk with close trusting persons from collegial support networks due to the lack of dependency, because

³⁹⁶ Cohen, S. & Wills, T. A. (1985): Stress, social Support, and the Buffering Hypothesis. Psychological Bulletin, 98(2), pp. 310-357.

there is a clear expectation regarding their reactions due to familiarity and understanding within the work context and organization- and leadership culture.

In addition, hidden and implicit messages in support conversations increase complexity because actual stress levels are only indirectly understood by the supervisor. It is questionable whether negative effects of social supervisor support could be avoided, if a conscious and direct addressing of stress were suggested. For this, a leader must have a wide range of communication skills and emotional competence. However, it must be kept in mind that a form of manipulation can also go hand in hand with conscious discussion. In the professional context, for example, the deliberate broaching of the subject of stress in connection with the fending off of additional tasks was mentioned. This could lead to massive damage at the organizational level if a large number of employees were to make use of such communication strategies.

Consolidation of the Results for the Transition to the Derivation of the Hypotheses

Overall, it can be stated that the analysis of the general conditions of social support by the supervisor points to the existence of different contents and thus allows a more detailed description. Social support from the direct supervisor mostly proceeds unreflectively and casually, in that stress is addressed consciously or unconsciously by the employees. In addition, conscious forms of support also exist, which, according to the subjects, rarely occur but would be extremely desirable. Superficial and brief remarks, such as expressing one's own state of stress, listing stressful activities, and expressing the employee's state of mind, could be identified as everyday forms of stress talk. Superficial and brief remarks, such as expressing one's own state of stress, listing stressful activities, and expressing the employee's state of mind, could be identified as everyday forms of stress talk. Since these forms of talking about stress, in the form of an indirect search for help, occur more frequently due to the high stress presence in everyday life, stress talk tends to be perceived as superficial, unreflective comments. This is therefore an emotion-based stress management strategy, since it is not the stressors as the cause of the stress state that are combated, but rather a short-term emotional relief that is aimed at.³⁹⁷

In contrast, during an intensive stress talk, participants consciously deal with their stress load. An example of this is situations in which specific confidants are sought out primarily in the collegial support network.

Since conscious and unconscious support conversations with the supervisor only take place in certain contexts, the degree of awareness seems to depend on person-related and environment-related aspects (e.g., family obligations). This shows parallels to the transactional stress model according to LAZARUS & FOLKMAN, since here the interaction of person and environmental variables determines the stress experience and reaction. Person-related factors represent in the context of the support discussions, e.g., the stress feeling and emotional needs. Environmental

³⁹⁷ Lazarus, R. & Folkman, S. (1984): loc. cit., p. 145.

factors can be described by current stress and available social support resources. Thus, depending on these factors, either a conscious or unconscious addressing of stress in the context of help-seeking seems to take place. Although a correlation of these aspects became clear, the exact effect relationship of the variables cannot be reconstructed based on the present research results due to the scope alone.

The social support needs of the test persons are more complex than initially assumed. The analysis showed that all areas of everyday working life, in which different stressors occur, can be the content of support needs. In addition to the respective stressors, aspects of self-organization and ways of coping with stress are discussed in support conversations. Talking about them thus seems to be an everyday phenomenon.

Within the framework of the pre-understanding and the literature research, it was assumed that social supervisor support has a variety of functions, but that the focus is on emotional relief and less on instrumental coping. Overall, emotional support and instrumental support were recovered as support functions for supervisor support, mentioned by participants - with regard to emotional support being very frequent and the most differentiated. This result is in line with assumption in the theoretical part of the dissertation, that emotional support is the most important facet of social support.

Furthermore, participants mentioned functions that can result in negative consequences, such as admitting weakness or being overwhelmed. For this reason, employees tend to avoid initiating a request for help from their direct supervisor unless there is a chance of positive change. Supervisors should therefore recognize when situations require support from employees and not wait for it to be requested.

The effects of stress talks are also multifaceted, but were assumed to be one-sidedly positive in the context of the pre-understanding. In the course of the analysis, however, negative effects also emerged. Thus, a universal statement regarding the direction of effects cannot be made. Rather, a fit between needed and received social support seems to be necessary for positive effects of stress talks. This connection goes along with the results of LAIREITER & LETTNER; LETTNER and SCHWARZER & LEPPIN mentioned in the theoretical part.

Thus, it can be summarized that perceived support by the supervisor, as assumed at the beginning, represents a phenomenon for processing and coping with stress. Likewise, seeking help in personal support networks represents a coping strategy. The everyday confrontation with stressors and demands activates social support functions and thus, in the best case, they have positive effects on the well-being and associated health of employees. Hence, social support is necessary for the maintenance of employees' health. Nevertheless, the thematization of stress but also social support by the supervisor as well as by social support networks might have negative effects.

Derivation of Hypotheses and Presentation of the Research Model

The research model shows the operationalization of the individual variables and the exact designation of the hypotheses or hypothesis blocks.

In the first hypothesis, the aim is to test whether the reported findings on the burnout -reducing or -promoting effect of social support by supervisors can also be confirmed on the samples examined in the quantitative study. Burnout will be assessed by the employees themselves via the Maslach Burnout Inventory (MBI) in its three dimensions emotional exhaustion, depersonalization and reduced personal accomplishment.

Hypothesis 1 - A high level of social support by the supervisor (perceived support of the employee) has a significantly negative correlation with employee burnout in all three operationalized dimensions.

It is assumed that for all samples included, the relieving effect of a supporting supervisor can be proven in connection with the individual experience of burnout symptoms. Persons who feel supported by their supervisor to a high degree professionally should also feel better psychologically in this respect. It remains to be checked, however, whether the strength of the effect is similarly high for all the samples examined or whether there are differences in view of the demographic variables. In the first hypothesis, the interaction of different resources in the form of support networks and personality traits are not taken into account. The following hypotheses aim to clarify this in a more differentiated way.

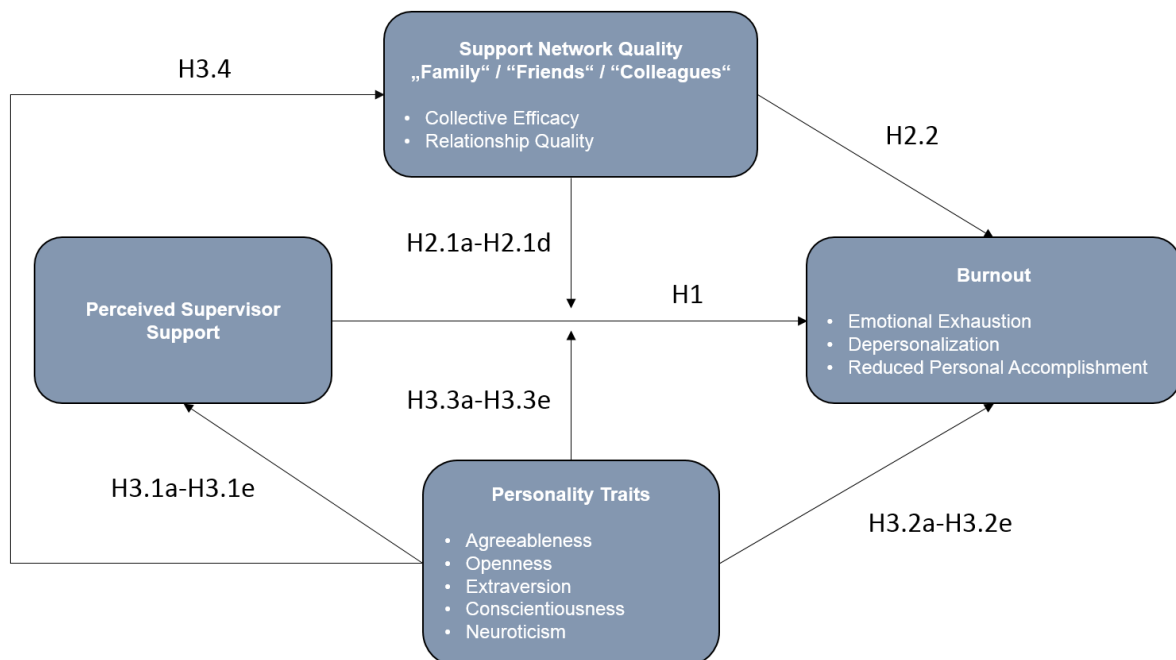


Fig. 7: Research Model with main Effects and Moderator Effects including the Links to the developed Hypotheses

Source: Author's construction.

In a next step, it is postulated that employees who perceive poor support from their supervisor, but who maintain a high-quality collegial support network, have fewer burnout symptoms than those who maintain a low-quality collegial support network. The latter have a higher stress perception and poorer health caused by poor perceived supervisor support. However, it seems doubtful that a low level of social support by the supervisor combined with a high-quality collegial support network leads to the same result. Rather, it would be conceivable that the affected employees could fall back on colleagues who are available to help them in stressful situations and thus compensate for the deficit.

Hypothesis 2.1a - A high quality support network „colleagues“ is able to buffer (moderate) the relationship between the social support by the supervisor (perceived supervisor support) and employee burnout.

With the help of this hypothesis, a contribution should be made to the clarification of moderating support networks.

In the further course of the project, it is to be examined whether employees who perceive a lack of support from their supervisor can compensate for this through a high-quality support network in the private sector. Interesting for the investigation of a relevant effect are employees, who feel supported by the supervisor only in small measure. For this group of people, the influence of a high-quality support network in the private sphere (initially the focus should be on the support network „family“) on burnout symptoms should be examined. In the sense of a compensatory (moderating) effect, it is to be expected that employees who perceive a higher quality of their family support network should distinguish themselves from those whose support network is of lower quality. They should therefore perceive poor supervisor support as less impairing and as a result of symptoms of the three burnout dimensions should evaluate themselves less strongly. Based on these considerations, the following hypothesis can be made:

Hypothesis 2.1b - A support network „family“ in high quality is able to buffer (moderate) the relationship between the social support by the supervisor (perceived supervisor support) and employee burnout.

In terms of a further private resource, the next step is to consider the private support network „friends“. It would be conceivable that employees who have a supportive inner circle of friends of high quality would have fewer burnout symptoms. The following hypothesis can therefore be formulated:

Hypothesis 2.1c - A high quality support network „friends“ is able to buffer (moderate) the relationship between the social support by the supervisor (perceived supervisor support) and employee burnout.

In this study it is assumed that „professionals“ and yet familiar, strong relationships in the work context are those who are first consulted in all matters related to the professional environment. Contrary to the assumption of CANTOR and LITWAK, which postulate that the preferred

support persons are distinguished by their emotional and usually also spatial proximity - characteristics which in a way equate them as a quality feature of the relationship or that of the support network with the supporting person (group). In this investigation, however, the context in which a support network exists should not be lost sight of. In this case the context is „work“. It is therefore assumed that a support network from the private sphere, such as the family support network or the friends support network - even if they are characterized by high quality - are less well suited to moderating the relationship between perceived social support by the supervisor and the subjectively assessed mental and physical health of the employee.

Hypothesis 2.1d - A support network of high quality from the private near field (friends, family) has a weaker buffer function between the social support by the supervisor (perceived supervisor support) and employee burnout as the professional support network „colleagues“.

The assumption is based on two reasons: [1] Strong relationships ensure the integration into a social, professional core network, which gives the individual a stable social background (identity, sense of belonging, support) and fulfils basic support needs. In addition, close colleagues as communication channels ensure a rapid (informal) professional exchange of information. Furthermore, [2] group dynamic processes play a role. In organizations, the phenomenon of „social contagion“ is of particular importance. The term social contagion describes the phenomenon of a form of emotional transmission between people. Through social contagion, moods, feelings, etc. can spread in a society. Social contagion is explained by the same alignment of individual emotional energies. Self-organizing feedback mechanisms create resonance and reinforcement in the collective. And just as aspects conforming to affect in the individual combine to form a „conclusive affect logic“, this also happens collectively. In the case of a social support by the supervisor that is perceived as insufficient, a collective „logic of fear“ or „logic of anger“ can develop.³⁹⁸ So what people feel and how they behave is often not decided by them alone, because the psyche cannot escape the power of the social, although within internal networks of the organisation this effect can be strengthened and expanded - employees look for allies to support them.³⁹⁹

For the reasons mentioned above, these allies are mainly found in the working environment. In this respect, the self-rated quality of support network „colleagues“ should be higher. The following hypothesis can thus be made:

³⁹⁸ Ciompi, L. & Endert, E. (2011): Gefühle machen Geschichte. Die Wirkung von kollektiven Emotionen von Hitler bis Obama. Göttingen: Vandenhoeck & Ruprecht, pp. 26-28.

³⁹⁹ Glasl, F. (2011): Konfliktmanagement: ein Handbuch für Führungskräfte, Beraterinnen und Berater. Bern: Haupt, p. 169. Schwarz, G. (2010): Konfliktmanagement: Konflikte erkennen, analysieren, lösen. Wiesbaden: Springer, p. 98.

Hypothesis 2.2 - The self-rated quality of the support network „colleagues“ is rated higher by the employee than the quality of support networks in the primary environment.

At this point, the work of HAGER & BRINK should be mentioned, which was carried out as part of a preliminary study for this dissertation.⁴⁰⁰

Hypotheses are also to be developed with regard to the personality traits of the surveyed employees. Neuroticism is not a mental disorder, but describes a characteristic in which all persons of a population differ more or less. Neuroticism denotes a stable, enduring personality trait and not a personality disorder. Neurotic people are considered to be anxious, moody, sensitive, depressed, irritable, nervous or dour. According to MUND & NEYER, the quality of their social relationships is also rated rather negatively.⁴⁰¹ In contrast, people with a low level neuroticism are emotionally stable, balanced and not so easily upset. They evaluate their social relationships positively. Of all the characteristics of the 5-factor model⁴⁰² neuroticism is considered the strongest predictor of life dissatisfaction and negative quality and instability of partnerships.⁴⁰³ ZELLARS & PERREWÉ cite neuroticism as a concrete characteristic which is highly associated with perceived support and burnout dimensions.⁴⁰⁴ According to JUDGE, HELLER & KLINGER, neurotic persons experience increased stress and often feel threatened by stressful situations.⁴⁰⁵

Therefore, it is to be assumed that neuroticism is connected with the dyad employee-supervisor and perceived supervisor support of the employee.

Hypothesis 3.1a - Neuroticism has a significant negative effect on employees' perceived supervisor support.

The higher the level of neuroticism, the lower the perception of social support by the supervisor. Similarly, the hypothesis that neurotic employees have a higher risk of burnout applies in this study.

Hypothesis 3.2a - Neuroticism has significant positive effects on the burnout dimensions.

⁴⁰⁰ Hager, F. W. & Brink, N. (2020): Personal Support Networks as Moderators in dyadic Employee-Supervisor Relationships. Journal of Economics and Management Research, 9, Faculty of Business, Management and Economics, University of Latvia (in press).

⁴⁰¹ Neyer, F. J. (2014): loc cit., pp. 236.

⁴⁰² The Five-Factor-Model is used in the empirical part of this thesis to measure essential factors of personality. According to this model, extraversion, neuroticism, conscientiousness, agreeableness and openness - the so-called Big-Five - are the basal areas of an individual's personality.

⁴⁰³ Neyer, F. J. (2014): loc cit., pp. 236.

⁴⁰⁴ Zellars, K. L. & Perrewé, P. L. (2001): Affective Personality and the Content of emotional social Support: Coping in Organizations. Journal of Applied Psychology, 86(3), pp. 459 & 464-467.

⁴⁰⁵ Judge, T. A.; Heller, D. & Klinger, R. (2008): The Dispositional Sources of Job Satisfaction: A comparative Test. Applied Psychology, 57(3), pp. 361-372.

The reason for this is the assumption that neurotic employees rarely use adaptive coping strategies such as positive thinking and active stress management. It cannot be assumed that neuroticism has a buffer function between perceived supervisor support and employee burnout, as it can not be seen as a resource.

Hypothesis 3.3a - Neuroticism has no moderating effect between perceived supervisor support and the three burnout dimensions.

People with a high degree of extraversion are open to social contacts, active, cheerful, optimistic and have comparatively many social relationships and a great potential for social support. For example, their social network is usually also more extensive than that of less extraverted people.⁴⁰⁶ When extraverts experience stress, they are more likely to establish social contact (as a coping strategy) more quickly than introverts. In addition, extraverts do not attribute failure to themselves, but rather blame their environment for certain circumstances. This in turn leads to a reduction of personal stress and emotional tension. Above all, the ability to seek out emotionally supportive sources reduces the stressful life of extraverts. In this respect, the following hypothesis can be assumed:

Hypothesis 3.1b - Extraversion has a significant positive effect on employees' perceived supervisor support.

If, as NEYER stated, extraverts' social network is usually more extensive than that of less extraverted people, they should also positively assess the quality of their social relationships or personal support networks.

Hypothesis 3.4 - Extraverted employees have high quality personal support networks.

SCHNEIDER, RENCH, LYONS & RIFFLE found unique effects on stress responses for the personality traits neuroticism (high threat and negative affect and low positive affect) but also for extraversion (high positive and low negative affect).⁴⁰⁷ XIN, WU, YAO, GUAN, ALEMAN & LUO observed that individuals higher in extraversion showed smaller cortisol activation to stress and less increase of negative affect.⁴⁰⁸ There is also a lot of research on the influence of extraversion on burnout. While a high degree of neuroticism favors the occurrence of burnout symptoms, a high degree of extraversion is described as an indicator for a lower risk of burnout.⁴⁰⁹

⁴⁰⁶ Neyer, F. J. (2014): loc cit., pp. 236.

⁴⁰⁷ Schneider, T. R.; Rench, T. A.; Lyons, J. B. & Riffle, R. R. (2012): The Influence of Neuroticism, Extraversion and Openness on Stress Responses. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 28, p. 102.

⁴⁰⁸ Xin, Y., Wu, J.; Yao, Z.; Guan, Q., Aleman, A. & Luo, Y. (2017): The Relationship between Personality and the Response to acute psychological Stress. *Scientific Reports*, 7(1) [16906].

⁴⁰⁹ Joseph, E. N.; Luyten, P.; Corveleyn, J. & De Witte, H. (2011): The Relationship between Personality, Burnout, and Engagement among the Indian Clergy. *International Journal for the Psychology of Religion*, 21(4), pp. 276-288; McManus, I. C.; Jonvik, H.; Richards, P. & Paice, E. (2011): Vocation and

Against this background, the following hypothesis can be made for the sample in this study:

Hypothesis 3.2b - Extraversion has significant negative effects on the burnout dimensions.

At this point it can be assumed that extraversion also acts as a buffer between employees' perceived supervisor support and burnout, as this is a positive personality trait and can be drawn from resources that contribute to stress management.

Hypothesis 3.3b - Extraversion has a moderating effect between perceived supervisor support and the three burnout dimensions.

Among others, there are results in this regard, e. g. from AMIRKHAN, RISINGER & SWICKERT, which report that extraverts are more likely to build networks of friends than introverts. In addition, extraverts tend to use active and problem-focused stress management strategies.⁴¹⁰

Openness to experience refers to an area of personality characterized by active imagination, aesthetic sensitivity, attention to inner feelings, preference for diversity and intellectual wonder. Open-minded individuals are more willing than others to embrace new and unconventional ideas. They are also more creative than others, although openness is not synonymous with intelligence and educational success. By contrast, individuals with a low level of openness are more closed to themselves, tend to have conventional and conservative attitudes and are more willing to submit to authority. Openness has consequences for social relationships. Open-minded people are more sociable, which further increases their openness.⁴¹¹ Since the personality trait Openness assesses the extent to which a person actively seeks new experiences and reflects tolerance and a propensity to explore unknown situations, it can be concluded that individuals are equally open to and actively seek support from different sources. For this reason, the following hypothesis is made:

Hypothesis 3.1c - Openness has a significant positive effect on employees' perceived supervisor support.

DEARY, BLENKIN, AGIUS ENDLER, ZEALLEY & WOOD discovered a modest, but significant positive relationship between the personality trait openness and the Burnout Dimension personal accomplishment.⁴¹² ZELLARS, PERREWÉ & HOCHWARTER also reported a positive relationship between openness and personal accomplishment. Moreover, they

Avocation: Leisure Activities correlate with professional Engagement, but not Burnout, in a cross-sectional Survey of UK Doctors. BMC Medicine, 9(100), pp. 1-18.

⁴¹⁰ Amirkhan, J.; Risinger, R. & Swickert, R. (1995): Extraversion: A „hidden“ Personality Factor in Coping? Journal of Personality, 63(2). Hoboken: Wiley, pp.189-212.

⁴¹¹ Neyer, F. J. (2014): loc cit., pp. 236.

⁴¹² Deary, I. J.; Blenkin, H.; Agius, R. M.; Endler, N. S.; Zealley, H. & Wood, R. (1996): Models of Job-related Stress and personal Achievement among Consultant Doctors. British Journal of Psychology, 87(1), pp. 3-29.

found a negative relationship between openness and depersonalization.⁴¹³ In a longitudinal analysis of burnout in nursing students, DEARY, WATSON & HOGSTON indicated that nurses with more open personalities were more likely to be emotionally exhausted.⁴¹⁴ Therefore, in the present study, a relationship between openness and the three Burnout dimensions emotional exhaustion, personal accomplishment and depersonalization has been expected.

Hypothesis 3.2c - Openness has significant negative effects on the burnout dimensions.

A moderating effect of personality trait openness on the relationship between perceived supervisor support and the three burnout dimensions is not assumed, since openness is not only seen as a strength, but can also be seen as having negative connotations and effects, as DEARY, WATSON & HOGSTON have shown. Therefore, openness probably does not act as a classical buffer.

Hypothesis 3.3c - Openness has no moderating effect between perceived supervisor support and the three burnout dimensions.

Agreeableness is also a feature of social behavior and is characterized by altruism, helpfulness, understanding and compassion. Compatible people behave in a socially desirable and cooperative manner. They are rarely involved in interpersonal conflicts and are popular with their fellow human beings, while less tolerant people appear self-centered, suspicious and competitive and show a high willingness to conflict in social relationships. Compatible persons also rate the subjectively perceived closeness to their network members somewhat more in relation to genetic kinship, i. e. they are a little more oriented towards their family relationship. For this reason, the hypothesis is proposed:

Hypothesis 3.1d - Agreeableness has a significant positive effect on employee's perceived supervisor support.

ALARCON, ESCHLEMAN & BOWLING, concluded from a meta-analysis that agreeableness is negatively associated with emotional exhaustion.⁴¹⁵ Similar conclusions were earlier made by ZELLARS, PERREWÉ & HOCHWARTER in a study using a sample of nurses. SWICKERT, HITTNER & FOSTER note, that neither agreeableness nor conscientiousness were significant predictors of perceived social support. Also, MAGNANO, PAOLLILO & BARRANO found

⁴¹³ Zellars, K. L., Perrewé, P. L. & Hochwarter, W. A. (2000): Burnout in Health Care: The Role of the Five-Factors of Personality. *Journal of Applied Social Psychology*, 30(8), pp. 1570–1598.

⁴¹⁴ Deary, I. J.; Watson, R. & Hogston, R. (2003): A longitudinal Cohort Study of Burnout and Attrition in nursing Students. *Journal of Advanced Nursing*, 43(1), pp. 71-81.

⁴¹⁵ Alarcon, G.; Eschleman, K. J. & Bowling, N.A. (2009): Relationships between Personality Variables and Burnout: A Meta-Analysis. *Work & Stress*, 23(3), pp. 244-263.

that agreeableness did not significantly predict any burn-out factor.⁴¹⁶ Despite this ambivalent picture of outcomes, it is assumed in this paper that agreeableness might be most strongly related to the burnout dimension depersonalization.

People who have an appreciative, helpful and cooperative personality will not easily fall prey to cynicism. In this respect, the hypothesis can be proposed:

Hypothesis 3.2d - Agreeableness has no significant effects on the burnout-dimensions.

In experiencing burnout, people respond to work settings in their own unique individual way, so people may perceive specific aspects of a situation (including the given or not given social supervisor support) as more or less stressful and will react differently to situations, according to their personality characteristics personality plays a role in the stress experience, in the perception of threat and in the concomitant emotional and physiological reactions.⁴¹⁷ It can therefore be assumed that:

Hypothesis 3.3d - Agreeableness has a moderating effect between perceived supervisor support and the three burnout dimensions.

Conscientiousness is an aspect of self-control and manifests itself in the correct planning, organization and execution of tasks. People with high values of conscientiousness appear determined, ambitious, diligent, persevering, reliable, punctual, orderly, but also meticulous, compulsive and controlling. In contrast, people with a low level of conscientiousness tend to be careless, indifferent and pursue their goals with little effort. In social relationships, conscientious persons feel particularly obliged to maintain and nurture certain relationships, such as in very close families, while less conscientious persons tend to maintain relationships of a less obligatory nature. Conscientious persons also tend to cultivate their relationships in the workplace.⁴¹⁸ The results of HUANG, WANG, LI & AN showed that conscientiousness has a significant positive correlation with perceived social support among firefighters.⁴¹⁹ In a longitudinal study of middle-aged adults, ALLEMAND, SCHAFFHUSER & MARTIN showed, that conscientiousness has significant and medium-sized initial level associations with all latent constructs of perceived social support.⁴²⁰ Due to this, in this study it is assumed, that conscientiousness correlates positively and significantly with the perceived social supervisor support of employees.

⁴¹⁶ Magnano, P.; Paolillo, A. & Barrano, C. (2015): Relationships between Personality and Burn-Out: An empirical Study with Helping Professions Workers. *International Journal of Humanities and Social Science Research*, 2015(1), pp. 15.

⁴¹⁷ Magnano, P.; Paolillo, A. & Barrano, C. (2015): loc. cit., p. 11.

⁴¹⁸ Neyer, F. J. (2014): loc cit., pp. 236.

⁴¹⁹ Huang, J.; Wang, X.; Li W. & An, Y. (2019): The Relationship between Conscientiousness and posttraumatic Stress Disorder among young Chinese Firefighters: The mediating Effect of perceived social Support. *Psychiatry Research*, 273, pp. 450 & 453.

⁴²⁰ Allemand, M.; Schaffhuser, K. & Martin, M. (2015): Long-term correlated Change between Personality Traits and perceived social Support in middle Adulthood. *Personality and Social Psychology Bulletin*,

Hypothesis 3.1e - Conscientiousness has a positive significant effect on employee's perceived supervisor support.

Earlier research on the relationship between conscientiousness and the burnout-dimensions show rather ambivalent findings. BAKKER, VAN EMMERIK & EUWEMA in a study of volunteer counselors⁴²¹ and ZELLARS, PERREWÉ & HOCHWARTER in a study of nurses⁴²², found conscientiousness not to be significantly correlated to any of the three dimensions of burnout. DEARY, BLENKIN, AGIUS, ENDLER, ZEALLEY & WOOD found conscientiousness to be negatively correlated to emotional exhaustion and reduced personal accomplishment but not to depersonalization among Scottish doctors.⁴²³

Conscientiousness stands above all for self-control, accuracy, a sense of responsibility and determination. Many attribute this quality to a decisive influence on later professional success. People who are less conscientious are conspicuous for their carefree and spontaneous way of life. In this respect, conscientiousness could have a positive influence on the burnout dimension reduced personal accomplishment, as this is related to aspects of work engagement with its component's vigor, dedication and absorption.⁴²⁴ On the other hand, vigor and dedication are the direct positive opposites of exhaustion and cynicism, respectively. Absorption was found to be a constituting element of engagement.⁴²⁵ Therefore, it is hypothesized:

Hypothesis 3.2e: Conscientiousness has a significant negative effect on the burnout dimensions

With regard to a possible buffer function of the two factors, no moderating effect is assumed at this point.

Hypothesis 3.3e - Conscientiousness has no moderating effect between perceived supervisor support and the three burnout dimensions.

In chapter 3, the study is outlined, with whose data the hypotheses are tested. The results of the analyses are summarized and discussed.

41(3), pp. 420-432. URL: [https://www.zora.uzh.ch/id/eprint/116236/1/Allemand, Schaffhuser, & Martin_PSPB_accepted.pdf](https://www.zora.uzh.ch/id/eprint/116236/1/Allemand_Schaffhuser_Martin_PSPB_accepted.pdf). p. 17. Last retrieved: 25.05.2020.

⁴²¹ Bakker, A. B.; Van der Zee, K. I.; Lewig, K. A. & Dollard, M. F. (2006): The Relationship between the Big-Five Personality Factors and Burnout: A Study among Volunteer Counselors. *The Journal of Social Psychology*, 146(1), pp. 42.

⁴²² Zellars, K. L., Perrewé, P. L., & Hochwarter, W. A. (2000): loc. cit., pp. 1585-1590.

⁴²³ Deary, I. J.; Blenkin, H.; Agius, R. M.; Endler, N. S.; Zealley, H. & Wood, R. (1996): Models of Job-related Stress and personal Achievement among Consultant Doctors. *British Journal of Psychology*, 87(1), pp. 3 & 26-28.

⁴²⁴ Schaufeli, W. B. & Bakker, A. B. (2004): Job Demands, Job Resources, and their Relationship with Burnout and Engagement: A Multi-Sample Study. *Journal of Organizational Behavior*, 25, p. 295.

⁴²⁵ Schaufeli, W. B.; Salanova, M.; Gonzalez-Roma, V. & Bakker, A. (2002): The Measurement of Engagement and Burnout: A two Sample Confirmatory Factor analytic Approach. *Journal of Happiness Studies*, 3, pp. 71-92.

2.8. Summary of the second Chapter

The previous chapter was intended to describe the Conceptual Framework, the scientific relevance, research gaps and the presentation of the research model as well as the formulation of the hypotheses. At the beginning of the chapter, the phenomenon of „burnout“ as defined by Freudenberger was discussed. Next, a conceptual approach was made, whereby, in addition to the history of the term, various definitions and connections between burnout, stress and mental health were presented. In this context, it could be concluded that Burnout is not a fashionable disease, but can be regarded as a serious diagnosis for the sick person, but also for organizations.

Subsequently, the positive and negative effects of various network characteristics and social support on burnout were examined. For the sake of clarity, a more precise distinction was made between burnout and the concepts of mental health and stress. In the next paragraphs, it became clear that the term „social network“ is initially only a metaphor for the totality of social relationships between a defined set of people, roles or organizations, i.e. the fact that people are socially linked to others. The network perspective, however, created a connection between the consideration of the primary and secondary social environment of the employees and broader structures, in order to delineate the conceptual framework of the dissertation. Specifically, the possible influences of the perceived quality of primary and secondary environment support-networks (family, friends and colleagues) on the relationship between perceived social support and burnout were addressed. Likewise, personality traits of employees were presented as possible influences on this relationship.

The results from the qualitative study, which forms the ending of the second chapter, provide evidence on the influence of social support from supervisors on employee burnout and which support networks as a resource play a role with the resulting burnout symptoms. It is suggested furtheron that the focus of social support as a discipline of health-oriented leadership in the context of organizational health management should be on the workplace, as this is of great importance for reducing the risk of burnout. In order to prevent burnout, it is time that a higher priority is given to human values at work. Only if the supervisor responds appropriately to the individual personal limits, employees experience their job as a positive challenge and enjoy their daily work. This positive attitude to the job is a basic prerequisite for a high-performing and motivated employees, whose commitment contributes to the productivity of the organization. Both the health and financial consequences of burnout are too high to be ignored or considered insignificant. Supervisors should perceive stress in the workplace as an indication of a need to transform the work environment to prevent burnout symptoms. Supervisors are called upon to help give greater consideration to the human needs of their employees, thus ensuring the necessary identification with individual work tasks. Supervisors can act as a role model for their employees in dealing with problems and stresses in the workplace. They are able to strengthen the cooperation of the subordinates as well as their self-confidence in order to be able to

successfully achieve a common goal. Employees can only perform the tasks assigned to them within the scope of the work design options given to them.

With regard to the influence of support networks on the risk of burnout, the qualitative study showed that subjects seem to have a lower risk with close confidants from collegial support networks, as there is a clear expectation of their reactions due to the familiarity and understanding within the work context and the organizational and leadership culture. Networks are still not sufficiently understood as social capital and promoted as a support structure by supervisors. Network engagement is still not sufficiently perceived, rewarded and positively reinforced as a professional competence of employees. Health promotion in organizations should therefore also create the subjective and social conditions for self-determined workplace design and the opportunities for anchoring in organizational networks for communication, mutual assistance and social support. Promoting personal network engagement, as already mentioned can be a tool for an effective health- and support oriented leadership in the framework of an organizational health management. In a close context, an internal relationship management could be effective as part of the leadership work that could deal with working on the interpersonal issues of personal networking, communication, health related issues, conflict resolution, moderation, feedback or coaching.

3. The Impact of Support-Network Quality and Personality Traits on the Burnout promoting Effect of poor Supervisor Support

After the previous two chapters have prepared the theoretical foundations for the investigation from organizational and system-theoretical points of view, and after the hypotheses to be investigated have been formulated and the necessary operationalization of the constructs to be measured has been carried out, the last chapter will first present the conduction of a preliminary quantitative investigation as the second part of the triangulation. This is followed by a discussion and presentation of the results. In a third step of the triangulation, the quantitative main investigation is carried out. After a description of the data basis and data collection, the hypotheses will be checked. Finally, the results of the investigation are analyzed and discussed.

3.1. Tools for preliminary and main Research

The test materials described below are used in the investigation. The individual parts of the questionnaire package can be found in the appendix.

Survey of Perceived Supervisor Support - SPSS (Kottke & Sharafinski, 1988)⁴²⁶

To measure Perceived Supervisor Support, the SPSS scale of KOTTKE & SHARAFINSKI has been used. The SPSS scale is based on the Perceived Organizational Support Survey by EISENBERGER, HUNTINGTON, HUTCHINSON & SOWA⁴²⁷ - with one difference - all items refer to the supervisor, not to the organization as a global entity. Given that the definitions of Perceived Organizational Support and Perceived Supervisor Support are practically identical in nature, their measurements have been adapted to accommodate these similarities. The SPSS consists of 16 items with a 7-point Likert scale anchored from “strongly disagree (1) to “strongly agree” (7). Example items include: “My supervisor really cares about my well-being.” “My supervisor is willing to help me, when I need a special favour.” “My supervisor tries to make my job as interesting as possible.” The items “If my supervisor could hire someone to replace me at a lower salary, he/she would do so.” and “If given the opportunity, my supervisor would take advantage of me.” must be reversed during summation of the total values. Higher scores indicate that participants perceived their supervisors to be more supportive. Cronbach's alpha in the present study was measured at .944.

⁴²⁶ Kottke, J. L., & Sharafinski, C. E. (1988): Measuring Perceived Supervisory and Organizational Support. *Educational and Psychological Measurement*, 48(4), pp. 1075-1079.

⁴²⁷ Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986): Perceived organizational Support. *Journal of Applied Psychology*, 71, pp. 500-507.

Maslach Burnout Inventory - MBI-D (Büssing & Perrar, 1992)⁴²⁸

The Maslach Burnout Inventory by MASLACH & JACKSON has been used as a diagnostic tool for the detection of burnout.⁴²⁹ The questionnaire is regarded as the most widely used survey instrument in empirical studies of the burnout phenomenon. For this research, the German version of the Maslach Burnout Inventory (MBI-D) according to BÜSSING & PERRAR has been chosen. The MBI-D closely follows Maslach & Jackson's item content and scaling and captures the components (according to the original MBI construct) “emotional exhaustion”, “depersonalization” and “personal accomplishment”. The MBI-D consists of 21 items on a six-step Likert scale with possible answers: ”nie” (never), “sehr selten” (very rare), “eher selten” (rather rare), “manchmal” (sometimes), “eher oft”(rather often) and “sehr oft” (very often). MASLACH & JACKSON recommend the separate consideration of the three subscales. The values are calculated for each of the three scales by summation.

Important to notice is, that the scale of personal accomplishment has to be calculated vice versa. In this study, the scale has been renamed in “reduced personal accomplishment” to ease the scoring and interpretation of the findings. Higher reduced personal accomplishment scores refer to lower feelings of competence and successful achievement, whereas scoring high on this subscale indicates a higher attitude of inefficacy and reduced motivation.

Scoring higher on the subscale emotional exhaustion indicates greater feelings of fatigue and being drained; a higher score on the subscale depersonalization denotes a greater tendency toward cynical, callous and uncaring attitudes against e. g. colleagues; The reliability was estimated for the subscale emotional exhaustion at .823, for the subscale depersonalization .811 and for the subscale reduced personal accomplishment .902.

Evaluation of Social Systems Scale – EVOS (Schweitzer, Aguilar-Raab & Hunger, 2014)⁴³⁰

The EVOS-scale can be used to assess of relationship quality and collective efficacy in multi-person systems. The EVOS has two subscales, consisting of four and five items. There is also a final consensus item. Example of subscale “quality of relationship”: „For me, the way we talk to each other, is...“. Examples of subscale “collective efficacy”: “For me, the way we decide what needs to be done, is...”. Members of the social system answer the questionnaire with help of a 4-point rating scale. The format is ranging from “very poor” (0) to “very good” (3). The answers

⁴²⁸ Büssing, A., & Perrar, K.-M. (1992): Die Messung von Burnout. Untersuchung einer deutschen Fassung des Maslach Burnout Inventory (MBI-D). *Diagnostica*, 38(4), pp. 328-353.

⁴²⁹ Maslach, C.; Jackson, S. E. & Leiter, M. P. (1996-2018): Maslach Burnout Inventory Manual (Fourth Edition). Menlo Park: Mind Garden, Inc.

⁴³⁰ Schweitzer, J.; Aguilar-Raab, C. & Hunger, C. (2014): Systemveränderungen messbar machen: EVOS und EXIS als neuartige „Systemfragebögen“. *Kontext*, 45(4). Göttingen: Vandenhoeck & Ruprecht, pp. 416-429. See also: Aguilar-Raab, C.; Mühlhan, L.; Schweitzer-Rothers, J. (2014): EVOS - Evaluation of Social Systems. In: Kemper, C.; Zenger, M. & Brähler, E. (Ed.), *Handbuch Kurzskalen psychologischer Merkmale*. Berlin: Medizinisch-Wissenschaftliche Verlagsgesellschaft, pp. 72-75.

of the consensus item „I think we will give similar answers to these questions” range from “strongly disagree” to “strongly agree”. The consensus item is not an integral part of the scale and may be left out (as in this study). In this study, it is looked at the two dimensions of EVOS separately. Both scales in this study represent the quality of each support network. Cronbach's alphas for the subscales in the present study were measured at .811 for quality of relationship, and .829 for collective efficacy.

10-Item Big-Five Inventory - BFI-10 (Rammstedt, B.; Christoph, J.; Kemper, M.; Klein, C.; Beierlein, C. & Kovaleva, A., 2013)⁴³¹

The Five-Factor-Model of personality (Big-Five-Model) is currently the most widely used model for describing the overall personality. The model contains the five abstract dimensions (also: factors) *extraversion*, *agreeableness*, *conscientiousness*, *neuroticism* and *openness*.⁴³² These factors have already been described in detail in the hypotheses paragraph.

The model was developed on the basis of the so-called lexical approach. This assumes that there is also a representation in our language for personality traits that are particularly important for the way people interact with each other. Within the framework of this approach and its application, the five factors have emerged as central dimensions for describing human personality.⁴³³ Since the five independent dimensions encompass a large number of characteristics of the human personality and thus cover them very „broadly“, GOLDBERG has called them „big“.⁴³⁴

The BFI-10 consists of 10 items, two for each dimension of personality. Neuroticism is covered by items 4 and 9, extraversion by items 1 and 6, openness by items 5 and 10, tolerance by items 2 and 7 and conscientiousness by items 3 and 8. Each of the dimensions is covered by one positive and one negative item. Items 1, 3, 4, 5 and 7 are negatively poled. A five-level rating scale from “does not apply at all” (1) to “fully applies” (5) is available for the interviewee's answers.⁴³⁵

⁴³¹ Rammstedt, B.; Christoph, J.; Kemper, M.; Klein, C.; Beierlein, C. & Kovaleva, A. (2013): Eine kurze Skala zur Messung der fünf Dimensionen der Persönlichkeit: Big-Five-Inventory-10 (BFI-10), Working Papers, 2012/23. Mannheim: GESIS - Leibniz-Institut für Sozialwissenschaften.

⁴³² Ostendorf, F. & Angleitner, A. (2004): NEO-Persönlichkeitsinventar nach Costa und McCrae, revidierte Fassung. Göttingen: Hogrefe.

⁴³³ Rammstedt, B.; Christoph, J.; Kemper, M.; Klein, C.; Beierlein, C. & Kovaleva, A. (2013): loc. cit., p. 7.

⁴³⁴ Goldberg, L. R. (1981): Language and individual Differences: The Search for Universals in Personality Lexicons. In: L. Wheeler (Ed.), Review of Personality and social Psychology. Beverly Hills: Sage, p. 159.

⁴³⁵ Rammstedt, B.; Christoph, J.; Kemper, M.; Klein, C.; Beierlein, C. & Kovaleva, A. (2013): loc. cit., p. 7.

36-Item short Form Survey – SF-36 (Hays, Sherbourne & Mazel, 1993)⁴³⁶

For the pre-research in the next paragraph, the RAND⁴³⁷ SF-36 (v.1.0) has been used, which is a general health questionnaire that consists of 36 questions. It allows statements about the individual's state of health by means of 8 different dimensions. It makes statements about: [1] general health perceptions - 5 questions, [2] physical functioning - 10 questions, [3] role limitations due to physical health problems - 4 questions, [4] bodily pain - 2 questions, [5] energy/fatigue - 4 questions, [6] emotional well-being - 5 questions, [7] role limitations due to personal or emotional problems - 3 questions, [8] social functioning - 2 questions. For the evaluation of the SF-36 Questionnaire v1.0, all answers are first recoded into predetermined points using a recoding table. The average score of all questions of the respective health dimension is then calculated so that 8 average scores are obtained for the 8 dimensions. These 8 scores describe the patient's state of health in their respective dimensions, which can be assessed using comparison tables. The possible score ranges from 0 to 100 points. 0 points represent the greatest possible restriction of health, while 100 points represent the absence of health restrictions.⁴³⁸ In this study the internal consistency (Cronbach's Alpha) for the scale physical functioning was .831, the role limitations due to physical health problems .814, the scale bodily pain .843, the scale general health perceptions .804, the scale energy/fatigue .817, the scale social functioning .867, the scale role limitations due to personal or emotional problems .910 and the scale mental well-being .881.

3.2.Pre-Research: The Role of Personal Support Network Quality on the Relationship between perceived Supervisor Support and physical & mental Health Outcomes

The preliminary study, as the second part of the triangulation, served to specify the rough idea of the dissertation project. The outcome variables were kept general. In this case it was important to show the practical and scientific relevance by first quantitative results. Above all, however, the aim was to produce initial results that would answer the fundamental questions:

- [1] Is there a buffer function between the quality of personal support networks and the relationship between perceived supervisor support and mental & physical health of employees?
- [2] Which personal support networks have the greater positive impact on employee health.

⁴³⁶ Hays, R. D.; Sherbourne, C. D. & Mazel, R. M. (1993): The RAND 36-Item Health Survey 1.0. Health Economics. Hoboken: Wiley, pp. 223-226.

⁴³⁷ The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest.

⁴³⁸ Hays, R. D.; Sherbourne, C. D. & Mazel, R. M. (1993): The RAND 36-Item Health Survey 1.0. Health Economics. Hoboken: Wiley. RAND (2020): 36-Item short Form Survey (SF-36). URL: https://www.rand.org/health-care/surveys_tools/mos/36-Item-short-form.html. Last accessed: 08.04.2020.

During the study, it was deliberately ensured that the outcome-parameters were kept as general as possible in order to achieve the “safest” results.

The following hypotheses were postulated:

[1] *There are significant correlations between Perceived Supervisor Support and the SF-36 (self-rated physical and mental health dimensions).*

The personal support-networks [2] “colleagues”, [3] “family and [4] “friends” will moderate this relationship.

[5] *The health-promoting effect of support networks from the primary environment (family & friends) is rated higher by the respondents than that of support networks in the secondary environment (colleagues) due to their emotional proximity of the network members.*

A cross-sectional survey design has been used to determine the desired research results. The data has been collected online on XING-Network⁴³⁹. The online survey has been conducted via the platform SoScisurvey.⁴⁴⁰ The participants received no incentives. The sample comprises of managers in middle management (N=132) from different German automotive suppliers. In the examination, the Survey of Perceived Supervisor Support (SPSS), the Short Form Health Survey (SF-36) and the Evaluation of Social Systems Scale (EVOS) has been used. Totaling 132 datasets of participants were available for the analysis. The age of the participants ranges from 20 to 59 years (M = 37.12, SD = 13.34). 67 participants (50.76%) are male and 65 females (49,24%). Table 2 presents the results from the correlation analysis between perceived supervisor support and the eight SF-36 health dimensions.

Table 2

Results of the Pearson Correlation Analysis between “perceived Supervisor Support” and the eight SF-36 Health-Dimensions

	Perceived Supervisor Support
Physical Functioning	.012
Bodily Pain	-.023
Role Limitations due to physical Health Problems	.034*
Role Limitations due to personal or emotional Problems	-.234**
Emotional Well-Being	.312**

⁴³⁹ <https://www.xing.com/>

⁴⁴⁰ <https://www.soscisurvey.de/>

Social Functioning	.101
Energy/Fatigue	.344**
General Health Perceptions	.074*

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Source: Author's construction

Since the correlation analysis shows no significant interactions worth mentioning in all SF-36 physical and mental health dimensions and perceived supervisor support, the first hypothesis is rejected. Accordingly, no correlation could be measured between the individual health dimensions of the SF-36 questionnaire (physical functioning, bodily pain, role limitations due to physical health problems, social functioning and general health perceptions) and perceived supervisor support. Significant correlations were found in the factors “role limitations due to personal or emotional problems”, “emotional well-being” and “energy/fatigue.”

Table 3

Results of the Pearson Correlation between EVOS-dimensions „Quality of Relationship” and „Collective Efficacy” (=Quality of Support-Networks) and the eight SF-36 Health-Dimensions

	Quality of Relationship “Colleagues”	Collective Efficacy “Colleagues”	Quality of Relationship “Family”	Collective Efficacy “Family”	Quality of Relationship “Friends”	Collective Efficacy “Friends”
Physical Functioning	.058	-.012	.056	.034	.011	.022
Bodily Pain	.011	.053*	-.013	.110*	-.027	.080
Role Limitations due to physical Health Problems	-.045	.045	-.049	.091*	.015	-.024
Role Limitations due to personal or emotional Problems	-.310*	-.189*	-.216*	-.272**	-.124*	-.156*
Emotional Well-Being	.332**	.328**	.220*	.189**	.199**	.189*
Social Functioning	-.027	.043	.102*	.067	-.021	.043
Energy/Fatigue	.324**	.302**	.156**	.201**	-.057	.110
General Health Perceptions	.121*	.081*	-.021	.114	.037	-.019

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Source: Author's construction

Table 3 shows the results of the Pearson correlation between EVOS dimensions “quality of relationship” and “collective efficacy” and the eight SF-36 health dimensions for all participants. The hypothesis that the health-promoting effect of support networks from the primary environment can be rated higher than that of support networks in the secondary environment due to their emotional proximity to the network members was rejected. There are no significant correlations between SF-36 dimensions and the support networks “friends” and “family”. There are only significant correlations with the support network “colleagues” from the secondary environment.

Next, a linear regression analysis was calculated for the three significant dimensions of self-rated health in Table 2 and “perceived supervisor support” as the constant.

Table 4

Results of the Regression Analysis (Model Summary) between the three significant Dimensions of self-rated Health (SF-36) in Table 1 and „Perceived Supervisor Support” (Constant)

	R	R ²	Adj. R	Std. Error of the Estimate
Role Limitations due to personal or emotional problems	.234 ^a	.055	.051	1.178
Emotional Well-Being	.312 ^a	.097	.092	1.245
Energy/Fatigue	.344 ^a	.118	.112	1.341

a. Predictors: (Constant) Perceived Supervisor Support

Source: Author's construction

According to COHENS classification⁴⁴¹, the determination coefficients “emotional well-being” and energy/fatigue” correspond to a medium effect. The determination coefficient “role limitations due to personal or emotional problems” corresponds to a weak effect.

A separate linear regression analysis was calculated for the three significant dimensions of self-rated health in Table 4 and the EVOS Subscales “quality of relationship” and “collective efficacy” for the three support-networks “colleagues”, “family” and “friends”. For reasons of space and clarity, Table 5 shows only the determination coefficients R² in the form of a matrix.

⁴⁴¹ Cohen, J. (1988): Statistical Power Analysis for the Behavioral Sciences. New York: Erlbaum. According to the author, there is a strong effect at R² ≥ .25, a medium effect at R² ≥ .09 and a weak effect at R² ≥ .01.

Table 5

Results of the linear Regression Analysis for the three significant Dimensions of self-rated Health (shown in Table 2) and the EVOS-Subscales „Quality of Relationship” and „Collective Efficacy” for the three Support-Networks „Colleagues”, „Family” and „Friends” - R²-Values

Predictors Outcome	Quality of Relationship “Colleagues”	Collective Efficacy “Colleagues”	Quality of Relationship “Family”	Collective Efficacy “Family”	Quality of Relationship “Friends”	Collective Efficacy “Friends”
Role Limitations due to personal or emotional Problems	.096	.036	.047	.074	.015	.024
Emotional Well- Being	.110	.108	.048	.035	.040	.036
Energy/Fatigue	.105	.091	.024	.040	.003	.012

Source: Author's construction

In the regression analysis (Table 4), a medium-strong effect was determined for the support network “colleagues” in its two EVOS dimensions “quality of relationship” and “collective efficacy” for the outcome variables “emotional well-being” and “energy/fatigue”. The same applies to the EVOS dimension “quality of relationship” for the outcome variable “role limitations due to personal or emotional problems”. For the EVOS dimensions of the other two support networks “family” and “friends”, only a weak effect could be determined for the outcome variables. According to ANOVA, the regression of the models makes a statistically significant prediction (Sig. $.000 \leq .050$). Finally, surprisingly no significant effects of the SF-36 dimensions were associated with gender. Emotional well-being was positively associated with job tenure ($\beta = .192$; $p < .05$).

The prerequisite for the moderator analysis, the normal distribution of the dependent variable and the moderator variable, is given. The previous correlation analysis in Table 2 shows, that perceived supervisor support has a significant influence in the SF-36 factors “role limitations due to personal or emotional problems”, “emotional well-being” and “energy/fatigue”.

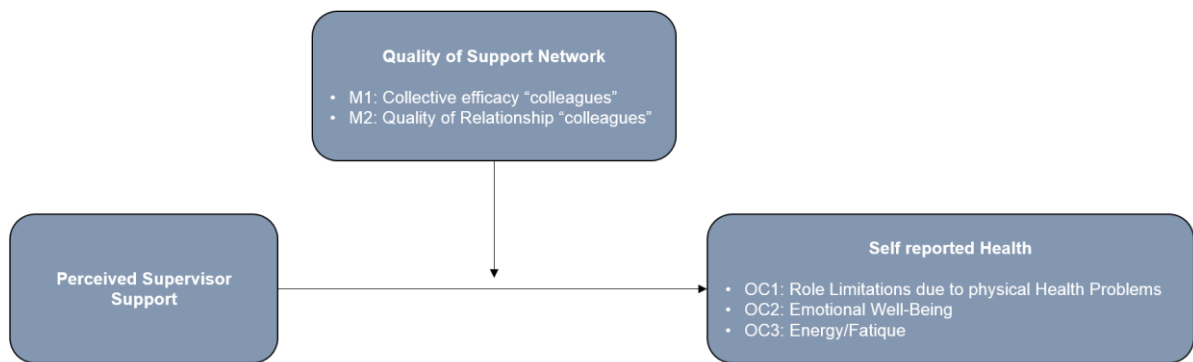


Fig. 8: Scheme of the Moderator Analysis. Support-Networks „Quality of Relationship” (Colleagues) and „collective Efficacy” (Colleagues) set as Moderators between „perceived Supervisor Support” and the SF-36’s significant three Dimensions (shown in Table 2). M=Moderator Variable, OC=Outcome Variable

Source: Author’s construction.

A moderator analysis should check the role of the “quality support networks” consisting of “quality of relationship colleagues” and “collective efficacy colleagues” as possible moderators between “perceived supervisor support” and SF-36s’ significant three dimensions (Table 2). The reason for choosing results from support network “colleagues” is the $R^2 \geq .09$ according to Cohens (1988) classification. All weak predictors have been dropped.

Table 6

Results of the Moderator Analysis. Support-Networks „Quality of Relationship „Colleagues” and „Collective Efficacy Colleagues” set as Moderators between „Perceived Supervisor Support” and SF-36’s significant three Dimensions

	Quality of Relationship “Colleagues”	Collective Efficacy “Colleagues”
Relationship: Perceived Supervisor Support on Role Limitations due to personal or emotional Problems	-,551/1,045 p<,037	-,341/1,645 p<,057
Relationship: Perceived Supervisor Support on emotional Well-Being	-1.359/-,459 p<,001	-1.211/-,261 p<,001
Relationship: Perceived Supervisor Support on Energy/Fatigue	-1,113/-,879 p<,001	-1.659/-,255 p<,001

Source: Author’s construction

This indirect effect was tested for significance using the bootstrapping procedures outlined by HAYES. Bootstrapping uses random sampling with replacement to increase accuracy in sampling estimates. The PROCESS macro, model 4, was used to test the model. This analysis used 5,000 bootstrap samples created from the original sample to estimate bias-corrected standard errors and 95% confidence intervals for the indirect effect of perceived supervisor support on health

outcomes via support networks (Table 6). As described by HAYES indirect effects are considered significant at $p < .050$ if zero is not included in the 95% confidence interval.⁴⁴² The results in Table 6 show a moderating effect of the EVOS dimensions “quality of relationship” and “collective efficacy” of the support network “colleagues” on both SF-36 dimensions “emotional well-being” and “energy/fatigue”. Hypotheses 3 and 4 are rejected.

Preliminary Conclusion from Pre-Research

The present study aimed at finding out in a first step, whether there are significant correlations between “perceived supervisor support” and “self-rated psychological and physical health”. The hypothesis that all eight dimensions of the SF-36 questionnaire correlate significantly with “perceived supervisor support” had to be rejected. For better clarity and understanding, these eight subcategories could have been combined into a physical (PCS = Physical Component Summary) and a mental (MCS = Mental Component Summary) summation scale. However, this approach was deliberately omitted, since from the author's point of view “energy/fatigue” and “general health perceptions” as well as “social functioning” cannot be assigned one hundred percent to both sum scales, and thus there would be a danger of generating fewer meaningful mixed categories. As the results show, this distinction was rightly made, since the individual correlations “role limitations due to personal or emotional problems”, “emotional well-being” and “energy/fatigue” with the dependent variable “perceived supervisor support” are stronger than the respective correlations with the two mixed categories and thus details could be better worked out.

Following the ICD classification system⁴⁴³ and focusing on the research results for the diagnosis of burnout syndrome since the mid-1970s, then the most important validated test procedures show which symptoms are used to operationalize the burnout syndrome today. These symptoms have intersections with the three previously mentioned individual dimensions of SF-36. MASLACH describes the burnout syndrome based on criteria, such as “emotional exhaustion” “depersonalization” and “professional efficacy”⁴⁴⁴. Emotional exhaustion results from excessive emotional or physical effort (tension). It is the stress dimension of burnout syndrome. Those affected feel weak, powerless, tired and dull. They suffer from weakness of drive and are easily irritable.⁴⁴⁵ A study by FRADELOS, TZITZIKOS GIANNOULI ARGYROS, VASSILOPOULOU & THEOFILOU confirms these connections: The “emotional exhaustion” subscale of the Maslach Burnout Inventory (MBI) appears to be strongly and negatively correlated with the “energy/fatigue” ($R = -0.658$, $p = 0.000$) and “emotional well-being” ($R = -0.675$,

⁴⁴² Hayes, A. F. (2018): Partial, conditional, and moderated mediation: Quantification, Inference, and Interpretation. *Communication Monographs*, 85. London: Taylor & Francis, pp. 4-40.

⁴⁴³ The ICD is the global health information standard for mortality and morbidity statistics.

⁴⁴⁴ The exact designation in this dissertation is „reduced personal accomplishment“. The factor is calculated reversely.

⁴⁴⁵ Maslach, C. (1982): *Burnout: The Cost of Caring*. Englewood Cliffs: Prentice Hall.

$p=0.000$).⁴⁴⁶ With the reaction of the depersonalization, the concerned individual establishes a distance between himself and his clients (patients, pupils, persons in need of care, customers, etc.). This manifests itself in an increasing indifference and sometimes cynical attitude towards them. The work becomes an impersonal routine. Again, FRADELLOS, TZITZIKOS GIANNOULI ARGYROS, VASSILOPOULOU & THEOFILOU found a correlation between the subscale of the MBI “depersonalization” with “emotional well-being” ($R=-0.543$, $p=0.000$) and “energy/fatigue” ($R= -0.462$, $p=0.000$).⁴⁴⁷ It becomes clear that the SF-36 dimensions “emotional well-being” and “energy/fatigue” reflect this burnout (stress) dimension (partially) and are also predicted by “perceived supervisor support” (Table 3). This makes it clear how strongly professional life is shaped by the demands employees are faced with on a daily basis and which are of importance to them - demands made on employees from outside or which they make on themselves. As long as employees judge their external and personal resources to be sufficient for meeting these requirements, they perceive them positively as challenges. If they judge their resources (including the support of supervisors) to be insufficient to cope satisfactorily with the requirements, stress arises. In this study, everything indicates that mental health was initially affected by stress caused by poor support from the supervisor, which could lead to burnout symptoms. “role limitations due to personal or emotional problems” is another value that correlates significantly with “perceived supervisor support” (Table 2). This factor of SF-36 indicates the extent to which emotional problems affect work or other daily activities. It is only a weakly correlating value. While the regression analysis shows, that “perceived supervisor support” is a significant predictor of “role limitations due to personal or emotional problems”, the strength of the regression coefficient is weak ($R^2=.055$, $p=0.01$). The results underline the importance of social support as a relief and protection factor with direct effect (main-effect hypothesis) on the stress perception of employees. Basically, this finding is not a novelty, because assumptions on the effect of social support are typically closely linked to models of stress development and stress management. The evaluation of a situation as acceptable, irrelevant or potentially negative depends on the individually available resistance resources, which include the available social resources. In addition, the mobilization of social support is also part of the adaptive stress management strategies.⁴⁴⁸

In a further step it was examined, whether the quality of social support networks - both in personal spheres (family, relatives & friends) and in organizational spheres (colleagues) - influences the relationship between “perceived supervisor support” and the SF-36 dimensions

⁴⁴⁶ Fradelos, E.; Tzitzikos, G.; Giannouli, V.; Argyrou, P.; Vassilopoulou, C. & Theofilou, P. (2014): Assessment of Burn-Out and Quality of Life in Nursing Professionals: The Contribution of Perceived Social Support. *Progress in Health Sciences*, 4(1), p.107.

⁴⁴⁷ Fradelos, E.; Tzitzikos, G.; Giannouli, V.; Argyrou, P.; Vassilopoulou, C. & Theofilou, P. (2014): *loc. cit.*, p. 107.

⁴⁴⁸ Hager, F. W. & Seibt, T. (2018): Team Relationship Quality - A Moderator between Supervisor Support and perceived Stress. *Proceedings of the 10th CER Comparative Research Conference – International Scientific Conference for PhD-Students of EU-Countries*, 10(2), London: Sciemcee Publishing, p. 15.

“emotional well-being”, “energy/fatigue” and “role limitations due to personal or emotional problems” At this point, it is interesting to note that the EVOS subscales Quality of Relationship “colleagues” and collective efficacy “colleagues” has the strongest and significant correlations and proved to be significant predictors, with the SF-36 dimensions “emotional well-being” and “energy/fatigue”. This suggests that preferably colleagues have an influence on the mental health of an employee. In this context, the emotional closeness to the respective supporter⁴⁴⁹ or to the members of the support network may play a less important role than the same understanding of the supporter for the deficient work situation.

The results of the moderator analysis show that poor supervisor support can be better handled, to some extent, by employees, if they develop or maintain good quality work relationships and a sense of cohesion. A community that holds together and maintains a trusting team climate, thus can (partially) compensate this leader deficit. The same is for the team efficiency: Effective teams are convinced that they will succeed. This, in turn, motivates them to work harder. Small successes increase self-confidence and motivate the team to improve their technical and interpersonal skills through training. The higher these skills become, the greater the self-confidence and the ability to confirm the trust. If this condition is prevalent in the group, the team is able to compensate for poor supervisor support (for a limited time). For executives, therefore, team efficacy should be seen as an important factor that has to be changed for the better.⁴⁵⁰

3.2 Composition of the Population and descriptive Statistics of the main Study

The target group of the main survey can be defined as follows: Office-based managers (middle management) from the producing automotive industry all over Germany. The focus is on medium-sized companies. Persons whose activities include more than 20% travel (field service), part-time employees and self-employed persons were not considered.

With regard to the maximum population, it is difficult to make an exact statement even through extensive research, as the description of the sample is very specific. However, an exact value can be found for the total number of employees in the German automotive industry. Based on the most recent value from 2018, it can be seen that 833,937 people work for automobile manufacturers and suppliers throughout Germany.⁴⁵¹ This number is a reference value from which the required minimum sample size for finite populations is calculated using the following formula:

⁴⁴⁹ It cannot be assumed that every collegial relationship is a close friendship at the same time.

⁴⁵⁰ Hager, F. W. & Seibt, T. (2018): loc. cit., p. 16

⁴⁵¹ The value was taken from the German online portal „Statista“, which provides access to data from market and opinion research institutions and from the business world. URL: <https://de.statista.com/statistik/daten/studie/30703/umfrage/beschaeftigtenzahl-in-der-automobilindustrie/>. Last accessed: 17.03.2020.

$$n \geq \frac{N}{1 + \frac{(N-1) \cdot \varepsilon^2}{z^2 \cdot P \cdot Q}}$$

whereby it applies that $Q = 1 - P$

With a confidence level of 95 % ($z = 1.96$), the mean value of the population 50 % ($P = 0.5$), an error range of 5 % ($\varepsilon = 0.05$) and the population size/total number $N = 833,937$, the required sample size is $n=384$. It should be noted that this is the required sample size in relation to all employees in the German automotive industry, an extremely precise value since aggregate statistics⁴⁵² have been included in the calculation.

The sample surveyed in this study consists of two sub-samples using different survey methods. Firstly, test persons were acquired via the XING network.⁴⁵³ This network was deliberately chosen because the majority of its members are resident in Germany. The sample was explicitly surveyed in Germany to avoid cultural differences. Secondly, the link to the questionnaire was distributed among persons from the author's professional social network with the request to answer it themselves and also to forward it to other potential participants in their own company or beyond. Again, only persons from Germany were interviewed. The survey was conducted anonymously. The respondents did not receive any reward. The persons addressed expressed their consent to participate in the survey by filling out the online questionnaire, to which an explanatory cover letter with contact address and telephone number for further inquiries was attached.

A total of 662 questionnaires were distributed or sent out online via the first access channel. The total response was $N = 256$ (38.67%). The second access method resulted in a total response of $N = 84$, whereby the number of respondents is unknown due to the corresponding distribution of the questionnaires (separate survey-link). It was necessary to exclude 2 individuals from the sample (0.59%) for error in the age indication, totaling 338 participants with data available for analysis. This sample size can be considered as very good when comparing the calculated minimum sample size in relation to the total number of all employees in the German automotive industry ($n=384$).

⁴⁵² Koch, A. & Blohm, M. (2015): Nonresponse Bias. Leibnitz Institut für Sozialwissenschaften (SDM Survey Guidelines), p. 4 & 6.

⁴⁵³ XING is a social network where members primarily manage their professional contacts. XING primarily offers a platform for business networks primarily in german-speaking countries, in contrast to globally oriented networks such as LinkedIn. URL: <http://www.xing.com>.

Table 7

Selected sociodemographic Characteristics of the Sample (N=338) of the main Research and their Distribution in Percent

	n	%
<i>Gender</i>		
male	229	67,8
female	109	32,2
<i>Age</i>		
<19	1	0,3
19-29	25	7,4
30-39	41	12,1
40-49	126	37,3
50-59	111	32,8
>60	34	10,1
<i>Marital Status</i>		
single	113	33,4
married/cohabiting	183	54,1
divorced/seperated	24	7,1
widowed	18	5,3
<i>Number of Children</i>		
0	81	24,0
1	165	48,8
≥2	92	27,2
<i>Gross-Income in €</i>		
<30.000	1	0,3
30.000-39.999	42	12,4
40.000-49.999	45	13,3
50.000-59.999	75	22,2
60.000-69.999	47	13,9
70.000-79.999	106	31,4
80.000-89.999	4	1,2
90.000-99.999	12	3,6
>100.000	6	1,8

Highest Education - ISCED-2011-Level⁴⁵⁴		
ISCED-97 Level 1 ^a - Without school-leaving Qualification, Basic Education, Elementary School.	0	0
ISCED-97 Level 2 – Secondary School, Secondary-modern School, Economics School.	69	20,7
ISCED-97 Level 3/4 – Technical College, Upper Secondary, Higher vocational School	117	35,0
ISCED-97 Level 5A - Polytechnic, University.	144	43,1
ISCED-97 Level 6 - Promotion, Habilitation.	4	1,2
Job Tenure in Years		
0-5	79	23,7
6-10	168	50,3
11-15	9	2,7
16-20	65	19,5
>20	13	3,9

a. ISCED-97 level 1 was formally included in the table.

Source: Author's construction

The sample shows higher proportion of men than women in automotive industry management. Of the 338 respondents in the sample, 67.8% are male and 32.2% female. The surplus of men among office staff in the whole of Germany cannot be determined in the unknown survey population. Nevertheless, reference can be made here to the data of the Federal Statistical Office of Germany, which states that the proportion of women in specialist positions in automotive industry in Germany in 2019 was 35.4%.⁴⁵⁵

It is not a value which reflects the population, but rather a mixed value which is part of employees in management functions. Nevertheless, this gives a rough indication of the socio-demographic characteristics of gender and allows a judgement to be made on the comparability of the sample (aggregate statistics).

On average, the employees are (M=45.2) years old (SD=6.4) at the time of the survey. The age range covered extends from 18 years to 62 years. Exactly half of the respondents (n=167) are in the two middle age groups (30 to 49 years), while those up to 29 years of age (n=26) account for only 7.9% and those over 50 (n=145) for 43.4%. According to Kolmogorov-Smirnov .000 and Shapiro-Wilk .000, there is clearly no distribution for the age of the interviewees, as the specified significance limit for this study falls short of $p < .050$.

⁴⁵⁴ The ISCED 97 level was used for the classification of the highest educational qualification, since an international understanding with regard to the classification of qualifications must be created. URL: <http://uis.unesco.org/en/topic/international-standard-classification-education-isced>. Last accessed: 17.06.2020.

⁴⁵⁵ Destatis (2019): Statistisches Jahrbuch 2019, Wiesbaden: Statistisches Bundesamt, p. 375.

Since the population and its composition cannot be determined or data on this cannot be researched, a broader focus must be placed on the working population. In the year 2017, employed persons in Germany were on average about 44 years old, which is about 4 years more than 20 years before. The average age of working women and men was almost identical in 2017. As the Federal Statistical Office (Destatis) further reports on the basis of current results from the microcensus, there were, however, considerable differences between self-employed persons and employees who are not part of the sample. There are also fluctuations in the individual occupational groups. In purchasing and sales, the German Federal Statistical Office gives a gender-neutral average age of 44.6 years.⁴⁵⁶ The sample can therefore also be assessed as comparable in terms of its age structure.

54.1% (n=183) of the respondents in the sample are married or living in a life partnership at the time of the survey, 33.4% (n=113) are single, divorced 7.1% (n=24) and widowed 5.3% (n=18). A comparison of the subjects' marital status with the German population shows clear similarities. According to the German Federal Statistical Office, 50.3% of the Germans are married/living together, 30.1% are single, 7.8% are widowed and 8.3% are divorced.⁴⁵⁷ With regard to marital status, the sample also provided plausible and comparable results.

Almost a quarter of the subjects in the sample have no children (24.0%; n=81). Compared with a relatively recent figure from the German Federal Statistical Office, which states that in 2018 29% of all German couples had no children, there is a slight deviation of 5%. Compared to the German population, managers in middle management in the automotive industry have children more often. Just under half (48.8%) of the respondents have exactly one child. Two or more children live in 27.2% of the test persons' families.

The average gross income of the test persons is on average (M=62,880) (SD=4,583) Euro per year, which corresponds to a monthly income of 5,240 Euro for 12 months without special payments. More than two thirds of the persons (67.4%) are in the income range of 50,000 Euro to 80,000 Euro. 6.6% of the interviewees earn more than 80,000 euros, about a quarter (26%) are in the lower range with an income of 50,000 euros or less. According to Kolmogorov-Smirnov .000 and Shapiro-Wilk .000, there is no normal distribution for the monthly income of the interviewees, as the specified significance limit for this study falls far short of $p < .050$.

The level of school education, or the highest school leaving certificate, which according to BOURDIEU can be described as the company's incorporated, objectified, and institutionalized

⁴⁵⁶ Destatis (2018): Pressemitteilung Nr. 448, November, 19. 2018. Durchschnittsalter von Erwerbstätigen nach ausgewählten Berufsgruppen. Ergebnis des Mikrozensus 2017. Wiesbaden: Statistisches Bundesamt. URL: https://www.destatis.de/DE/Presse/Pressemitteilungen/2018/11/PD18_448_122.html. Last accessed: 06.02.2020.

⁴⁵⁷ Destatis (2019): loc. cit., p. 60.

social and cultural capital,⁴⁵⁸ must be recorded as socially recognized, comparable and as a formal school leaving certificate. Since this dissertation is also intended to address a supra-regional audience, the UNESCO ISCED⁴⁵⁹ comparison system was used, which is able to classify different types of degrees into ordinary categories. The respective levels and their significance in the German school system can be seen in Table 6.

A large proportion of the respondents have completed the highest level of education at academic level (ISCED level 5A) (43.1%, N=144), 1.4% (N=4) also have a research qualification (ISCED level 6). 35% (N=117) have completed secondary education second stage (ISCED level 3) or post-secondary, non-tertiary education at the end of secondary education (ISCED level 4). Both levels or types of school in Table 2 are generally aimed at advancing to level 5A in Germany and are therefore considered equivalent in the study. 20.7% (N=69) have secondary education first stage.

In German Labor Law, job tenure is understood to be the uninterrupted period of an employment relationship concluded between employee and employer. It is also referred to as length of service or period of employment. The average job tenure of the test persons is (M=8.75) years (SD=7.43). Almost three quarters of the persons (74.0%, N=247) have been employed in their company for less than 10 years. 23.4% (N=78) of the interviewees have worked in their company for more than 15 years. Only 2.7% (N=9) work 10-15 years in their enterprise. According to Kolmogorov-Smirnov .000 and Shapiro-Wilk .000, there is no normal distribution for seniority of the interviewees, as the specified significance limit for this study falls short of $p < .050$.

3.3. Results of the Correlation-, Regression- and Moderator Analyses

In the following, the results from the correlation, regression and moderator analyses are presented. For the sake of simplicity, the presentation of the results is based on the individual tests of the hypotheses. These numbers can be taken from the corresponding research model (Fig. 7).

⁴⁵⁸ Bourdieu, P. (2006): The Forms of Capital. In: Teoksessa H., Lauder, P. Brown, J.-A. Dillabough & A. H. Halsey (Eds.). Education, Globalization and social Change, Oxford: Oxford University Press. pp. 115-118.

⁴⁵⁹ UNESCO's International Standard Classification of Education (ISCED) classifies and characterizes school types and school systems. It distinguishes between several levels and is also suitable for indicating the level of education (the highest level of education) in international comparison. This classification was chosen in order to be able to systematically classify and compare national and international school-leaving qualifications in the context of the analysis. It must be assumed that the respondents are non-Germans or Germans who acquired their highest school leaving certificate outside Germany.

Testing Hypothesis H1

The results from the correlation analysis between “perceived supervisor support” and the three burnout-dimensions “emotional exhaustion”, “depersonalization” und “reduced personal accomplishment” are presented in Table 8.

There was a significant correlation at the MBI dimension “emotional exhaustion” ($r = -.352, p < .01$) and “reduced personal accomplishment” ($r = -.322, p < .01$) found.

Table 8

Results of the Correlation Analysis between Perceived Supervisor Support and the three Burnout-Dimensions „Emotional Exhaustion”, „Depersonalization” and „Reduced personal Accomplishment”

MBI Burnout - Dimensions	Perceived Supervisor Support
Emotional Exhaustion	-.352**
Depersonalization	-.149
Reduced Personal Accomplishment	-.322**

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Source: Author's construction

There are no significant interactions at between all three burnout-dimensions and “perceived supervisor support” at the same time. Hence, the first hypothesis (H1) is rejected. Accordingly, no significant correlation could be measured between “depersonalization” and “perceived supervisor support”. Next, a linear regression analysis was calculated for the two significant dimensions of burnout Table 8 and “perceived supervisor support” as the constant.

Table 9

Results of the linear Regression Analysis calculated for the two significant Dimensions of Burnout “emotional Exhaustion” and “reduced personal Accomplishment” (shown in Table 8) and „perceived Supervisor Support” set as the Constant

	R	R ²	Adj. R	Std. Error of the Estimate
Emotional Exhaustion	.352 ^a	.124	.120	1.567
Reduced Personal Accomplishment	.321 ^a	.104	.099	1.398

a. Predictors: (Constant) Perceived Supervisor Support

Source: Author's construction

The determination coefficients “emotional exhaustion” and “reduced personal accomplishment” correspond to a medium effect.⁴⁶⁰ 12,4% of the variance of the “emotional exhaustion” and 10,4% of the variance of “reduced personal accomplishment” can be predicted from “perceived supervisor support”. According to ANOVA, the regression of the models makes a statistically significant prediction (Sig. .000≤.050).

Testing Hypothesis H2.2

Table 10 shows the results of the Pearson correlation between EVOS dimensions “quality of relationship” and “collective efficacy” and the three dimensions of burnout for all participants.

The hypothesis (H2.2) stating that burnout-preventing effects of personal support networks from the secondary environment can be rated higher than those of support networks in the primary environment was confirmed (quality of support network). The highest negative correlations have been found between the EVOS-dimension collective efficacy “colleagues” and the MBI-dimension “reduced personal accomplishment”.

Furthermore, there were correlations between the EVOS-dimension quality of support network “colleagues” and the MBI-dimension “emotional exhaustion”. There are only few and weak significant correlations with the support networks from the primary environment “friends” and “family”. Worth mentioning is also a medium strong negative correlation between quality of support network “friends” and the MBI-dimension “emotional exhaustion”.

Table 10

Results of the Pearson Correlation between EVOS-Dimensions „Quality of Relationship” and „Collective Efficacy” and the three MBI-Dimensions “emotional Exhaustion”, “Depersonalization” and “reduced personal Accomplishment”

	Quality of Relationship “Colleagues”	Collective Efficacy “Colleagues”	Quality of Relationship “Family”	Collective Efficacy “Family”	Quality of Relationship “Friends”	Collective Efficacy “Friends”
Emotional Exhaustion	-.366**	-.052	.026	.034	-.267*	.056
Depersonalization	-.091*	.014	-.063*	.090*	-.051	.076
Reduced Pers. Accomplishment	-.465**	-.453**	-.049	.091*	.035	-.124*

** Correlation is significant at the 0.01 level (2-tailed)

⁴⁶⁰ Cohen, J. (1988): Statistical Power Analysis for the Behavioral Sciences. New York: Erlbaum. According to the author, there is a strong effect at $R^2 \geq .25$, a medium effect at $R^2 \geq .09$ and a weak effect at $R^2 \geq .01$.

* Correlation is significant at the 0.05 level (2-tailed)

Source: Author's construction

A separate linear regression analysis was calculated for the two significant MBI-dimensions in Table 8 and the EVOS Subscales “quality of relationship” and “collective efficacy” for the three support-networks “colleagues”, “family” and “friends”. For reasons of space and clarity, Table 11 shows only the determination coefficients R^2 in the form of a matrix.

Table 11

Results (Determination Coefficients) of the linear Regression Analysis calculated for the two significant MBI-Dimensions (shown in Table 8) and the the three Support-Networks „Colleagues”, „Family” and „Friends” - R^2 -Values

Predictors Outcome	Quality of Support Network “Colleagues”	Collective Efficacy “Colleagues”	Quality of Support Network “Family”	Collective Efficacy “Family”	Quality of Support Network “Friends”	Collective Efficacy “Friends”
Emotional Exhaustion	.134	.003	.001	.034	.071	.003
Reduced Personal Accomplishment	.216	.205	.002	.008	.001	.015

Source: Author's construction

In the regression analysis (Table 11), a medium effect was determined for the support network “colleagues” in its EVOS dimension “quality of relationship” for the outcome variables “emotional exhaustion” and “reduced personal accomplishment”. 13,4% of the variance of the emotional exhaustion and 21,6% of the variance of reduced personal accomplishment can be predicted from Quality of Support Network “colleagues”. Simultaneously, a medium effect (7,1%) was determined for the support network “colleagues” in its EVOS dimension “collective efficacy” for the outcome variable “reduced personal accomplishment”.

According to ANOVA, the regression of the models makes a statistically significant prediction (Sig. $.000 \leq .050$).

Testing Hypotheses H2.1a-H2.1d

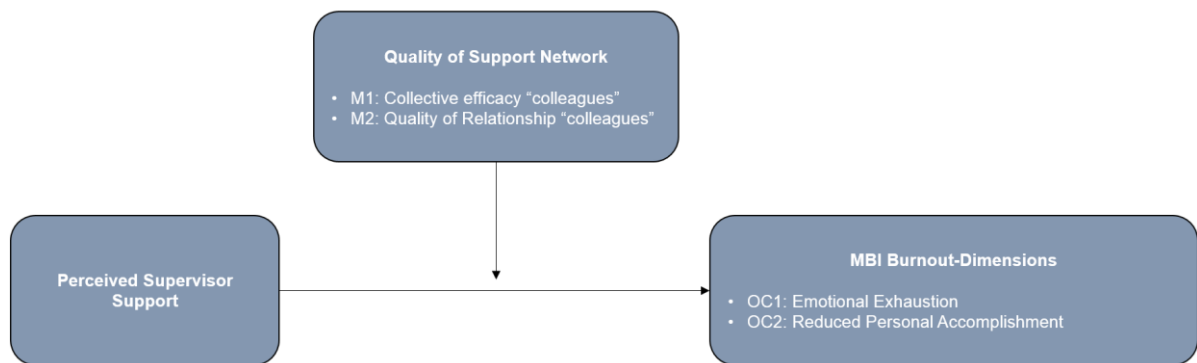


Fig. 9: Scheme of the Moderator Analysis. Support Networks „Quality of Relationship” (Colleagues) and „collective Efficacy” (Colleagues) set as Moderators between „perceived supervisor Support“ and MBIs significant two Dimensions (shown in Table 8). M=Moderator Variable, OC=Outcome Variable

Source: Author’s construction.

As in the pre-research already mentioned, the prerequisite for the moderator analysis, the normal distribution of the dependent variable and the moderator variable, which is given. The previous correlation analysis in Table 8 shows, that perceived supervisor support has a significant influence on the burnout dimensions “emotional exhaustion” and “reduced personal accomplishment”.

Table 12

Results of the Moderator Analysis. The EVOS-Dimensions „Quality of Relationship” of the Support-Network „Colleagues” set as Moderators between „Perceived Supervisor Support” and significant MBI-Dimensions „emotional Exhaustion” and „reduced personal Accomplishment”

	Quality of Relationship “Colleagues”	Collective Efficacy “Colleagues”
Relationship: Perceived Supervisor Support on Emotional Exhaustion	-,835/-1,256 p<,019	-
Relationship: Perceived Supervisor Support on Reduced Personal Accomplishment	-1.359/-,459 p<,001	-1.251/,342 p<,039

Source: Author’s construction

A moderator analysis should check the role of the Support Networks quality of relationship “colleagues” and collective efficacy “colleagues” as a possible moderator between “perceived supervisor support” and the MBI’s significant two dimensions (Table 8). The reason for choosing support network “colleagues” solely, is the lower limit of the interval $R^2 \geq .09$ for a moderately

strong correlation according to COHENS classification. All weak predictors have been dropped. Table 11 is showing the results.

As described by HAYES and already mentioned in the pre-research's moderator analysis, indirect effects are considered significant at $p < .05$ if zero is not included in the 95% confidence interval.⁴⁶¹ The results in Table 11 show a moderating effect of the EVOS dimensions "quality of relationship" of the support network "colleagues" on both MBI dimensions "emotional exhaustion" and "reduced personal accomplishment".

Therefore, Hypothesis 2.1a is rejected partly. A high-quality support network "colleagues" is able to buffer (moderate) the relationship between employee's "perceived supervisor support" and employee-burnout. However, the buffer function takes place via the quality dimension of the relationship exclusively, not via the dimension of "self-efficacy".

Hypotheses 2.1b and e 2.1c are rejected. The support networks "family" and "friends" are not able to buffer (moderate) the relationship between employee's "perceived supervisor support" and employee burnout. The values from the regression analysis (Table 10) were negligible a priori. $R^2 \geq .09$. They were dropped according to COHENS classification.

Therefore hypothesis 2.1d is also rejected, as there is no moderating support network of high quality from the private sphere⁴⁶² between employee's "perceived supervisor support" and employee burnout.

Testing Hypotheses H3.1a-H3.1e

The results from the correlation analysis between the Big 5 Dimensions and Perceived Supervisor Support are presented in Table 13.

A medium significant correlation was observed in the Big-Five dimension "neuroticism" and "extraversion". Hypothesis block 3.1 is assessed as follows: First, hypotheses 3.1a and 3.1b can be confirmed. "Neuroticism" has a significant negative effect on "perceived supervisor support" ($r = -.363, p < .01$).

Similarly, it can be confirmed that "extraversion" has a significant positive effect on "perceived supervisor support" ($r = .389, p < .01$). Although the Big-Five dimension "openness" is significant ($p < .05$), the strength of the correlation is only marginally positive ($r = .088$). Hypothesis H3.1c is rejected in this case.

The Big-Five dimensions "agreeableness" is not significantly related to "perceived supervisor support", the hypotheses 3.1d can therefore be confirmed. The personality trait

⁴⁶¹ Hayes, A. F. (2018): Partial, conditional, and moderated Mediation: Quantification, Inference, and Interpretation. *Communication Monographs*, 85. London: Taylor & Francis, pp. 4-40.

⁴⁶² Private sphere = friends and family.

“conscientiousness” is not significantly related to “perceived supervisor support”. Hypothesis 3.1e is therefore rejected.

Table 13

Results of the Correlation Analysis between the Big-Five Dimensions and „perceived Supervisor Support”

	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness
Perceived Supervisor Support	-.363**	.389**	.088*	.233	.114

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Source: Author’s construction

In a next step, two separate linear regression analyses were calculated for “perceived supervisor support” and the two significant Big-Five dimensions “neuroticism” and “extraversion” as constants. The dimension “openness” has been dropped due to its low correlation which is not worth to mention.

Table 14

Results of the linear Regression Analysis (Model Summary), calculated for „perceived Supervisor Support” and the two significant Big-5-Dimensions „Neuroticism” and „Extraversion” shown in Table

13

	Neuroticism	Extraversion
R	.363 ^a	.389 ^a
R ²	.132	.151
Adj. R	.128	.146
Std. Error of the Estimate	1.865	2.12

a. Predictors: (Constant) Perceived Supervisor Support

Source: Author’s construction

In the regression analysis (Table 14), according to COHEN, a medium effect was determined for the outcome variables “perceived supervisor support”. 13,2% of the variance of the “perceived supervisor support” can be predicted from “neuroticism”. Simultaneously, 14,6% of the variance of the “perceived supervisor support” can be predicted from “extraversion”. According to ANOVA, the regression of the models makes a statistically significant prediction (Sig. .000 ≤ .050).

Testing Hypotheses H3.2a-H3.2e

The evaluation material could partially confirm the hypothesis H3.2a. The personality dimension “neuroticism” is significantly related to the burnout complaints that affected the interviewed persons. This means that the more anxious and nervous the person is, the greater the limitations due to “emotional exhaustion” ($r = .421, p < .01$). The more the person thinks about the future and is affected by self-doubt, the more his or her personal performance is limited (reduced personal accomplishment) ($r = -.396, p < .01$). There is also a weak correlation between “neuroticism” and “depersonalization”, which means that the state of self-alienation increases accordingly with increasing neurotic personality traits ($r = .123, p < .05$).

Table 15

Results of the Correlation Analysis, between the Big-Five Personality Traits and the MBI-Dimensions

	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness
Emotional Exhaustion	.421**	.084	-.245*	-.164	.055
Depersonalization	.123*	.112	- .301**	-.089	-.131
Reduced Personal Accomplishment	.396**	-.077	.089	.022	-.012

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Source: Author's construction

The hypothesis H3.2b could not be confirmed by the empirical calculations. This means that in this study the MBI-dimension “extraversion” had no (significant) influence on burnout symptoms of employees. There are no significant correlations.

According to expectations, a negative significant correlation between the Big-Five dimensions “openness” and the burnout dimensions “emotional exhaustion” ($r = .245, p < .05$) and “depersonalization” ($r = .301, p < .01$) has been found. The hypothesis H3.2c could thus be partially confirmed. Hypotheses 3.2d could be confirmed. No significant correlation between the Big-Five dimensions agreeableness and the MBI-dimensions has been found in this research. Contrary to the research presented, no significant correlation with the burnout dimensions could be determined for “conscientiousness”. Hypotheses 3.2e could thus not be confirmed.

Results of the linear Regression Analysis (R²-Values) for the MBI-Dimensions and the two significant Big-5-Dimensions „Neuroticism” and „Openness” shown in Table 15

Outcome	Predictors	Neuroticism	Openness
Emotional Exhaustion		.177	.060
Depersonalization		.015	.091
Reduced Personal Accomplishment		.157	-

Source: Author's construction

The results of the linear regression analysis for the MBI-Dimensions and the two significant Big-Five dimensions “neuroticism” and “openness” as constants are presented in Table 16. A medium effect was determined for “neuroticism” and the outcome variables “emotional exhaustion” and “reduced personal accomplishment”. 17,7% of the variance of “emotional exhaustion” and 15,7% of the variance of “reduced personal accomplishment” can be predicted from “neuroticism”. Simultaneously, a medium effect (9,1%) was determined for “openness” and the outcome variable “depersonalization”. Moreover, a weak effect (6%) was found out for “openness” and “emotional exhaustion”. According to ANOVA, the regression of the models makes a statistically significant prediction (Sig. $.000 \leq .050$).

Testing Hypothesis H3.4

The correlation analysis could confirm the hypothesis H3.4. The personality dimension “extraversion” has a significant correlation in relation to the subjective assessment of the quality of support networks (consisting of “quality of relationship” and “quality of self-efficacy”) in all three areas (“friends”, “family” and “colleagues”) of the employees surveyed. This means, that the more extroverted a person is, the more positive is their assessment of the quality of their personal support networks. The respective values are listed in Table 17.

A weaker correlation could also be found between “neuroticism” and the subjective-qualitative assessment of support networks (“colleagues” and “friends”). This personality trait was disregarded in the hypothesis development. It should be noted that the correlation between “colleagues” is much stronger than that between the support network “friends”.

Table 17

Results of the Correlation Analysis between the Big-Five Dimensions and the Quality of the three Support-Networks „Colleagues”, „Family” and „Friends”

	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness
Quality of Relationship “Colleagues”	-.377*	.398**	.129*	-.022	.111
Collective Efficacy “Colleagues”	-.331**	.327**	.133	-.007	.013*
Quality of Relationship “Family”	-.023	.211*	.090	.124	-.045
Collective Efficacy “Family”	-.156	.233*	.211	.155	-.078
Quality of Relationship “Friends”	-.231*	.388**	.093*	.103	-.132
Collective Efficacy “Friends”	-.255*	.356**	.003	-.029	-.004

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Source: Author’s construction

In the following step, a linear regression analysis was calculated for the quality of the support networks (consisting of “quality of relationship” and “quality of self-efficacy”) “colleagues”, “family” & “friends” (outcome) and for the two significant Big-Five dimensions “extraversion” and “neuroticism” (predictors).

Table 18

Results of the linear Regression Analysis (R²-Values), calculated for the Quality of the Support-Networks (Quality of Relationship & Collective Efficacy) „Colleagues”, „Family” & „Friends” (Outcome) and for the two significant Big-Five Dimensions „Extraversion” and „Neuroticism”

Predictors	Neuroticism	Extraversion
Outcome		
Quality of Relationship “Colleagues”	.142	.158
Collective Efficacy “Colleagues”	.110	.107
Quality of Relationship “Family”	-	.045
Collective Efficacy “Family”	-	.054

Quality of Relationship “Friends”	.053	.151
Collective Efficacy “Friends”	.065	.127

Source: Author’s construction

The results of the linear regression analysis are presented in Table 18. Medium effects were determined for “neuroticism” and the outcome variables “quality of relationship colleagues” as well as “collective efficacy colleagues”. 14,2% of the variance of the factor “quality of relationship colleagues” and 11% of the variance of “collective efficacy colleagues” can be predicted from “neuroticism”. Simultaneously, a medium effect (15,8%) was determined for “extraversion” and the outcome variable “quality of relationship colleagues”. It has also turned out, that “extraversion” is a predictor for the variance of the outcome “collective efficacy colleagues”. Similar results were found considering the support network “friends”. Extraversion predicts the subjective rated “quality of relationship friends” (15,1%), and the subjective rated “collective efficacy” of the friends-network. According to ANOVA, the regression of the models makes a statistically significant prediction (Sig. .000≤.050).

Testing Hypotheses H3.3a-H3.3e

The normal distribution of the dependent variable and the moderator variable which is necessary to be able to perform the analysis, is given. “Emotional exhaustion” and “reduced personal accomplishment” are set as the outcome variables, because the previous correlation analysis (Table 8) shows, that “perceived supervisor support” has a significant influence on those.

This moderator analysis should check the personal traits “neuroticism” and “openness” (Table 14) for being possible moderators between “perceived supervisor support) and the MBI’s significant two dimensions (Table 8). Weak predictors have been dropped.

There were no moderating effects for “neuroticism” observed. The moderator analysis could confirm hypothesis 3.3a. “Neuroticism” is not able to buffer (moderate) the relationship between employee’s “perceived supervisor support” and the three MBI-dimensions.

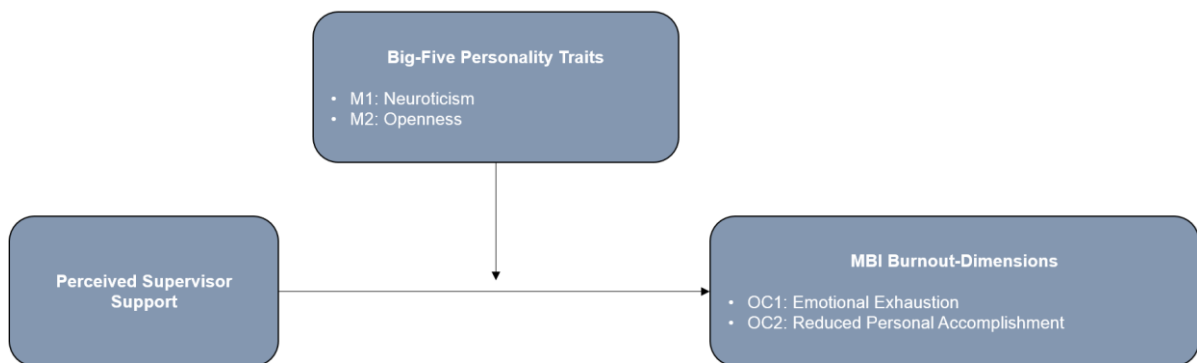


Fig. 10: Scheme of the Moderator Analysis. MBI-Dimensions „Neuroticism” and „Openness” set as Moderators between „perceived Supervisor Support” and MBIs significant two Dimensions (shown in Table 8). M=Moderator Variable, OC=Outcome Variable

Source: Author’s construction.

As expected, “openness” has no moderating effect on the relationship between “perceived supervisor support” on “emotional exhaustion). Hypothesis 3.3c was confirmed in the moderator analysis.

Table 19

Results of the Moderator Analysis. The Big-Five Dimensions „Neuroticism” and „Openness” set as Moderators between „perceived Supervisor Support” and the significant MBI-Dimensions „emotional Exhaustion” and „reduced personal Accomplishment”

	Neuroticism	Openness
Relationship: Perceived Supervisor Support on Emotional Exhaustion	-.546/1.288 p<,121	-2.113/.733 p<,062
Relationship: Perceived Supervisor Support on Reduced Personal Accomplishment	-1.279/.422 p<,101	-

Source: Author’s construction

The values from the regression analysis (Table 15) “extraversion”, “agreeableness” and “conscientiousness” were negligible from the outset, $R^2 \geq .01$. These were dropped due to the lack of direct effect. Hypotheses 3.3b, 3.3d and 3.3e therefore rejected.

3.4. Influence of demographic Variables and Mean Value Comparisons

In the following it is reported whether there is a significant difference in age and gender, job tenure, marital status, number of children, educational level and income. These calculations were made in addition to the actual question posed in Hypothesis 1 (H1). Only significant results were documented.

Influence of the demographic Variables Age & Gender

The age groups of the female test subjects differ significantly from one another only with regard to the burnout dimension of “emotional exhaustion” $F=2.459$, $df_{num}=4$, $df_{denom}=104$, $p < .001$. The younger the female test person, the stronger the expression of the state of “emotional exhaustion”. With the help of post-hoc tests it can be shown that the group of 19 to 29-year-olds has significantly lower values in “emotional exhaustion” than the group of 40 to 49-year-olds, 50 to 59-year-olds and >60-year-olds. The 30 to 39-year-olds also differ from the two older age

groups with significantly lower values. However, no significant difference can be observed between the 19 to 29-year-olds and the 30 to 39-year-olds. The group <19 years of age was dropped due to the missing number of test persons (N = 1) in this group and the resulting lack of significance. Despite the moderate effect size of $\eta^2 = .056$ it can be said that the perception of “emotional exhaustion” increases with age in women. The reported findings are listed again in Table 19.

Table 20

F-Test – Emotional Exhaustion of different Age Groups (Women)

Age	N	M	SD	η^2
				0.56
19-29	9	1.56	1.04	
30-39	18	1.89	2.91	
40-49	38	2.39	.88	
50-59	32	2.71	1.33	
>60	11	2.76	.98	

Source: Author's construction

Overall, women show significantly higher values for “emotional exhaustion” than men (337) = 3.319, $p = .006$. This is an average effect of $d = 0.52$. The values are shown in Table 20.

Table 21

T-Test – Emotional Exhaustion on Gender

Gender	N	M	SD	cohens d
				0.52
m	229	2.67	1.06	
w	109	3.12	.96	

Source: Author's construction

No significant results can be reported for the two other burnout dimensions “depersonalization” and “reduced personal accomplishment”.

Influence of the demographic Variable Job Tenure

The analysis of variance shows that there are no significant differences in “emotional exhaustion” ($p = .567$) and “depersonalization” ($p = .139$) between the different groups depending on job tenure.

Table 22

F-Test – MBI- Dimension “reduced personal Accomplishment” on Job Tenure

Years	N	M	SD	η^2
				0,64
0-5	79	3,42	2.55	
6-10	168	2,11	2.34	
11-15	9	2,86	.92	
16-20	65	2,67	1.83	
>20	13	2,11	1.36	

Source: Author's construction

There is a significant difference in “reduced personal accomplishment” depending on job tenure $F=2.399$, $df_{num}=4$, $df_{denom}=334$, $p = .000$. The group with job tenure up to 5 years has a significant higher “reduced personal accomplishment” than the others.

Influence of the demographic Variables Marital Status & Number of Children

According to the analysis of variance there are no significant differences in „emotional exhaustion“ ($p = .331$), „depersonalization“ ($p = .129$) and „reduced personal accomplishment“ ($p = .296$) between the different groups depending on marital status.

With regard to the relationship between the number of children and the three burnout dimensions, the results of this study did not provide significant results “emotional exhaustion” ($p = .139$), “depersonalization” ($p = .262$) and “reduced personal accomplishment” ($p = .092$).

Influence of the demographic Variables Level of Education & Income

Single factor ANOVA F-tests were performed. The results shown in Table 23 indicate that the level of education is significantly associated ($p < 0.05$, $df_{num}=3$, $df_{denom}=335$) with “emotional exhaustion” ($p = 0.031$), and “reduced personal accomplishment” ($p = 0.013$).

Table 23

F-Tests – Burnout Dimensions on Highest Education - ISCED-2011-Level

	Level 2 (SD)	Level 3/4 (SD)	Level 5A (SD)	Level 5A (SD)	F	p
Emotional Exhaustion	3.44 (.89)	2.91 (.99)	2.88 (1.11)	2.23 (1.21)	2.632	.004

Reduced Personal Accomplishment	3.21 (.1.01)	2.99 (1.13)	2.31 (0.78)	2.45 (1.11)	2.632	.013
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Source: Author's construction

No significant relationship was found between the level of education and “depersonalization” ($p = 0.421$).

Regarding the association between income and the three burnout dimensions, the results of this study did not provide any significant results - i. e. there is no significant relationship between the income of the employees and “emotional exhaustion” ($p = .111$), “depersonalization” ($p = .209$) and “reduced personal accomplishment” ($p = .061$).

3.5. Discussion of the Results from the main Research

In the following paragraph, the results presented in the foregoing paragraph are discussed. Only significant values are interpreted.

a.) Impact of Social Supervisor Support on MBI-Dimensions (Hypothesis 1)

In a first step, the aim of the study was to capture the „perceived supervisor support“ that employees experience from their immediate supervisors and to investigate the extent to which this support predicts the development of burnout in its three dimensions. The theoretical starting point was that the positive effect of social support in connection with coping with stressful situations is transferable to dyadic supervisor-employee relationships of office-based managers - i. e. there is a connection between social supervisor support and the occurrence of burnout among the surveyed employees. A distinction of the three burnout dimensions according to MASLACH; JACKSON & LEITER made it possible to obtain a more precise description of the effect of supervisor support and to explain their specific connections.⁴⁶³ The analyses on the prediction of burnout point to the special importance of the supervisor, since high levels of support are accompanied by lower levels of exhaustion. Social supervisor support can act as a psychosocial immune system. Granted or denied, social support can directly affect the mental state of individuals – both in a positive or negative sense. In a positive way, it promotes health and helps to overcome disease. Social support is thus a prerequisite for employee-oriented and health-oriented leadership. It can take the form of tips or work relief (instrumental) as well as encouragement, comfort and motivation (emotional). Less hierarchical leadership through emotional competence counteracts burnout among employees. Hence, the more dissonant and dictatorial the leadership is, the more likely burnout will become noticeable among employees. Supervisor support is therefore strongly related to the emotional competence of the executive.

⁴⁶³ Maslach, C.; Jackson, S. E. & Leiter, M. P. (1996-2018): Maslach Burnout Inventory Manual (Fourth Edition). Menlo Park: Mind Garden, Inc.

Emotional Intelligence (EI), which became known through the psychologist and science journalist Daniel Goleman, describes the ability to perceive emotions appropriately, to use them in thought processes, and to control and understand them adequately. Goleman distinguishes between two components of Emotional Intelligence: On the one hand, social skills (in relation to oneself), which include self-perception and self-management. On the other hand, social competencies (in relation to dealing with other people), which include social awareness and relationship management. Emotional intelligence is a prerequisite for leaders to put themselves in the shoes of employees, to perceive complex situations and to be able to react with appropriate support.

The influence on the burnout dimensions is made clear by the results of this work. Already in the preliminary study it was shown that perceived supervisor support has a medium strong, significant influence especially on the SF-36 factors „emotional well-being“ ($r = .312$; $p < 0.01$) and „energy/fatigue“ ($r = .344$; $p < 0.01$). „Emotional well-being“ measures overall mental health, including depression, anxiety, emotional and behavioral control, and overall positive mood. „Energy/fatigue“ measures whether the person is feeling energetic and full of energy or whether she/he is more tired and exhausted. This fact makes it clear that both SF-36 factors are relevant to burnout. The factor „emotional well-being“ in a negative connotation shows parallels to the MBI dimension „emotional exhaustion“. For the burnout dimension, a medium strong, significant influence of ($r = -.352$; $p < 0.01$) on the „perceived social support“ could be determined in the main study. The SF-36 factor „energy/fatigue“ shows parallels to the burnout dimension „reduced personal accomplishment“. It correlated medium-strong and significantly with the „perceived social support“ and shows similar values ($r = -.322$; $p < 0.01$).

According to GOLEMAN, successful managers have a high emotional intelligence: „*Truly effective leaders are also distinguished by a high level of emotional intelligence*“.⁴⁶⁴ Emotional intelligence is based on mutual understanding and trust, empathy, sociability and contributes to synergy effects in teamwork and networking. Thus, if a supervisor can recognize negative feelings and emotions, she/he has a decisive influence on stress and finally also on the perception of exhaustion and burnout-relevant factors of the employees. In the framework of organizational health management, coaching sessions for supervisors can focus on the feelings. Supervisors who understand themselves and thus these inner mechanisms better have a clear psychological innovation advantage. And thus, also the teams, departments and companies they lead - not on the basis of a functional and therefore manipulative attitude, but on the basis of compassion, genuine empathy and sensitivity, following the principles of human dignity, respect and appreciation. Emotional intelligence should therefore not just be a catchphrase, but an important personality aspect of a successful entrepreneur and a health-oriented, supporting and burnout-preventing leadership.

⁴⁶⁴ Goleman, D. (1998): Working with Emotional Intelligence. New York: Bantam Books, p. 82.

The targeted use of such health-promoting measures can not only strengthen the potential of employees, but also decisively improve the competitive position on the labor market. In addition, the organizational reputation as an attractive employer is enhanced. Against this backdrop, it is more important than ever for organizations to sensitize supervisors to the issue of health-promoting leadership and to develop it further. After all, health means much more than the absence of physical illness. In the future, the prevention of harmful stress will play just as important a role as the prevention of accidents and work-related physical illnesses. Employee-oriented leadership and the promotion of mental health by superiors, not only helps employees, but also makes itself felt in an increase in work motivation and, as a result, higher productivity by optimizing relevant cost types (e.g. manufacturing and machine costs). A healthy workforce also reduces the number of errors and rejects. A low sickness rate also improves the ability to plan and the availability of employees.

If organizations or supervisors succeed in sustainably protecting the performance of their workforce through health-promoting measures or by implementing an organizational health management, this represents a decisive competitive advantage. Investments in the human and social capital of an organization are strategic investments. They are intended to secure long-term employment and economic success. Health in organizations is therefore an advantage that is difficult for competitors to catch up on.

Age and Gender and the Connection with Burnout

Women show significantly higher values of “emotional exhaustion” than men ($t(337) = 5,211, p < .001$) and the perception of “emotional exhaustion” increases with age in women. In men, no significant association between age and burnout was found in this study. This result is astonishing at first sight, especially because from a psychological point of view, women tend to adopt the strategy of “tend and be friend” in stressful situations, whereas in men it is mainly the “fight or flight” reaction (i.e. fight and aggression or flight and retreat – or in repression and addictions) observed.⁴⁶⁵ The various behavior patterns can be interpreted with different life circumstances of men and women in the course of evolution. To what extent they are still helpful and justified in today's society is difficult to judge. Studies in the workplace also show that men experience both support and stress less through social relationships than women. Stress-related pressure on the heart and sleep disorders are nowadays considered almost normal in an exaggerated way. Full schedules, little time and energy to enjoy life are “in”. Men are even more likely to want to be “the number one everywhere”. In terms of gender, men go to the doctor on average less often and later, as is the case with burnout. Men generally ignore their disease symptoms more, which is also a risk factor for the chronification of the symptoms. Men often only see a need for action

⁴⁶⁵ Taylor, S.; Klein, L.; Lewis, B.; Gruenewald, T.; Gurung, R.; Updegraff, J. (2000): Biobehavioral Responses to Stress in Females: Tend-and-be-friend, not fight-or-flight. *Psychological Review*, 107, pp. 411-429.

in the case of serious and above all physical illnesses. This “hiding” could lead to depression at the end, whereby the depression of the man shows a different face than that of the woman. Characteristics of depression in men are additionally characterized by Irritability, disgruntlement, aggressiveness, low impulse control, fits of rage and anger, anger, tendency to blame others, low stress tolerance, higher risk taking, tendency to socially inappropriate behavior, substance abuse (e. g. alcohol, nicotine), general dissatisfaction, increased suicide risk.

However, these typical symptoms have not yet been included in the leading diagnostic guidelines and therefore depression in men often remains unrecognized. For this reason, the depressive rate of men is also underestimated and men, in comparison to women, rarely seek professional help because of depressive symptoms, because they dissimulate and ward off these symptoms. Untreated depressive men commit suicide more often than women. Women, on the other hand, are more likely to seek help when they are overburdened. Men talk less about private problems, fears or overstraining at work. Against this background, it is possible that men also assessed their symptoms as weaker than the women interviewed in this study. The higher burnout values among women could also be seen as a result of the triple burden of work, household and children. However, this might also be similar for the smaller number of male test persons who take on this task.

Job Tenure and the Connection with Burnout

Differences between job tenure and the connection with burnout were only found in the burnout component „reduced personal accomplishment“. Employees with less than 5 years of work experience have a significantly higher „reduced personal accomplishment“ than those with more than 5 years of work experience, i. e. all other age groups. Personal accomplishment describes the satisfaction with oneself. It arises from the feeling of competence and from the impression of mastering problematic situations in working with people. Due to the longer job tenure, the interviewed employees might have developed a higher job satisfaction (this was not specifically questioned in this work). The assumption that employees with a longer working life or in middle age are more „burnt out“ could not be confirmed in this study. However, the employees who are more „burnt out“ may have already left their jobs or, as already mentioned above, may not have participated in the questionnaire.

Marital Status/Number of Children and the Connection with Burnout

In this Examination, the correlation between marital status and the three MBI-dimensions „emotional exhaustion“, „depersonalization“ and „reduced personal accomplishment“ is statistically not significant. Findings that also MASLACH & JACKSON already published in the 1980s.⁴⁶⁶

⁴⁶⁶ Maslach, C. & Jackson & S. E. (1984): Patterns of Burnout among a national Sample of public Contact Workers. *Journal of Health and Human Resources Administration*, 7(2), pp. 201.

Under normal circumstances, it would be assumed that for the family environment is a factor, that would provide security and support; supports psychological/emotional successes and which protects the subject from exhaustion, developing impersonal, cynical and negative attitudes towards colleagues at the workplace. In order to provide an adequate explanation for this question based on the available results, it is necessary to anticipate this discussion. Table 9 shows that there are only marginal direct effects between the MBI dimensions „depersonalization“/“reduced personal accomplishment“ and the quality of the „family“ support network (consisting of “quality of relationship” and “quality of self-efficacy”). A high-quality support network “colleagues” however, is able to buffer (moderate) the relationship between employee's „perceived supervisor support“ and employee-burnout („emotional exhaustion“ via the quality dimension and „reduced personal accomplishment“ via both EVOS-dimensions). What became clear in the evaluation of the results is, that the quality of the „family“ support network is also not a suitable moderator variable. Since a partnership belongs to a close, family support network, this finding may well contribute to the triangulation of the results, since according to the results mentioned above, the quality of family support networks does not have any influence on burnout.

For the present evaluation, the answers in the variable „number of children“ were combined into two categories: (1) childless, (2) one child & (3) 2 or more children. With a higher number of children, it was assumed that the parents will have a higher burden of responsibility, care and education for their kids. As already noted, in terms of the number of children and the relationship of the burnout-dimensions, no significant relationship was found. Neither for the female nor for the male parent. The reason for the separate analysis was the idea that, despite having a job, women in most cases take on more responsibility for childcare than their male colleagues in the same job situation, so that women with children are more affected by multiple burdens (job, household, child care, etc.) and are therefore more stressed than employees with children. However, it should be critically noted that it would probably have been better to ask for underage children when collecting data. After all, children who are already grown-ups should generally be regarded as less of a burden in terms of care, responsibility and upbringing. However, burnout does not develop within a short period of time, but the longer-term overload etc. play a decisive role according to the theoretical basis, so that already grown-up children must also be regarded as an additional burdening factor that has existed at least for a long period of time.

Level of Education/Income and the Connection with Burnout

The findings indicate that the level of education is significantly associated ($p < 0.05$, $df_{num}=3$, $df_{denom}=335$) with “emotional exhaustion” ($p = 0.031$), and “reduced personal accomplishment“ ($p = 0.013$). The higher the education of the employees, the higher is the burnout risk in the sample. In other words, professionals who have only completed an ISCED level 2 education are less at risk of burnout than those who have completed an ISCED level 3/4 and above. It is interesting to note at this point that the mean values of the dimensions “emotional exhaustion” and “personal accomplishment” in relation to ISCED level 5A and ISCED level 6 differ only

slightly. It is therefore irrelevant for the burnout risk whether a doctorate is additionally obtained. It can also be noted that those who have completed ISCED level 2 suffer from a much lower degree of “emotional exhaustion” than professionals who have completed ISCED level 3/4, after which the curve flattens out, i. e. the increase in “emotional exhaustion” from ISCED level 3/4 to ISCED level 5 is less than when compared with the step from ISCED level 2 to ISCED level 3/4. This could be related to work expectations that are inversely proportional to “emotional exhaustion”. With regard to “reduced personal accomplishment”, it is interesting to note that professionals who only have ISCED level 2 are more likely to improve their personal progress or personal professional performance than those who have completed higher education. The increase in “reduced personal accomplishment” in this case is rather linear.

The results are in the line with those of MASLACH et al 2001, who suggested, that persons with high level of education report higher levels of burnout, than less educated people. The results may be confounded by the fact that education level may be connected to a higher responsibility and therefore to a higher work-stress. *„Or it may be that more highly educated people have higher expectations for their jobs and are thus more distressed if these expectations are not realized.”*⁴⁶⁷

It is possible that people with a higher level of education are also affected because they identify more strongly with their work and organization, and consciously want to do so because of the qualifications and career prospects they have achieved. At this point it is noticeable that the level of education is in turn related to personality traits, since, on the basis of the previous conclusions, a high sense of duty, willingness to perform, a tendency towards perfectionism or high ambition can be associated. These characteristics are among the aspects that promote burnout. Surprisingly, in this investigation and contrary to the research presented, no significant correlation with the burnout dimensions could be determined for “conscientiousness”, the Big-Five dimension, to which the above-mentioned properties can be subordinated.

As already mentioned, there is no association between income and the three burnout dimensions, the results of this study did not provide any significant results - i.e. there is no significant relationship between salary of the employees and “emotional exhaustion”, “reduced personal accomplishment” or “depersonalization”. It is possible that this result is due to the fact that there are strong fluctuations in salary levels and employee qualifications in the field of activity and the industry under investigation. The result could also be explained by geographical factors (structurally weak areas vs. conurbations) in the survey. As no region was indicated in the survey, the result cannot be clearly justified.

This makes clear how difficult it is in general to establish a certain comparability of the data. Many research articles appear to lump main- or demographic variables together or comparing apples to oranges at times. By comparing individuals among different professions, industries, service sector, location of work, departments, etc. and not controlling for those confounding variables it is

⁴⁶⁷ Maslach, C., Schaufeli, W. B. & Leiter, M. P. (2001): loc. cit., p. 410.

difficult to understand whether the correlation is related to the desired dependent variable or some other random factor.

b.) The Role of personal Support Network Quality on the Relationship between social Supervisor Support and Burnout (Hypotheses 2.1a - 2.1d)

Another step and another question focused on the social environment and the social support network of the employees. Of particular interest was the self-rated quality of the individual support networks. Although the social environment has become an integral part of support networks, and has developed into a part of industrial and organizational psychology - against the background of socio-ecological considerations and the associated holistic principle, which empowers companies, teams, work groups and complex systems to take action - social support networks were only understood as a potential resource after the transformation from a deficit-oriented to a resource-oriented understanding of leadership. This empirical study attempted to close a gap in the research on this resource.

Social support in the work context is provided by an average of 11.31 people, with the personal support network consisting of roughly the same number of family members (3.98 people), friends (3.74 people) and work colleagues (3.59 people). The results of the moderator analysis show - also in the main research - that poor supervisor support can be better handled, to some extent, by employees, if they develop or maintain good quality support networks. The more a person is integrated into a diverse social network with important caregivers, supporters and advisors and accepts and values them as transaction partners, the better this person can deal with unfavorable social conditions, critical life events and ongoing stress. The burnout dimensions “emotional exhaustion” and “reduced personal accomplishment” are moderated by the subjectively assessed quality of the personal collegial support network. A high-quality support network of “colleagues” is thus able to buffer the relationship between the perceived social support by the supervisor and employee burnout. As has already been noted, the buffer function is performed exclusively by the quality dimension and not by the self-efficacy dimension. According to this study, the support networks “family” and “friends” are not able to moderate “emotional exhaustion” and “reduced personal accomplishment” due to poor social support by the supervisor. How could this be explained?

The question of the substitutability of individual relationships as well as the question of who can be considered as a supporting person can best be explained with the thesis of functional specificity according to LITWAK. LITWAK, as has already been explained, does not focus on the persons in a social support network or their social positions, but on the nature of the support services. Since it is the subjectively perceived and not the actual support received, the approach needs to be slightly adapted:

Let's suggest an employee who de facto needs specific support on a regular basis. From the employee's point of view, only the direct supervisor is initially considered as a theoretical support potential. The employee who is in fact in need of help must be able to turn to the potential helper, the supervisor, at any time. However, the supervisor must know that the employee needs support. The supervisor must therefore be prepared to help at any time. The fact that help can actually be provided is dependent on the concrete need for help and the actual availability of the supervisor and his or her competence to provide this help. These last selection steps, i.e. ultimately the fact that the supervisor can actually help, are, as already mentioned, placed in the foreground by LITWAK and treated by him under the keyword "optimal matching" of characteristics of the assistance and the relationship - in this research - between employee and supervisor.

In the special case of perceived support, the employee must feel or perceive the optimal matching. Why can the support network "colleagues" buffer the relationship between perceived supervisor support and burnout, while the other two support networks "family" and "friends" cannot? It is interesting to consider whether and for what reasons the employee in need of help contacts the colleagues, or why the employee believes that the colleagues are willing to help, or why the employee thinks the quality of the support network "colleagues" is higher.

This question is at the same time the question following CANTOR about the reasons for possible preferences for certain support persons or -networks. The interpretation of the present results is that the evaluation of the three support networks is not about individual preferences, since in this particular case, there are no suitable alternatives in the working context and the aspect of competence for the specific problem and the actual availability is the main focus. The question of CANTOR, to whom one would prefer to turn, is therefore not at issue. The next paragraph makes it clear that support network quality also has a direct effect on burnout.

c.) *The direct Effect of personal Support Network Quality on Burnout (Hypothesis 2.2)*

The effect of social support networks in the sense of a direct effect could also be determined via the support network „colleagues“. The EVOS-factor quality of relationships „colleagues“ correlates moderately and significantly with „reduced personal accomplishment“ ($r = -.465$; $p < 0,01$), and equally significantly and moderately with „collective efficacy colleagues“ ($r = -.453$; $p < 0,01$). A further significant and medium-strong correlation could be calculated between the EVOS-factor „quality of relationship colleagues“ and the MBI-dimension „emotional exhaustion“. Regarding the direct effect, it becomes clear that a collegial network helps to alleviate the burnout symptoms. The support and the quality of the network provides more work resources, a valuable tool for the employees for coping with stressful and complicated situations.

The support network, in which the affected employee can express emotions, deals with interpersonal relationships and offers the opportunity to express feelings and concerns. The primary support network used by the employees for coping with poor supervisor support can thus be identified as the collegial network. This goes in line with the results of the pre-research:

The EVOS subscales „quality of relationship colleagues“ and „collective efficacy colleagues“ had the strongest and significant correlations and proved to be significant predictors, with the SF-36 dimensions „emotional well-being“ and „energy/fatigue“.

This suggested that - in the study - preferably colleagues have an influence on the mental well-being respectively on the burnout-symptoms of an employee. It is possible that for the employee the understanding of the supporter for the deficient work situation plays a decisive role in the selection of the primary support network. A good collegial support network could therefore be described as the most important „psychosocial immune system“ in the work context.

In the context of health promotion but also public health, the term network promotion or network engagement has recently been used more frequently for the creation of local, regional or national cooperation networks. However, more appropriate for the cooperation of different actors in organizations is the term network management, network building or and networking, which corresponds to a central principle of action of the Ottawa Charter for Health Promotion. According to the WHO, „mediating and networking“ is a process through which the various interests of individuals are brought into harmony with the aim of maintaining, protecting or promoting health. In the Jakarta Declaration, the statement that health promotion requires the development of "social capital" appears for the first time. Social capital describes the degree of social cohesion found within communities. Social capital refers also to processes among people that produce networks, norms, and social trust, and facilitate coordination and cooperation. The close relationship or extensive overlap with the „social support network“ concept originating in this dissertation is unmistakable. The WHO thus gives orientation, not only on a global scale – for supervisors it could be a rethinking in the context of leadership behavior. Health is a basic human right and is essential for social and economic development. Increasingly, health promotion is being recognized as an essential element of health development. It is a process of enabling people to increase control over, and to improve, their health. Health promotion, through investment and action, has a marked impact on the determinants of health so as to create the greatest health gain for people. This also applies to supervisor - employee relationships, or in organizations in general.

For this reason for supervisors, it would be possible that e.g. task-related social networks in the sense of self-organized associations are promoted. In the center of such networks a common goal could stand in the as connecting element, e.g. stress discussions, health, sport, leisure activities, etc. Such social networks can have great significance for the organization of collegial social support, the expansion of employees‘ personal support networks and social actions in the sense of better working conditions and greater well-being. Especially in this area, network promotion can be described as a general (disease-unspecific) approach to health promotion and prevention within the framework of organizational health management. The development of informal network structures can also be seen as a practical implementation strategy or a tool of health

promotion. A health-promoting network serves the effective use of resources of employees as well as the common coordination and the production of a content-related and/or organizational connection of health-relevant offers.

d.) The Role of Personality Traits on the Relationship between social Supervisor Support and Burnout (Hypotheses 3.3a – 3.3e)

As expected, no moderating effects for “neuroticism” were observed. “Neuroticism” is not able to buffer (moderate) the relationship between social support by the supervisor (perceived supervisor support) and the three MBI-dimensions. This finding could be interpreted as follows: A high level of “neuroticism” can generally be seen as a lack of resources - internal and external demands are more difficult for the person concerned to cope with. As a result, a higher stress level is created. Neurotic persons are less able to react appropriately to stress situations and activate adequate coping strategies. As a result, feelings of being overwhelmed, insecurity and possibly also a reduced perception of social support develop more quickly. It can be assumed that neurotic employees attribute the lack of (perceived) professional support by their supervisors as self-destructive. Accordingly, “neuroticism” does not have a resource function/buffer function, but, as it turned out, various direct effects on the MBI-dimensions.

As expected, “openness” has no moderating effect between “perceived supervisor support” on “emotional exhaustion”. However, since comparable results are largely lacking in the literature, the task of future studies will be to examine these relationships more closely. As already noted, the values from the regression analysis (Table 14) “extraversion”, “agreeableness” and “conscientiousness” could be neglected from the outset $R^2 \geq .05$. These were dropped due to the lack of a direct effect.

e.) The Role of Personality Traits on Rating personal Support Network Quality (Hypothesis 3.4)

As the results of the correlation analysis show, the personality dimension „extraversion“ has a significant correlation in relation to the subjective assessment of the EVOS-dimensions „quality of relationship“ and „self-efficacy“ in all three areas („friends“, „family“ and „colleagues“) of the employees surveyed.

This means that the more extraverted the employees are, the more positive they are about the „relationship quality“ and „self-efficacy“ of their personal support networks. As already mentioned, „extraversion“ basically describes an outwardly directed attitude. People whose personality has a high degree of „extraversion“ tend to find exchange with other people and groups stimulating. Classical synonyms are sociability or talkativeness. It seems that either through the confident attitude of the employees, the assessment of the „relationship quality“ and „self-efficacy“ of the support networks is more positive, or there is indeed a higher quality support network.

Hence, extraverts can help a team and its members to become more energetic and form more energetic relationships when the group is in agreement about its goals and how to get there. As a result, they are perceived as proactive team players - for example, by developing new ideas or offering suggestions for improvement. It can be assumed that at the time of the evaluation there was a certain degree of harmony and unity in the personal support network. It remains open, however, to what extent and how often members are simply removed or replaced from the personal support network when different views arise, whether in the collegial area or among friends. The rating of the support network „family“ correlates weakest with „extraversion“. It is obvious that this network is rated worst by extraverts. One reason could be the lack of interchangeability of network members by extraverts.

Significant correlations were also found between „neuroticism“ and the subjective assessment of support network quality. The personality trait „neuroticism“ was not taken into account in the hypothesis development. It should be noted that the negative and significant correlation between „quality of relationship colleagues“ and „collective efficacy colleagues“ is much stronger than in the case of the support network „friends“. In the case of the support network „family“ there is no significant connection with the personality trait „neuroticism“.

It can be assumed that this personality trait has a long-term detrimental effect on relationships and is therefore likely to be negatively related to relationship satisfaction and the assessment of personal support networks, since the respective facets of the trait are unfavorably associated with subjective stress assessment, stress management behavior and the type of causal attributions made. It can therefore be assumed that anxious, emotionally unstable or neurotic persons evaluate their support network more negatively overall compared to emotionally stable individuals because they are more easily vulnerable. In interaction with stressful events, they may choose rather dysfunctional strategies for coping with stress, which in turn may lead to a marked decline in problem-solving skills and internal network communication. It can also be assumed that emotional instability and the associated increased propensity for negative emotions predisposes people to perceive relationship experiences in a distorted way and to react particularly strongly to unpleasant situations. Thus, neurotic or emotionally unstable individuals attach greater importance to negative events in particular by attributing negative behavior of the partner to internal, stable and global causes. The reason for the missing significance and (negative) correlation between „quality of relationship“/“self-efficacy“ and neuroticism of the network „family“ is not clear. It can be assumed that some emotionally unstable persons use the personal support network „family“ as their primary network because of the emotional closeness to the network members.

f.) The direct Effect of Personality Traits on Burnout (Hypothesis 3.2a – 3.2e)

According to expectations, a negative significant correlation between the personality dimensions „openness“ and the burnout dimensions „emotional exhaustion“ ($r = -.245$, $p < .05$) and

„depersonalization“ ($r = -.301, p < .01$) was found. With regard to the factor „openness“ this means: the lower the „openness“ values, the higher the burnout problem. The less tolerant and open an employee is, the more negatively he experiences interpersonal relationships and thus experiences long phases of constant life stress, which in turn leads to „emotional exhaustion“ and „depersonalization“. It has to be taken into consideration, that the MBI in this study uses of a “reversed score” calculation for personal accomplishment (reduced personal accomplishment); that is asking the questions backward and then subtracting the actual score from the highest possible score.

Furthermore, there is a significant connection between „neuroticism“ with the MBI dimension of „reduced personal accomplishment“ ($r = .396, p < .01$). „Depersonalization“ can be neglected because of the weak correlation. Previous research reports have shown that the personality trait „neuroticism“ in particular causes the burnout process. Negative mood, self-doubt, dissatisfaction or imbalance and withdrawal are typical characteristics of all those persons who show high values for „neuroticism“ and below average values for „extraversion“. Thus, the results on „neuroticism“ are in line with previous researches,⁴⁶⁸ but in terms of „extraversion“, it is contradictory to previous researches.⁴⁶⁹ Contrary to expectations, it turns out that the „extraversion“ dimension did not influence the burnout problem of employees in this study. There are no significant connections. As expected, there is also no significant connection between the Big-Five dimensions „agreeableness“/“conscientiousness“ and the MBI-dimensions.

By using these findings, managers can prevent the intensification of job burnout through being aware of their employees' personality traits. By enforcing happiness creating factors and job burnout mitigating factors, managers can control job burnout and prevent its serious consequences which hurt employees mentally and physically. With regard to the investigation of gender-specific differences in the personality dimension of „neuroticism“, earlier results could be replicated.⁴⁷⁰

g.) *The direct Effect of Personality Traits on Perceived Supervisor Support (Hypotheses 3.1a – 3.1e)*

This block of hypotheses dealt more comprehensively with aspects of personality in connection with the perceived support of the supervisor. For this purpose, the characteristics of the Five Factor Model were used to investigate the significance of the relevant variables. The aim was to focus on how employees and representatives of individual patterns perceive socially supportive

⁴⁶⁸ Alarcon, G.; Eschleman, K. J. & Bowling, N.A. (2009): loc. cit., pp. 252-254; Bowling, N. A.; Beehr, T. A.; Johnson, A. L., Semmer, N. K., Hendricks, E. A. & Webster, H. (2004): Explaining the Potential Antecedents of Workplace Social Support: Reciprocity or Attraction? *Journal of Occupational Health Psychology*, 9, pp. 339-350; Bono, J. E. & Judge, T. A. (2003): Core self-evaluations: A Review of the Trait and its Role in Job Satisfaction and Job Performance. *European Journal of Personality*, 17, pp. 5-18.

⁴⁶⁹ Alarcon, G.; Eschleman, K. J. & Bowling, N.A. (2009): loc. cit., pp. 252-254.

⁴⁷⁰ Schmitt, D. P. & Shackelford, T. K. (2008): Big Five Traits related to short-term Mating: From Personality to Promiscuity across 46 Nations. *Evolutionary Psychology*, 6(2), pp. 246–282.

behaviour. In concrete terms, the aim was to question how perceived socially supportive behaviour at work is related to individual characteristics of the person. First, correlations between the personality traits of the Five Factor Model; “extraversion”, “neuroticism”, “conscientiousness”, “agreeableness” & “openness” and “perceived supervisor support” were calculated. According to previous findings,⁴⁷¹ significant correlations between “perceived support and extraversion” ($r = -.363$; $p < 0.01$) as well as “neuroticism” ($r = .389$; $p < 0.01$) were found in the group of surveyed employees. The correlation with “openness” ($r = .088$; $p < 0.05$) is negligible.

For the context investigated here, this means that the perception of socially supportive behavior by the supervisor is associated with highly extraverted behavior in individuals. Extraverted employees perceive social support by their supervisor more easily. The personality trait “neuroticism” also shows a medium but negative significant correlation. The correlations are higher for the characteristic “neuroticism” than for the personality dimension “extraversion”. Accordingly, neurotic persons, i. e. emotionally unstable, vulnerable, hypersensitive, anxious and sometimes helpless employees, perceive significantly less social support from their supervisor than extraverted personalities who tend to be more dynamic, active and enthusiastic.

The result seems to be understandable, since this study focuses on the professional context, respectively the dyad of supervisors and employees. While in the leisure sector there is a freedom to choose with which persons individuals surrounds themselves, this is hardly possible in this professional constellation. If the supervisor appears unsympathetic or selfish, gives poor support etc., the employee concerned will have to arrange with it. With “extraverted” personality traits, cooperation will probably be made easier and perhaps also forced, because nothing can easily upset the affected colleague and he or she can deal with the demands made on him or her and the lack of support in a relaxed manner. In order to mobilize social support, it is necessary first to admit to oneself, to be dependent on support and to reveal this neediness. However, “neuroticism” makes the mobilization more difficult.⁴⁷² The “perceived social support” and the mobilization of support services is largely determined by personal resources and personality traits. Extraverted employees have a decisive advantage in the dyad of supervisors & employee - they find it easier to establish a relationship with their supervisors. In the further course of this social relationship a certain degree of empathy, the ability and willingness to cooperate as well as emotional stability is required for its maintenance and further development.⁴⁷³ “Neuroticism”, this is how the results are interpreted, reduces trust in the social relationship and reduces the “perceived supervisor support”.

⁴⁷¹ Swickert, R. J.; Hittner, B. H. & Foster, A. (2010): loc. cit., pp. 736-741.

⁴⁷² Niemann, D. (2019): Die Rolle des Partners und der Partnerin bei der Bewältigung arbeitsbedingter Belastungen. Der interaktive Prozess der sozialen Unterstützung in Paarbeziehungen. Wiesbaden: Springer, p. 80.

⁴⁷³ Niemann, D. (2019): loc. cit., p. 79.

Every occupational activity requires the fulfillment of certain performance requirements in different ways. In addition, the job-specific interaction with people requires the fulfillment of certain social or interpersonal requirements. The third aspect for understanding occupational problems is the question of the relationship between effort and gratification. On the level of performance requirements, the demanded work performance, a neurotic disorder can be causative in occupational problems, this is shown by the results of the study. In this context, neurotic disorders can have a negative effect on the planning, the execution as well as on the completion of work processes. Occupational problems in neurotic disorders often show up on the level of planning the activity a late start or a misjudgment of the time needed. On the level of the execution of work processes, neurotic disorders often show occupational problems in the provision of work materials or problems with work continuity or error correction. This can be perfectionistic on the one hand or superficial on the other. Furthermore, this often shows malfunctions that indicate unconscious conflicts that affect the working relationship. For example, the perception of social support is limited or distorted. At the level of the completion of an activity, neurotic work and professional problems often show up in the fact that the work is not handed in on time with the possibility of a final correction, that it is often handed in late, due to perfectionism, or handed in at the last minute, but then uncorrected. A supervisor should be aware that work difficulties or professional problems are rooted in neurotic work disorders. A supervisor should therefore try to find out whether it is a matter of habitual reacting, which cannot be stopped even if the employee concerned makes an urgent effort to do so himself and the external situation would absolutely require it. Therefore, it is important for the supervisor, in order to understand the professional problems correctly and to be able to provide adequate support, not only to evaluate the prevailing (negative) situation, but also to be aware of hidden personality traits that negatively affect both the planning, execution and completion of work processes. This can be achieved through leadership coaching in the context of organizational health management. The goal is to create an objective and meaningful profile that not only helps the selected person, but can also be used to deploy this personality as efficiently as possible in the company

Conclusions

The findings highlight the importance of supervisor support embedded in a health-oriented leadership culture as a key discipline of management health care science. The valuable conclusions drawn from these findings confirm the contemporary management science approach to focus more on employees in daily business, not on economic processes solely. The results of this study are satisfactory since the main hypothesis has been confirmed. This study contributes to extend management theory on individual ethical and health- and support oriented decision making in organizations from the viewpoint of system theory.

Prior research has been intensively reviewed, confirmed, and supplemented in many ways. In summary, it can be said that interesting findings are available after this research.

The author concludes as follows in general:

1. The model tested in this dissertation can be used to systematically examine the effects of perceived social support from supervisors on employee burnout while simultaneously considering the moderating effects of individual personality traits and the quality of personal support networks among employees. In this regard, the research model provides convincing results based on the high statistical and internal validities of the measurement instruments used and their now proven interaction. This speaks for a high reliability of the research.
2. If considering the reliability of this research as a quality criterion and including the underlying scientific theories and their research in the development of the scientific model as an evaluation of the quality, it can be asserted that the combination of management, systems theory and psychological approaches and their interaction within the model has contributed significantly to answering the research question and to find the subsequent conclusions. In particular, the ease of understanding and the associated practical transfer possibilities in seminars and coaching sessions benefit from this multi-theoretical perspective.
4. In addition, the hypotheses testable on the basis of the existing theories were underpinned by the experience of experts. Thus, it can be additionally argued that these hypotheses were not only developed based on pure deduction of theoretical foundations, but they were also established based on "new" information from the qualitative study for verification. This means an improved validity of the results and higher certainty of knowledge due to the research model.
5. With regard to the mental risk assessment, which has been mandatory since 2013 due to the German Occupational Health and Safety Act and explicitly requires the consideration of mental stress, the model in connection with the results of the research can provide practical indications. For example, it could be argued that in isolated activities, such as in the home

office, there are fewer opportunities to cultivate collegial support networks and thus build up resources, and that the risk of poorer perception of supervisor-support comes to the fore.

Based on the research model, furthermore detailed conclusions for practice can be derived:

6. Social support helps to cope with professional, private and health problems. Employees are psychosocially more stable and able to act. The idea that support is available in stressful situations is an important protective factor for stress. The collegial support network in the professional sphere and the associated social support is an important resource for maintaining mental health and helps to counteract burnout.
7. Social support is not able to compensate all deficits in the area of work design. Systematic over- or under demand cannot be compensated by occasional support of a content-related or emotional nature. Instead, it is necessary to check whether the work requirements and performance prerequisites of the employees are in balance with each other, and where they are not, either to increase the competencies of the employees through qualification measures or to change the work requirements. These insufficiencies could be remedied within the framework of organizational health management.
8. It is primarily a matter of integrating the health thought into the organizational culture and anchoring it as a strategic goal in the operational management processes. The skills and the qualification of supervisors can be the entry into a process that makes health promotion at all levels a central task of the company.
9. To take time for the problems and difficulties of the employees and to show interest in solving them creates the feeling that the individual can rely on his/her supervisor (perceived supervisor support) and turn to him/her if necessary. A supervisor also conveys this feeling by advocating the (professional, but also private) concerns of the employee at a higher level.
10. Constructive and healthy working relationships are established and developed through a health-oriented leadership style. Some of the main factors that make up a health-oriented leadership style are as follows: Honest appreciation, adequate workload (not too much, not too little), allowing room for maneuver and creating a positive social work climate which results in a feeling of job security (basic need for security) and work-satisfaction.
11. If the problem of employees in need of help is not addressed, if the assistance is too far-reaching, if the support has a patronizing undertone, then the help can easily turn into the opposite. Social support is therefore a skill that needs to be trained and for which social skills are indispensable.

12. Despite the inflationary spread of the term “burnout”, efforts to link information on burnout-related topics with workplace health promotion have not yet made much progress in Germany. Small and medium-sized companies without implemented organizational health management are particularly affected by this. However, such a stronger link could help companies to see health-promoting working conditions as a resource in the organization.
13. A support culture in organizations cannot simply be ordered or arranged. Without conviction and possibly also through approaches of ethical thinking of all relevant people (e. g. supervisors, works council, in larger companies also the company doctor, the HR department or social services) such a change cannot fall on fertile ground. Organizational framework conditions or resources initiated by the top-management are necessary that enable and promote the willingness and readiness of a support-culture.
14. Whether an organization has a harmful “elbow-culture” or a healthy support-culture is largely determined by the top-management. This also depends on
 - whether transparent decisions and information flows prevail in a company or secrecy, which leads to rumors and mutual mistrust,
 - whether support processes in the workplace are perceived as “keeping employees from working” or whether mutual assistance is promoted and encouraged as a desired behavior by the company,
 - and whether the working atmosphere is regarded as a negligible factor or whether specific measures are taken to improve the working atmosphere (social gatherings, offers of external activities, sports, etc.).

It is important that supportive measures are not propagated in glossy brochures solely but are also put into practice by supervisors at all levels of the hierarchy.

15. The qualitative study in particular shows that asking for support is not easy for employees. In part, receiving help is perceived as a personal defeat and belittling of their person. In particular, those people who were raised to be independent at an early age experience even a well-intentioned offer of help as a slight. Supervisors should be aware of this when they offer support. Help is not perceived as embarrassing if it is seen as a contribution to joint problem solving.
16. The term “training” expresses the fact that the integration of a new employee into existing organizational structures involves a certain amount of effort or work. Poor support leads to the new employee becoming increasingly dissatisfied with his or her work, feeling little commitment with the company and considering changing the job. This is not conducive to performance. Especially talented employees, knowledge maintainer or new employees with a

high potential cannot be retained in the company without support, and thus, organizational competence stagnates by losing social capital.

17. In the debate on a personal support network, it can be concluded that it makes sense to differentiate between different support networks. For the further empirical examination of the construct, this means, among others, that interactions between different support networks could yield further results.
18. The central question was whether the quality of personal support networks is able to buffer the relationship between perceived supervisor support and employee burnout. It can be stated that the subjectively assessed quality of personal collegial support networks moderates the relationship between perceived supervisor support and the burnout dimensions “emotional exhaustion” and “reduced personal accomplishment”. It can be stated: Colleagues can provide effective support in the professional context. Close friends and family members may not be able to do so, because they are less familiar with the work problems and conflicts and thus less able to act as a stress buffer.
19. It is also clear with regard to the direct effect that a collegial support-network helps to alleviate the burnout symptoms. Such networks are largely underestimated. Many executives see that collegial networks or informal networks in general are an important topic but have not yet dealt with them in depth. A very striking statement in this regard would be - If managers do not have a grip on informal organization, they work less performance-oriented. This does not only refer to the health of their employees, which is a valuable asset of the company.
20. It is not merely decisive how many social contacts and network options a person possesses. Equally important is the strength and reliability of this person's subjective conviction that he or she will actually be supported or will be able to receive support when needed. Being embedded in a network of trusted colleagues is a potential and effective stress resource - even if objectively helpful interactions do not or not yet occur. The protective effect exists in the feeling of belonging and through the option of being able to mobilize the network in the event of a crisis.
21. It can also be deduced that perceived support is fed on the one hand by personality-specific characteristics, but on the other hand by the actual conditions of the professional support situation. Thus, the perception of support availability influences the stress-buffering effect directly by modifying appraisals of the situation.
22. A logically significant situational factor would be the size of the working team. For the managers' population it is noticeable that the collegial support network is a relatively small group of people (MD = 3.59). It remains to be unclear whether these effects are systematic or rather random. It is plausible, however, if the cooperation in a smaller team (or department)

was more supportive and more facing than in a large one (and as a result the support network was correspondingly smaller). It would also be conceivable that a manager in a small circle would be more likely to respond to the individual and his or her needs and problems than if he or she had significantly more colleagues to lead. The connection between burnout and social support has been scientifically proven and the results of the present study further support this fact.

23. Health- and support-oriented leadership is not a completely new approach. Many existing management concepts, such as transformational or employee-oriented management, already have a positive effect on employee health. The question is whether support-oriented leadership really needs to be redesigned, or whether “good and correct” leadership does not also have the positive side effect of social support for employees. The possibilities for shaping a healthy & supportive management style are nothing fundamentally new for managers, but it is assumed that these are generally perceived less consciously because the influence on the operational performance process and the performance of the employees is not considered to be significant.
24. Due to the direct contact with employees, supervisors at lower and middle management levels in particular are predestined to take on the task of implementing health-oriented leadership.
25. In practice, the problem of cost-benefit analysis often becomes ostensible. As long as no identifiable figures are available describing the financial benefits of the measures for a support- and health-oriented leadership, this makes implementation more difficult. Clear advantages on the side of soft employee-related aspects, such as the working climate or the organizational culture, which are difficult to measure, are in many cases not sufficient for the management. The fact that the absenteeism rate solely provides information about a healthy organization is far from sufficient in view of the presenteeism phenomenon. In the future, it would be necessary to gain further business management insights in connection with management and the success of the company or the performance of the employees. In this way, business management could be convinced of the advantages of healthy & supportive leadership and would no longer act purely on the basis of the legal regulations on health management.
26. The introduction of organizational health management is time-consuming and cost intensive. This is mainly since new personnel resources have to be created. However, if the company weighs up the effort, costs and benefits, the positive effects will outweigh them. Well thought-out and implemented, the performance of employees is sustainably ensured. An organizational health management promotes optimal working conditions, health and quality of life at the workplace.

Suggestions

This research results may help supervisors, responsible persons from the field of human resources, organizational development or external consulting companies to attain a deeper understanding for the mechanisms of social support on the effects on employee health. With greater knowledge, more experience and a better comprehension of how health- and support-oriented leadership works, how it can be used effectively and how it can be aligned with the strategic goals of the company, it may be easier to avoid misunderstandings and to dismantle negative stereotypes both regarding supervisors as well as regarding employees in an organization.

Based on the findings and conclusions of this study, the author suggests the following practical actions:

Suggestions for Supervisors

1. Employees perceive the relationship with their supervisor as being of high quality if, for example, if they know how they are assessed, their professional needs and any problems are understood, their development opportunities are recognized, and decisions are comprehensible. In order to be able to deduce the personality structure of an employee and find out where their strengths and weaknesses lie, the supervisor should take on the role of a coach. A supervisor himself should also be able to let himself be questioned by the employee and to get feedback from the employee. A supervisor acts in a supportive and health-oriented way on an equal footing by taking into account the biographies and personality structures of his or her employees.
2. It is recommended that managers be approachable and available when problems at work occur. Supervisors should support their employees in the work process when difficulties are indicated. Employees should be adequately informed - all information and resources relevant to the performance of the task should be available.
3. It is recommended that leaders pay attention to role clarity and predictability in the workplace. They can influence this form of support particularly well; it forms the basis of health- and support-oriented leadership. A clear organizational strategy, clear leadership messages, clearly outlined roles and responsibilities - all of this provides security and offers clear orientation in day-to-day operations. If such certainty and orientation are lacking, this often leads to inefficient coordination processes, duplication of work and, above all, negative psychological stress among employees.
4. It is suggested that managers regularly inquire about the well-being of their employees and encourage them to find a good work-life balance. Supervisors should address individual

employees if they appear to be overworked and make sure that employees stay home when they are sick.

5. Leaders must deal openly and honestly with their employees within the framework of health- and support-oriented management and adhere to agreements and arrangements. Care must continue to be taken to ensure that employees' tasks are distributed fairly and that employees are treated equally.
6. It is recommended that supervisors always explain the background of decisions and clarify the meaning of certain tasks. In addition to the clear competencies and responsibilities already mentioned, employees must also understand the assigned tasks in detail. Task requirements and expectations of employees must be clearly stated and communicated.
7. Employees' work and commitment should be recognized through praise and acknowledgement. Work process-related feedback should be given regularly. Employees have to know at all times how they are rated in terms of the quality of their work. This includes a constructive and fair criticism.

Suggestions for the Top-Management

8. In order to be able to anchor a health- and support-oriented fundamental thought, and ultimately also a morally humane personnel policy within an organization, it is necessary to strengthen one's own credibility by communicating only mission statements, values and regulations that are seriously meant and lived by the management. Flimsy attempts to enhance an image or to greenwash a tarnished organizational ethic will certainly fail in the long run.
9. If a healthier working environment and a higher level of mental well-being are to be achieved in the long term, a rethink must take place at all levels of the company and a healthy culture, especially a supportive management culture, must be created.
10. Top management is recommended to carry out the risk assessments consistently. Mental stress and burnout in the workplace can be identified at an early stage through regular mental risk assessment. In Germany this is even required by law, but the occupational safety report of the technical testing organization Dekra (2018/2019)⁴⁷⁴ revealed that only 41% of small and medium-sized companies comply with it. The potential behind this audit is not recognized. Because if the risk assessment brings to light various stressors in the workplace, these can be reduced through targeted burnout prevention. Always in focus: the physical and mental health of the employees, which is the most important asset in the company.

⁴⁷⁴ DEKRA (2019): Arbeitssicherheitsreport 2018/2019, p. 14

Suggestions for the HR-Department & Responsible of the Organizational Health Management

11. As an important source of impetus for the implementation of personnel development concepts, the HR-department must rethink the existing means by which the awareness of healthy & supportive leadership can be strengthened and how deficits can be improved.
12. Supervisors and senior management need to be sensitized to the impact of poor support on employees' health – and as a result also on business performance. Accordingly, the company's goal must be to inform management levels to the connection between leadership and health. Only in this way they are able to initiate appropriate measures.
13. It is recommended to focus on the holistic nature of leadership behavior. Health-promoting and supportive leadership means modern leadership competence that releases high performance and at the same time promotes an organizational capacity for growth and innovation. This principle of combining and balancing the elements of demand and development can be implemented in the form of organizational development processes.
14. An anonymous and voluntary employee survey should be conducted on an annual basis to determine the health situation in the respective area of responsibility of the supervisor (e.g. department) or organization wide. In Germany, health insurance funds and employers' liability insurance associations support this procedure by providing standard questionnaires in the framework of an organizational health management that can be individualized.
15. It is recommended to use the 360-degree feedback method for supervisors. In this process, different feedback providers (e.g. employees) give feedback on the supervisor's behavior from their perspective. The 360-degree feedback must be planned and prepared as a method for personnel development and should help to establish a comparison of self-image and external image with different perspectives.
16. Targeted personnel planning is intended to ensure that an organization has suitable and qualified managers. It is important to make a clear distinction between “managing” and “leading” competencies. The competencies of a good supervisor include the ability to structure, set up and control processes, perform factual tasks, professional competence and optimize productivity. However, this does not make a good supervisor. Supervisors who are “healthy leaders” have great social competence, provide instrumental and emotional support, focus on relationship tasks and promote job satisfaction and motivation. They manage to harmonize the individual and social needs and goals of employees with the goals of the organization.
17. When hiring new supervisors, in addition to general leadership qualities, the focus should be on the extent, to which the future leader's ability to assess the behavior of employees as well as the relationship quality of the leader-employee dyad is pronounced. Furthermore, the approach is relevant as to how he/she reacts to the cognitive processes of the employees

arising in work situations and how he/she evaluates them. This cannot be easily tested in a normal job interview, it is recommended to be determined in an assessment center event, which should be attended not only by those responsible for HR management, but also by those in charge for organizational health management.

Suggestions for future research:

18. Due to the fact that perceived support is fed on personality-specific characteristics, it is suggested to examine also the composition of the support network “colleagues” more in detail in addition to the analysis of the individual.
19. The differentiated recording of personal characteristics and situational conditions of the work context as well as interactions is recommended in order to explain inconsistent results. In addition to the recording of concrete support services by colleagues and supervisors, the examination of further work-related parameters should be implemented.
20. Conditions should be investigated under which a lack of support by the supervisor can be compensated or under which a deficiency can be exacerbated.

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Appendix

Appendix A: Definitions of „Support Conversations“ or „Support Contacts“ in the Framework of health- and support-oriented Leadership (Information and Handout for the Group Discussion in German original Version and English).

German Version:

Bei Supportgesprächen im Rahmen dieser qualitativen Vorabuntersuchung im Rahmen meiner Dissertation handelt es entweder um einen zielgerichteten Austausch (z. B. Vieraugengespräch), oder um einen eher spontanen, informellen Austausch über belastende Situationen im Rahmen der täglichen Arbeit. Letzterer verläuft eher unreflektiert und beiläufig, d. h. es wird über aktuelle Situationen, Probleme gesprochen oder beispielsweise auch über Stress und Belastungen ohne sich dessen bewusst zu sein. Die Länge des Gesprächs spielt hierbei keine Rolle. Als Supportgespräch kann auch ein kurzer Austausch zur aktuellen Lage zu einem Projekt, zur Befindlichkeitslage, Motivation usw. bezeichnet werden. Die zielgerichtete Thematisierung von Gesundheitsfaktoren Stress; Belastung oder Erschöpfung (die als Auslöser für Burnout gelten) ist hierbei nur ein Teilbereich möglicher Inhalte. Die genannten Faktoren sind ein subjektiv empfundenes, unterschiedlich starkes Gefühl und werden von Betroffenen unterschiedlich definiert. Grundsätzlich handelt es sich dabei aber um Überforderungsgefühle aufgrund einer belastenden Situation, welche Mitarbeiter in der aktuellen, belastenden Situation zunächst auszuhalten müssen.

Supportgespräche können auch im privaten Kontext mit Freunden oder Familienmitgliedern stattfinden, bevorzugt mit Personen, die sich in ähnlichen Lebenslagen oder vergleichbaren Situationen befinden und zu denen eine starke Bindung und ein starkes Vertrauensverhältnis besteht geführt werden. Man spricht hierbei von privaten Unterstützungsnetzwerken. Aber auch im beruflichen Kontext sind solche Gespräche denkbar, zumindest dann, wenn ein entsprechendes Vertrauen und eine enge Bindung gegeben ist. Es wird angenommen, dass durch Supportgespräche nur selten ein konkreter Lösungsansatz für den Umgang mit Stress entsteht. Supportgespräche tragen vermutlich vielmehr zu einer emotionalen Entlastung, bzw. emotionalen Unterstützung bei - demnach tut es einfach gut, sich über den persönlich empfundenen, schädlichen und burnoutförderlichen Gesundheitsfaktoren auszutauschen oder das eigentliche Problem zu thematisieren.

Insbesondere gehe ich von folgenden Motiven und erhoffte Wirkungsweisen bzw. Funktionen von Supportgesprächen aus:

- Mitleid/Anteilnahme,
- Entlastung,
- Hilfe/Unterstützung,
- Zugehörigkeit/Suche nach Gleichgesinnten

- Werbung um Verständnis.

Vermutlich unterscheiden sich Personen darin, wie sie über Unterstützung sprechen und diese wahrnehmen.

English Version:

Support conversations in the framework of this qualitative preliminary investigation and in the context of my dissertation are either targeted exchanges (e.g., face-to-face conversations) or rather spontaneous, informal exchanges about stressful situations in the context of daily work. The latter tends to be unreflective and casual, i.e. current situations and problems are discussed or, for example, stress and strains are talked about without being aware of them. The length of the conversation is not important. A short exchange about the current situation of a project, the state of health, motivation, etc. can also be described as a support talk. The targeted discussion of health factors such as stress, strain or exhaustion (which are considered to be triggers for burnout) is only part of the possible content. The factors mentioned are a subjectively felt, differently strong feeling and are variously defined by those concerned. Basically, however, they are feelings of being overburdened by a stressful situation, which employees must initially endure in the current, demanding situation.

Support discussions can also take place in a private context with friends or family members, preferably with people who are in similar circumstances or comparable situations and with whom there is a strong bond and a strong relationship of trust. This is referred to as private support networks. But such conversations are also conceivable in a professional context, at least if there is a corresponding level of trust and a close bond. It is assumed that support conversations rarely lead to a concrete solution for dealing with stress. Support conversations presumably rather contribute to an emotional relief, or emotional support - according to this, it is simply good to exchange ideas about the personally perceived, harmful and burnout-promoting health factors or to address the actual problem.

In particular, I assume the following motives and hoped-for effects or functions of support conversations:

In particular, I assume the following motives and hoped-for modes of action or functions of support conversations:

- Compassion/participation,
- Relief,
- Help/Support,
- Affiliation/search for like-minded people
- Soliciting understanding.

Presumably, individuals differ in how they speak about support and how they perceive it.

Appendix B: Screening-Questionnaire (German original Version and English Version)

Used to recruit subjects.

Persönliche Angaben	
Name	
Alter	
E-Mail	
Handy	
Berufliche Informationen VOR dem Burnout	
Branche	
Produktbereich	
Position	
Jobzugehörigkeit	
Wochenarbeitszeit	
Subjektives Stressempfinden	
Ich bin gestresst...	
...NACH dem Burnout (Skala von 1 - 10) 1 = kein Stress, 10 = sehr viel Stress	
...VOR dem Burnout (Skala von 1 - 10) 1 = kein Stress, 10 = sehr viel Stress	

Source: authors work.

Personal Details	
Name	
Age	
E-Mail	
Cell	
Professional information BEFORE burnout	
Branch	
Product Area	

Position	
Job Tenure	
Weekly working Hours	
Subjective Perception of Stress	
I am stressed...	
...AFTER Burnout (Scale 1 - 10) 1 = no Stress, 10 = a Lot of Stress	
...BEFORE Burnout (Scale 1 - 10) 1 = no Stress, 10 = a Lot of Stress	

Source: authors work.

Appendix C: Guideline for the Group Discussion (German original Version)

Interview or discussion duration approx. 100 minutes.

Einführung	
Begrüßung und Organisation	<p><u>Inhalte:</u></p> <ul style="list-style-type: none"> ● <i>Begrüßung.</i> ● <i>Einigung auf persönliche Anrede.</i> ● <i>Organisatorische Hinweise: Zeit, Ablauf.</i> ● <i>Zusicherung von Datenschutz und Verschwiegenheit.</i> ● <i>„Spielregeln“ der Diskussion.</i>
Kurzfragebogen (vorab per E-Mail)	<p>„Bitte kurz ausfüllen und gerne als Grundlage für die folgende Diskussion nutzen.“</p> <p><u>Inhalte:</u></p> <ul style="list-style-type: none"> ● <i>„Wie viel Stress haben Sie aktuell, bedingt durch aktuelle Tätigkeiten (Skala: 1-10)?“</i> ● <i>„Wieviel Stress haben Sie bedingt durch die Tätigkeit VOR Ihrem Burnout empfunden?“</i> ● <i>„In welcher Situation haben Sie zuletzt mit jemandem über Stress gesprochen? Welche Personen waren das?“</i>
Warming-Up	
Vorstellungsrunde	<p>„Bitte stellen Sie sich anhand der folgenden Merkmale vor.“</p> <p><u>Inhalte:</u></p> <ul style="list-style-type: none"> ● <i>Vorname.</i> ● <i>Berufliche Position VOR dem Burnout.</i> ● <i>Welcher Produkt-Bereich in der Automobilindustrie VOR dem Burnout.</i> ● <i>Wie lange waren Sie in diesem Job bei Eintritt des Burnouts.</i> ● <i>Wochenarbeitszeit VOR dem Burnout.</i>
Einführung in das Thema und Vorstellung des Moderators	<p><u>Inhalte:</u></p> <p>„Ich bin Doktorand an der Universität Lettlands an der Fakultät Management & Economics und arbeite zurzeit an einer qualitativen Studie im Rahmen meines Dissertationsprojektes. Es interessiert mich hierbei die Frage der Auswirkungen von wahrgenommener sozialer Unterstützung durch den Vorgesetzten und die Auswirkungen dieser auf Burnout. Im Rahmen unseres Interviews bzw. unserer Diskussion, werden wir auch über verwandte Begriffe wie z. B. Stress oder Belastungen reden, da diese als Auslöser für Burnout gelten. Darüber hinaus stellen soziale Unterstützungsnetzwerke einen weiteren Fokus dar, mit der Frage, ob diese die Möglichkeit haben, schlechte Unterstützung in irgendeiner Form zu puffern, also dem Burnout präventiv zu begegnen. Da mir dieses Thema aufgrund meines eigenen Burnouts</p>

	<p>vor 6 Jahren sehr am Herzen liegt und und für meine Dissertation eine hohe Relevanz hat, möchte ich dieses Phänomen mit Ihnen gemeinsam beleuchten.“</p>
<p>Impuls für das Interview</p>	<p>„Wir beginnen nun mit dem Interview - ich lade Sie ein, Gedanken weiterzuspinnen, bzw. diese aktiv zu diskutieren. Es soll eine Gesprächsrunde entstehen. Ich werde für Impulse sorgen und bei den jeweiligen Punkten gezielt Nachfragen. Denken Sie bitte bei der Fragestellung daran: Es geht um die Zeit VOR Ihrem Burnout.“</p> <p><u>1. Frage:</u></p> <p>„Welchen Situationen während der täglichen Arbeit waren für Euch besonders belastend?“</p> <p>„Bitte tauschen Sie sich dazu aus.“ (ca. 10 Minuten diskutieren lassen).</p> <p>Weitere Impulse (um Diskussion aufrecht zu erhalten):</p> <ul style="list-style-type: none"> • Persönliches Beispiel der Moderatorin • Wie geht es Ihnen dann in dieser Situation? • Wie steht Ihr Vorgesetzter zu dem Problem? • Wie äußert sich der Stress bei Ihnen?
<p>Reflexion</p>	<p>„Vielen Dank für den ehrlichen Austausch.“</p> <p><u>2. Frage:</u></p> <p>„Wie gerne redet Ihr über Stress und berufliche Belastungen?“</p> <p>Weitere Impulse (um Diskussion aufrecht zu erhalten):</p> <ul style="list-style-type: none"> • „Wie hat sich Unterstützung durch den Vorgesetzten für Sie angefühlt? • Inwiefern thematisiert ihr Euren Stress auch im Alltag?
<p>Hauptteil</p>	
<p>1. Themenblock: Rahmenbedingungen</p>	<p><u>3. Frage (Grundreiz):</u></p> <p>„Denken Sie bitte nun an Situationen, in der Sie durch Ihren Vorgesetzten Unterstützung erhielten. Beschreibt diese und tauschen Sie sich darüber aus!“</p> <p>Fragensammlung: (freie Diskussion, bei Bedarf nachhaken)</p> <ul style="list-style-type: none"> • Wo findet soziale Unterstützung durch den Vorgesetzten statt? • In welchen Situationen thematisieren Sie Stress und Belastungen? • In welchen Situationen brauchen Sie Unterstützung? • Wie häufig werden Sie unterstützt?

	<ul style="list-style-type: none"> • <i>Wie leiten Sie Gespräche ein, in denen Sie Unterstützung benötigen oder Ihren Stress und Ihre Belastung thematisieren?</i> • <i>Welche Medien nutzen Sie für den persönlichen Austausch vorzugsweise?</i> • <i>Wie stehen Sie dazu, mit der Führungskraft offen über Stress und Belastungen zu sprechen?</i>
2. Themenblock: Inhalte	<p><u>4. Frage (Grundreiz – Begriffssammlung):</u></p> <p>„Wie können Sie die Inhalte sozialer Unterstützung durch Ihren Vorgesetzten beschreiben?“</p> <p><i>Fragensammlung: (erst frei erzählen lassen, bei Bedarf nachhaken)</i></p> <ul style="list-style-type: none"> • <i>Worüber haben Sie das letzte Mal gesprochen als Sie in einer belastenden Situation gewesen waren?</i> • <i>Welche Themen vermeiden Sie im Supportgespräch?</i> <p><i>Nachhaken: Themen, Konflikte, involvierte Personen</i></p>
3. Themenblock: Funktion	<p><u>5. Frage (Grundreiz):</u></p> <p>„Was bewirkt soziale Unterstützung durch den Vorgesetzten bei Ihnen?“</p> <p><i>Fragensammlung: (erst freie Schilderungen, bei Bedarf nachhaken)</i></p> <ul style="list-style-type: none"> • <i>Wie fühlen Sie sich, während und nachdem Sie sich über Ihren Stress unterhalten haben?</i> • <i>Inwiefern hilft Ihnen die Thematisierung von Stress bei Ihrer Stressbewältigung?</i> • <i>Was ist üblicherweise das Ergebnis, wenn Sie Stress und Belastungen thematisieren?</i> • <i>Mit wem reden Sie sonst über Belastungen, Stress und Probleme?</i> <p><i>Nachhaken: Ziele, Hoffnungen, Motivation, Funktionen: Mitleid, Entlastung, Anteilnahme, Hilfe/Unterstützung, Zugehörigkeit, Gleichgesinnte finden, Klarstellung von Fakten, um Verständnis werben.</i></p>
Abschluss	
Zusammenfassung	<p>„Da wir uns dem Ende nähern, versuche ich, einmal zusammenzufassen, was soeben im Interview bzw. der Diskussion angesprochen wurde.“</p> <p>...</p>

Letzte Frage	<i>Frage 6: „Welches soziale Unterstützungsnetzwerk (Freunde, Familie oder Kollegen) nutzen Sie primär um Belastung und Stress zu thematisieren und warum?“</i>
Abschluss	<i>Dank an alle Teilnehmer. Beantwortung offener Fragen.</i>

Source: authors work.

Introduction	
Welcoming and Procedure	<p><u>Contents:</u></p> <ul style="list-style-type: none"> • <i>Welcoming.</i> • <i>Agreement on personal salutation.</i> • <i>Organizational notes: Time, procedure.</i> • <i>Assurance of data protection and confidentiality.</i> • <i>Dos and don'ts of the discussion.</i>
Short questionnaire (in advance by e-mail)	<p><i>„Please fill in briefly and feel free to use as a basis for the following discussion.“</i></p> <p><u>Contents:</u></p> <ul style="list-style-type: none"> • <i>"How much stress do you currently have, due to current activities (scale: 1-10)?"</i> • <i>"How much stress did you feel due to the job BEFORE you experienced burnout?"</i> • <i>"In what situation did you last talk to someone about stress? Which people were they?"</i>
Warming-Up	
Introduction Round	<p><i>„Please introduce yourself using the following characteristics:"</i></p> <p><u>Inhalte:</u></p> <ul style="list-style-type: none"> • <i>First Name.</i> • <i>What was your professional position BEFORE the burnout?</i> • <i>Which product area have you worked in the automotive industry BEFORE the burnout?</i> • <i>How have you been in this job when the burnout occurred?</i> • <i>How many weekly working hours have you worked BEFORE the burnout?</i>
Introduction to the Topic and Introduction of the Moderator	<p><u>Contents:</u></p> <p><i>„I am a PhD student at the University of Latvia at the Faculty of Management & Economics, and I am currently working on a qualitative study as part of my dissertation project. I am interested in the question of the impact of perceived social support from the supervisor on burnout. During our interview or discussion, we will also talk about related</i></p>

	<p>concepts such as stress or strain, as these are considered triggers for burnout. In addition, social support networks are another focus, with the question of whether they have the ability to buffer poor support in some way, i.e., to preventively counter burnout. Since this topic is very close to my heart due to my own burnout 6 years ago and has a high relevance for my dissertation, I would like to shed light on this phenomenon together with you."</p>
Impetus for the Interview	<p>"We will now begin with the interview - I invite you to continue spinning thoughts or to discuss them actively. A discussion round is to develop. I will provide impulses and ask specific questions on the respective points. When asking the questions, please remember: It's about the time BEFORE your burnout."</p> <p><u>1st question:</u></p> <p>"Which situations during your daily work were particularly stressful for you?"</p> <p>"Please share your thoughts on this." (Allow about 10 minutes to discuss).</p> <p>Further impulses (to keep discussion going):</p> <ul style="list-style-type: none"> ● Personal example of the moderator ● How do you feel about this situation then? ● How does your supervisor feel about the problem? ● How does the stress manifest itself for you?
Reflexion	<p>"Thank you for the honest exchange."</p> <p><u>2nd question:</u></p> <p>"How do you like to talk about stress and job strain?"</p> <p>Further prompts (to keep discussion going):</p> <ul style="list-style-type: none"> ● How did support from your supervisor make you feel? ● To what extent do you also address your stress in everyday life?
Main Part	
1st Block of Topics: General Conditions	<p><u>3rd question (basic stimulus):</u></p> <p>"Now please think of situations in which you received support from your supervisor. Describe these and share your thoughts about them!"</p> <p>Question collection: (free discussion, follow up as needed).</p> <ul style="list-style-type: none"> ● Where does social support by the superior take place? ● In which situations do you discuss stress and strain? ● In which situations do you need support? ● How often do you get support? ● How do you initiate conversations in which you need support or address your stress and strain?

	<ul style="list-style-type: none"> • Which media do you prefer to use for personal exchange? • How do you feel about talking openly about stress and strain with your manager?
2nd Block of Topics: Contents	<p><u>4th question (basic stimulus - term collection):</u></p> <p>"How can you describe the content of social support provided by your supervisor?"</p> <p>Question collection: (allow free narrative first, follow up as needed).</p> <ul style="list-style-type: none"> • What did you talk about the last time you were in a stressful situation? • What topics do you avoid in the support conversation? <p>Follow-up: topics, conflicts, people involved</p>
2nd Block of Topics: Function	<p><u>5th question (basic stimulus):</u></p> <p>"What does social support from your supervisor do to you?"</p> <p>Collection of questions: (first free descriptions, follow up as needed). ken)</p> <ul style="list-style-type: none"> • How do you feel while and after talking about your stress? • In what ways does talking about stress help you cope with stress? • What is usually the outcome when you bring up stress and strain? • Who else do you talk to about stresses, strains, and problems? <p>Follow up: goals, hopes, motivation. Functions: Compassion, relief, sympathy, help/support, affiliation, finding like-minded people, clarifying facts, soliciting understanding.</p>
Conclusion	
Summary	<p>"Since we are nearing the end, I will try to summarize what has just been addressed in the interview or discussion." ...</p>
Last Question	<p>Question 6: "Which social support network (friends, family or colleagues) do you primarily use to address strain and stress and why?"</p>
End of Discussion	<p>Thanking all participants. Answering open questions.</p>

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Source: authors work.

Appendix D: Short-Questionnaire as a Basis for Discussion

Bitte füllen Sie den Fragebogen aus. Er dient als Anregung zur Diskussion.

Wie viel Stress haben Sie kurz vor Ihrem Burnout empfunden?	
Skala 1 - 10	
Welche fünf Begriffe fallen Ihnen ein, wenn Sie an „Stress“ denken?	1. _____ 2. _____ 3. _____ 4. _____ 5. _____
Mit wem haben Sie in erster Linie über Stress gesprochen?	

Source: authors work.

Please complete the questionnaire. It serves as a suggestion for discussion.

How much Stress did you feel just before your Burnout?	
Scale 1 - 10	
What five terms come to mind when you think of "stress"?	1. _____ 2. _____ 3. _____ 4. _____ 5. _____
Who did you talk to primarily about stress?	

Source: authors work.

Appendix E: Examples from the Group Discussion (German original Version and English Version)

Example 1 (german):

Teilnehmer 4: „Und dann habe ich ihm eine Mail geschrieben, er hat aber nicht geantwortet. Ja, und dann habe ich ihn per Telefon erwischt: ‚Das ist gerade alles total viel für mich, ich bin unterwegs‘, und er so: ‚Ja, das ist doch kein Stress‘. Und insofern ist das auch ähnlich, wie bei dir, Teilnehmer 2, nur dass ich öfter beim Kunden bin. Es ist einfach schlimm, wenn er die Situation ständig herunterspielt.“

Teilnehmer 2: „Wirst du dann wütend?“

Teilnehmer 4: „Klar, das ist richtig schlimm.“

Teilnehmer 2: „Steigert es das Stresslevel?“

Teilnehmer 4: „Wenn man sich so denkt: ‚Eigentlich war die Situation im Nachhinein gar nicht schlimm. Ich habe aber gerade einfach keine Zeit mich auf die zusätzlichen Aufgaben zu 100% zu konzentrieren, und ich erwarte mir, dass er das auch versteht. Und es geht gar nicht, dass er mich ständig mit anderen vergleicht. Bei Kollegen ist die Situation schließlich unterschiedlich. Das ‚Hier, das ist doch kein Stress für dich‘, bewirkt bei mir das krasse Gegenteil, das ist keine Unterstützung, sondern ein Brandbeschleuniger.“

Teilnehmer 2: „In welchen Situationen sprichst du mit deinem Chef richtig über Stress?“

Teilnehmer 4: „Also so richtige Situationen? Sprichst du von einem wirklichem Vier-Augengespräch über Probleme und Stress oder meinst du nur dieses beiläufige rumjammern?“

Teilnehmer 1: „Das kommt ja alles eher immer so indirekt raus [Lachen]“

Teilnehmer 6: „Würde mich wundern, wenn es bei euch anders wäre [Lachen].“

Teilnehmer 5: „Wir reden jetzt doch über Stress!“ [Lachen der Gruppe]

Teilnehmer 4: „Also wo ich tatsächlich mit ihm intensiv über Stress und Probleme gesprochen habe, wo er es auch als das Einfordern von Unterstützung verstanden hatte, ist schon lange her. Das war das letzte Mal im Jahresendgespräch, letztes Jahr..., vorletztes Jahr? Fragt mich nicht, ob das was gebracht hat, ich glaube nicht, sonst hätte es ja was gebracht. Mein Chef ist da nicht besonders einfach, er hat da einen ganz schweren Geltungsdrang, sieht andere Probleme nur aus seiner Sicht und kann sich nicht unbedingt gut in Mitarbeiter hineinversetzen. Das kommt ja zum Stress wegen der vielen Arbeitszeit noch dazu, das ist einfach... ja psychologischer Stress würde ich schon sagen. Ich will nicht sagen, dass er kein Herz hat, aber so ein Verhalten

strahlt aus, das Teamgefüge aus, das ist angegriffen... ganz schlechtes Betriebsklima. Das ist für mich... ja, ich empfinde Stress bei sowas, das macht mich kaputt. Ich habe auch schon mit Kollegen darüber gesprochen, und da auch tatsächlich viel mit Leuten darüber gesprochen denen ich vertraue, aber eher so im Sinne von, ich brauche mal ein Ratschlag, wie ich mit diesem Thema umgehen kann, wie ich in diesem Team unter diesem Chef, arbeiten kann, dass es mich persönlich nicht mehr so sehr angreift, also so erschöpft und stresst. In dem Kontext eher.“

Teilnehmer 6: Da stellt sich für mich die Frage wann Unterstützung anfängt. Ich führe Stressgespräche mit dem Chef gefühlt ständig, auch wenn sie nur kurz und am Rande sind. Aber wenn er fragt ‚Wie geht’s dir?‘, dann kommt auch ganz oft der Gedanke ob er es ernst meint, oder es nur beiläufig und der Freundlichkeit halber tut. Für viel mehr als ein ‚Gut‘ oder ‚nicht gut‘ ist da keine Zeit abgesehen davon.“

Example 1 (english):

Participant 4: "And then I wrote him an e-mail, but he didn't answer. Yes, and then I caught him on the phone: „This is all totally a lot for me right now, I'm on the road', and he was like: 'Yes, that's not stress'. And in that sense it's also similar to you, Participant 2, except that I'm with the customer more often. It's just bad when he's constantly downplaying the situation.“

Participant 2: „Do you get angry then?“

Participant 4: „Sure, it's really bad.

Participant 2: „Does it increase the stress level?“

Participant 4: „When you think to yourself, Actually, in retrospect, the situation wasn't bad at all. But I just don't have time right now to focus 100% on the extra tasks, and I expect him to understand that. And I can't have him constantly comparing me to others. After all, the situation is different for colleagues. The 'Here, this isn't stress for you,' has the stark opposite effect on me; it's not support, it's an accelerant.

Participant 2: „In what situations do you really talk to your boss about stress?“

Participant 4: „So real situations like that? Are you talking about a real one-on-one conversation about problems and stress or do you just mean this casual whining around?“

Participant 1: „It all comes out rather indirectly [laughter].“

Participant 6: „I'd be surprised if it was any different with you guys [laughter].“

Participant 5: „We're talking about stress now, after all!“ [Group laughter]

Participant 4: „So where I actually talked to him intensively about stress and problems, where he also understood it as asking for support, was a long time ago. That was the last time in the year-end meeting, last year..., year before last? Don't ask me if that did anything, I don't think so, otherwise it would have. My boss is not particularly

easy to deal with, he has a very strong urge to get money, sees other problems only from his own point of view and can't necessarily put himself in the shoes of his employees very well. That comes on top of the stress because of the long working hours, it's just... yes, psychological stress, I would say. I don't want to say that he doesn't have a heart, but this kind of behavior radiates out, the team structure is attacked... a very bad working atmosphere. For me, that's... yes, I feel stress when I see something like that, it destroys me. I've also talked to colleagues about it, and I've actually talked a lot to people I trust about it, but more in the sense of, I need some advice on how I can deal with this issue, how I can work in this team under this boss, so that it doesn't attack me personally so much anymore, so exhausted and stressed. In that context, rather.“

Participant 6: „That begs the question for me of when support starts. I have stress conversations with the boss felt all the time, even if they're brief and on the sidelines. But when he asks 'How are you?', then the thought often comes whether he means it seriously or just casually and for the sake of friendliness. There's no time for much more than a 'good' or 'not good' apart from that.“

Example 2 (german):

Teilnehmer 1: „Das finde ich krass, Teilnehmer 3. Also, dass du da so verängstigt bist. Also das wirkt so, als ob das für dich so ein ziemlich, ja, belastendes Thema oder zumindest ein Thema ist, wo du nur mit sehr engen Vertrauten drüber sprechen kannst. Also das klingt für mich so, als wäre es sehr schlimm für dich, das vor deinem Vorgesetzten so einzugestehen, oder darüber zu sprechen - berichte mich ruhig, wenn ich da falsch liege, ...also schlimm finde ich es nun gar nicht meinen Chef zu sagen ‚Ich bin gestresst‘ [Zustimmung in der Gruppe]. Man macht es vielleicht nicht so häufig oder halt nur in gewissen Situationen oder im bestimmten Rahmen, bei Meetings nicht unbedingt. Aber auf der anderen Seite muss mein Vorgesetzter es auch unbedingt wissen, wenn es mir schlecht geht. Manche Sachen erzählt man einfach im bestimmten Rahmen nicht, aber schlimm finde ich es gar nicht darüber zu sprechen oder sogar zu sagen ‚Mir geht es gut‘. Ich finde da gibt es andere Sachen wie ‚Ich bin traurig‘ oder ‚Ich bin erschöpft‘, das würde ich zum Beispiel nicht so [Zustimmung] offen erzählen. Stress ist irgendwie so ein Begriff der zu häufig verwendet wird, ...hat kein Gewicht.“

Teilnehmer 2: „Es kommt drauf an, was es für ein Stress ist, würde ich behaupten.“

Teilnehmer 6: „Ja klar, wenn's emotionaler Stress ist, weil [Zustimmung der Gruppe] irgendwas Persönliches dahinter steht.“

Teilnehmer 4: Also das erzähl ich dann definitiv nicht. Ich sag dann nur: „Ich bin gestresst“.

Teilnehmer 5: „Ganz klar.“

Teilnehmer 6: „Ja warum?“

Teilnehmer 4: „Ich denke das könnte als Schwäche gewertet werden. Ja, ich will da einfach nicht drüber reden. Das wird wie anderen Kollegen wiederum anders sein, ist eine persönliche Einstellung.“

Teilnehmer 2: „Ja, es kommt auch drauf an, was es für ein Stress ist, sagte ich ja.“

Teilnehmer 4: „Klar.“

Teilnehmer 1: „Darf ich nochmal fragen, was ihr genau mit Situation meint. Rahmenbedingungen sozialer Unterstützung?“

Moderator: „Gerne auch wirklich eine Situation in der du mit deinem Chef über Probleme oder deine Befindlichkeit oder beispielsweise über Stress gesprochen hast. Eine Situation in der du soziale Unterstützung wahrgenommen hast.“

Teilnehmer 1: „Ich rede eher mit Kollegen über sowas. Nicht mit jeden, nur Enge.“

[Schmunzeln der Gruppe]

Teilnehmer 1: Bei Flurgesprächen kommt das zwangsläufig. Jeder weiß gleich was mit den eigenen Problemen gemeint ist. Viele haben die gleichen. Ob das Jammern zielführend ist und ob sich so die Situation bessert... ja, ich glaube, das ist ne rhetorische Frage.“

Example 2 (english):

Participant 1: „I think that's crass, Participant 3, that you're so scared. So it seems as if this is a rather, yes, stressful topic for you or at least a topic where you can only talk about it with very close confidants. So it sounds to me as if it would be very bad for you to admit it in front of your superior, or to talk about it - correct me if I'm wrong, ...so I don't think it's bad at all to say to my boss 'I'm stressed' [agreement in the group]. Maybe you don't do it so often, or only in certain situations or within a certain framework, not necessarily at meetings. But on the other hand, my supervisor also has to know if I'm feeling bad. Some things you just don't tell in a certain context, but I think it's bad not to talk about it or even to say 'I'm fine'. I think there are other things like 'I'm sad' or 'I'm exhausted', I wouldn't openly say that, for example. Stress is kind of a term that's used too much, ...doesn't carry any weight.“

Participant 2: „It depends on what kind of stress it is, I would argue.“

Participant 6: „Yeab sure, if it's emotional stress, because [group agreement] there's something personal behind it.“

Participant 4: So I definitely don't tell that then. I just say then, „I'm stressed.“

Participant 5: „Clearly.“

Participant 6: „Yes, why?“

Participant 4: „I think that could be seen as weakness. Yes, I just don't want to talk about it. That will be different like other colleagues again, is a personal attitude.“

Participant 2: „Yeah, it also depends on what kind of stress it is, I told you.“Participant 4: „Sure.“

Participant 1: „Can I ask again what exactly you mean by situation. Social support framework?“

Moderator: „Gladly really a situation where you talked to your boss about problems or your state of mind or stress for example. A situation in which you perceived social support.“

Participant 1: "I talk more with colleagues about something like that. Not with everybody, just tightness.“

[Group smirk.]

Participant 1: „With hallway conversations, it's bound to happen. Everyone knows right away what is meant by their own problems. Many have the same ones. Whether complaining is effective and whether the situation improves in this way... yes, I think that's a rhetorical question.“

Appendix F: Maslach Burnout Inventory - MBI-D (Büssing & Perrar, 1992)⁴⁷⁵

Instruction (german):

„Im Folgenden finden Sie einige Aussagen zu Gefühlen, die sich auf Ihre Arbeit beziehen. Falls bei Ihnen das angesprochene Gefühl nie auftritt, kreuzen Sie bitte „Dieses Gefühl tritt nie auf“. Falls das angesprochene Gefühl bei Ihnen auftritt bzw. Sie das Gefühl kennen, geben Sie bitte an, wie häufig das Gefühl bei Ihnen auftritt.“

O nie O sehr selten O eher selten O manchmal O eher oft O sehr oft

Emotionale Erschöpfung (9 Items):

1. Ich fühle mich durch meine Arbeit frustriert.
2. Ich fühle mich durch meine Arbeit ausgebrannt.
3. Am Ende eines Arbeitstages fühle ich mich verbraucht.
4. Ich fühle mich durch meine Arbeit gefühlsmäßig erschöpft.
5. Den ganzen Tag mit meinen Kunden zu arbeiten, ist für mich wirklich anstrengend.
6. Ich fühle mich wieder müde, wenn ich morgens aufstehe und den nächsten Arbeitstag vor mir habe.
7. Der direkte Kontakt mit Kunden bei meiner Arbeit belastet mich zu stark.
8. Ich habe das Gefühl, dass ich nicht mehr kann.
9. Ich habe das Gefühl, dass ich an meinem Arbeitsplatz zu hart arbeite.

Depersonalisation (5 Items):

1. Ich fürchte, dass mich diese Arbeit gefühlsmäßig verhärtet.
2. Es ist mir eigentlich egal, was aus manchen Kunden wird.
3. Seitdem ich diese Arbeit ausübe, bin ich gefühlloser im Umgang mit Kunden geworden.
4. Ich habe ein unbehagliches Gefühl wegen der Art und Weise, wie ich manche Kunden behandelt habe.
5. Ich glaube, dass ich manche Kunden so behandle, als wären sie unpersönliche Objekte.

Reduced Personal Accomplishment (7 Items):

1. Ich habe das Gefühl, dass ich durch meine Arbeit meine Kunden negativ beeinflusse.
2. Ich fühle mich wenig tatkräftig.
3. Es ist schwer für mich, eine entspannte Atmosphäre mit meinen Kunden herzustellen.

⁴⁷⁵ Büssing, A., & Perrar, K.-M. (1992): Die Messung von Burnout. Untersuchung einer deutschen Fassung des Maslach Burnout Inventory (MBI-D). Diagnostica, 38(4), pp. 328-353.

4. Es fällt mir schwer, mich in meine Kunden hinzusetzen.
5. Ich habe in dieser Arbeit wenig lohnenswerte Dinge erreicht.
6. Mit den Problemen meiner Kunden umzugehen fällt mir schwer.
7. Meine Stimmung ist gedrückt, wenn ich intensiv mit meinen Kunden gearbeitet habe.

Instruction (english):

„Below are some statements about feelings that relate to your work. If the feeling mentioned never occurs with you, please tick ‚never‘. If the feeling addressed occurs to you or you know the feeling, please indicate how often the feeling occurs to you.“

never very rarely rather rarely sometimes rather often very often

Emotional Exhaustion (9 Items):

1. I feel frustrated by my job.
2. I feel burned out from my work.
3. I feel used up at the end of the workday.
4. I feel emotionally exhausted by my work.
5. Working with my colleagues all day is really exhausting for me.
6. I feel fatigued when I get up in the morning and have to face another day on the job.
7. Direct contact with colleagues at my work puts too much strain on me.
8. I feel like I'm at the end of my rope.
9. I feel I'm working too hard on the job.

Depersonalization (5 Items):

1. I worry that this job is hardening me emotionally.
2. I don't really care what happens to some people.
3. I've become more callous toward people since I took this job.
4. I have an uneasy feeling about the way I have treated some people.
5. I feel I treat some colleagues as if they were impersonal objects.

Reduced Personal Accomplishment (7 Items):

1. I feel I'm negatively influencing other people's lives through my work.
2. I feel little energetic.
3. It's hard for me to create a relaxed atmosphere with my clients.
4. I can easily understand how my colleagues feel about things.
5. I haven't accomplished many worthwhile things in this job.
6. I deal very effectively with the problems of my recipients.
7. I feel depressed after working closely with my recipients.

Appendix G: Perceived Supervisor Support - SPSS (Kottke & Sharafinski, 1988)⁴⁷⁶

Instruction:

„Listed below and on the next several pages are statements that represent possible opinions that you may have about working at your company. Please indicate the degree of your agreement or disagreement with each statement by filling in the circle on your answer sheet that best represents your point of view about your supervisor. Please choose from the following answers:“

O strongly disagree O moderately disagree O slightly Disagree O neither agree nor disagree O slightly agree O moderately agree O strongly agree

1. My supervisor values my contribution to my companies well-being.
2. If my supervisor could hire someone to replace me at a lower salary it would do so.
3. My supervisor fails to appreciate any extra effort from me. (R)
4. My supervisor strongly considers my goals and values.
5. My supervisor would understand a long absence due to my illness.
6. My supervisor would ignore any complaint from me. (R)
7. My supervisor disregards my best interests when it makes decisions that affect me. (R)
8. Help is available from my supervisor when I have a problem.
9. My supervisor really cares about my well-being.
10. My supervisor is willing to extend itself in order to help me perform my job to the best of my ability.
11. My supervisor would fail to understand my absence due to a personal problem. (R)
12. If my supervisor found a more efficient way to get my job done, they would replace me. (R)
13. My supervisor would forgive an honest mistake on my part.
14. It would take only a small decrease in my performance for my supervisor to want to replace me. (R)
15. My supervisor feels there is little to be gained by employing me for the rest of my career. (R)
16. My supervisor provides me little opportunity to move up the ranks. (R)
17. Even if I did the best job possible, my supervisor would fail to notice. (R)
18. My supervisor would grant a reasonable request for a change in my working conditions.
19. If I were laid off, my supervisor would prefer to hire someone new rather than take me back. (R)
20. My supervisor is willing to help me when I need a special favor.

⁴⁷⁶ Kottke, J. L., & Sharafinski, C. E. (1988): Measuring Perceived Supervisory and Organizational Support. *Educational and Psychological Measurement*, 48(4), pp. 1075-1079.

21. My supervisor cares about my general satisfaction at work.
22. If given the opportunity, my supervisor would take advantage of me. (R)
23. My supervisor shows very little concern for me. (R)
24. If I decided to quit, my supervisor would try to persuade me to stay.
25. My supervisor cares about my opinions.
26. My supervisor feels that hiring me was a definite mistake. (R)
27. My supervisor takes pride in my accomplishments at work.
28. My supervisor cares more about making a profit than about me. (R)
29. My supervisor would understand if I were unable to finish a task on time.
30. If my supervisor earned a greater profit, it would consider increasing my salary.
31. My supervisor feels that anyone could perform my job as well as I do. (R)
32. My supervisor is unconcerned about paying me what I deserve. (R)
33. My supervisor wishes to give me the best possible job for which I am qualified.
34. If my job were eliminated, my supervisor would prefer to lay me off rather than transfer me to a new job. (R)
35. My supervisor tries to make my job as interesting as possible.
36. My supervisors are proud that I am a part of this organization.

Remark: (R) indicates the item is reverse scored.

Appendix H: EVOS - Evaluation of social Systems (Schweitzer, Aguilar-Raab & Hunger, 2014)⁴⁷⁷

Instruction:

„In the following your work colleagues are in the foreground. If there is a small number of trusted people in your organization, who are important to you and with whom you can have a close, trusting relationship, discuss personal matters and receive social support, how would you rate the quality of this support network?“

O very poor O poor O good O very good

1. For me, the way we talk to each other, is...
2. For me, the way we stick together, is...
3. For me, what we do for each other, is...
4. For me, the feeling between us, is...
5. For me, the way we decide what needs to be done, is...
6. For me, the way we recognize what will help us in reaching our goals, is...
7. For me, the way we make decisions, is...
8. For me, the way we find solutions to problems, is...
9. For me, how we adapt to change, is...

Instruction:

„Think of your family now. If there is a small number of trusted people in your family, who are important to you and with whom you have a close, trusting relationship, discuss personal matters and receive social support; how would you rate the quality of this support network?“

1. For me, the way we talk to each other, is...
2. For me, the way we stick together, is...
3. For me, what we do for each other, is...
4. For me, the feeling between us, is...
5. For me, the way we decide what needs to be done, is...
6. For me, the way we recognize what will help us in reaching our goals, is...
7. For me, the way we make decisions, is...
8. For me, the way we find solutions to problems, is...
9. For me, how we adapt to change, is...

⁴⁷⁷ Schweitzer, J.; Aguilar-Raab, C. & Hunger, C. (2014): Systemveränderungen messbar machen: EVOS und EXIS als neuartige „Systemfragebögen“. Kontext, 45(4). Göttingen: Vandenhoeck & Ruprecht, pp. 416-429.

Instruction:

„Please think of your friends now. If there is a small number of trusted people in your circle of friends who are important to you and with whom you can have a close, trusting relationship, discuss personal matters and receive social support, how would you rate the quality of this support network?“

1. For me, the way we talk to each other, is...
2. For me, the way we stick together, is...
3. For me, what we do for each other, is...
4. For me, the feeling between us, is...
5. For me, the way we decide what needs to be done, is...
6. For me, the way we recognize what will help us in reaching our goals, is...
7. For me, the way we make decisions, is...
8. For me, the way we find solutions to problems, is...
9. For me, how we adapt to change, is...

Appendix I: 10-Item Big-Five Inventory - BFI-10 (Rammstedt, Kemper, Klein, Beierlein, & Kovleva, 2013)⁴⁷⁸, English and German Items.

BFI-10

English Items

I see myself as someone who ...

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	can't choose
is reserved	1	2	3	4	5	
is generally trusting	1	2	3	4	5	
does a thorough job	1	2	3	4	5	
is relaxed, handles stress well	1	2	3	4	5	
has an active imagination	1	2	3	4	5	
is outgoing, sociable	1	2	3	4	5	
tends to find fault with others	1	2	3	4	5	
tends to be lazy	1	2	3	4	5	
gets nervous easily	1	2	3	4	5	
has few artistic interests	1	2	3	4	5	

⁴⁷⁸ Rammstedt, B.; Christoph, J.; Kemper, M.; Klein, C.; Beierlein, C. & Kovaleva, A. (2013): Eine kurze Skala zur Messung der fünf Dimensionen der Persönlichkeit: Big-Five-Inventory-10 (BFI-10), Working Papers, 2012/23. Mannheim: GESIS - Leibniz-Institut für Sozialwissenschaften.

BFI-10

German Items (Germany)

Ich...

	trifft voll und ganz zu	trifft eher zu	weder noch	trifft eher nicht zu	trifft überhaupt nicht zu	Kann ich nicht sagen
bin eher zurückhaltend, reserviert	1	2	3	4	5	
schenke anderen leicht Vertrauen, glaube an das Gute im Menschen.	1	2	3	4	5	
erledige Aufgaben gründlich.	1	2	3	4	5	
bin entspannt, lasse mich durch Stress nicht aus der Ruhe bringen.	1	2	3	4	5	
habe eine aktive Vorstellungskraft, bin phantasievoll.	1	2	3	4	5	
gehe aus mir heraus, bin gesellig.	1	2	3	4	5	
neige dazu, andere zu kritisieren.	1	2	3	4	5	
zu Trägheit neigt	1	2	3	4	5	
werde leicht nervös und unsicher.	1	2	3	4	5	
habe nur wenig künstlerisches Interesse.	1	2	3	4	5	

Source: *GESIS - Leibniz-Institute for the Social Sciences*. <https://www.gesis.org/en/services/study-planning/items-scales/bfi-10/>

Appendix J: 36-Item short Form Survey – SF-36 (Hays, Sherbourne & Mazel, 1993)⁴⁷⁹

1. In general, would you say your health is:

- (Circle One Number)
- Excellent1
 - Very good2
 - Good3
 - Fair4
 - Poor5

2. Compared to one year ago, how would you rate your health in general now?

- (Circle One Number)
- Much better now than one year ago.....1
 - Somewhat better now than one year ago.....2
 - About the same.....3
 - Somewhat worse now than one year ago.....4
 - Much worse now than one year ago.....5

The following items are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

	(Circle One Number on Each Line)		
	Yes, limited a lot	Yes, limited a little	No, not limited at all
3. Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports.....	1	2	3
4. Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf.....	1	2	3
5. Lifting or carrying groceries.....	1	2	3
6. Climbing several flights of stairs.....	1	2	3
7. Climbing one flight of stairs.....	1	2	3
8. Bending, kneeling, or stooping.....	1	2	3
9. Walking more than a mile.....	1	2	3
10. Walking several blocks.....	1	2	3
11. Walking one block.....	1	2	3
12. Bathing or dressing yourself.....	1	2	3

	(Circle One Number on Each Line)	
	Yes	No
13. Cut down the amount of time you spent on work or other activities.....	1	2
14. Accomplished less than you would like.....	1	2
15. Were limited in the kind of work or other activities.....	1	2
16. Had difficulty performing the work or other activities (for example, it took extra effort).....	1	2

⁴⁷⁹ Hays, R. D.; Sherbourne, C. D. & Mazel, R. M. (1993): The RAND 36-Item Health Survey 1.0. Health Economics, 2, Hoboken: Wiley, pp. 217-227.

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?

(Circle One Number on Each Line)

- | | Yes | No |
|---|-----|----|
| 17. Cut down the amount of time you spent on work or other activities..... | 1 | 2 |
| 18. Accomplished less than you would like..... | 1 | 2 |
| 19. Didn't do work or other activities as carefully as usual..... | 1 | 2 |
| 20. During the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbours, or groups? | | |

(Circle One Number)

- Not at all.....1
- Slightly2
- Moderately3
- Quite a bit.....4
- Extremely5

21. How much bodily pain have you had during the past 4 weeks?

(Circle One Number)

- None1
- Very mild2
- Mild3
- Moderate4
- Severe5
- Very severe6

22. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?

(Circle One Number)

- Not at all.....1
- A little bit.....2
- Moderately3
- Quite a bit.....4
- Extremely5

These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling.

How much of the time during the past 4 weeks...

These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling.

How much of the time during the past 4 weeks...

	(Circle One Number on Each Line)					
	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
23. Did you feel full of pep?.....	1	2	3	4	5	6
24. Have you been a very nervous person?.....	1	2	3	4	5	6
25. Have you felt so down in the dumps that nothing could cheer you up?.....	1	2	3	4	5	6
26. Have you felt calm and peaceful?.....	1	2	3	4	5	6
27. Did you have a lot of energy?.....	1	2	3	4	5	6
28. Have you felt downhearted and blue?.....	1	2	3	4	5	6
29. Did you feel worn out?.....	1	2	3	4	5	6
30. Have you been a happy person?.....	1	2	3	4	5	6
31. Did you feel tired?.....	1	2	3	4	5	6

32. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?

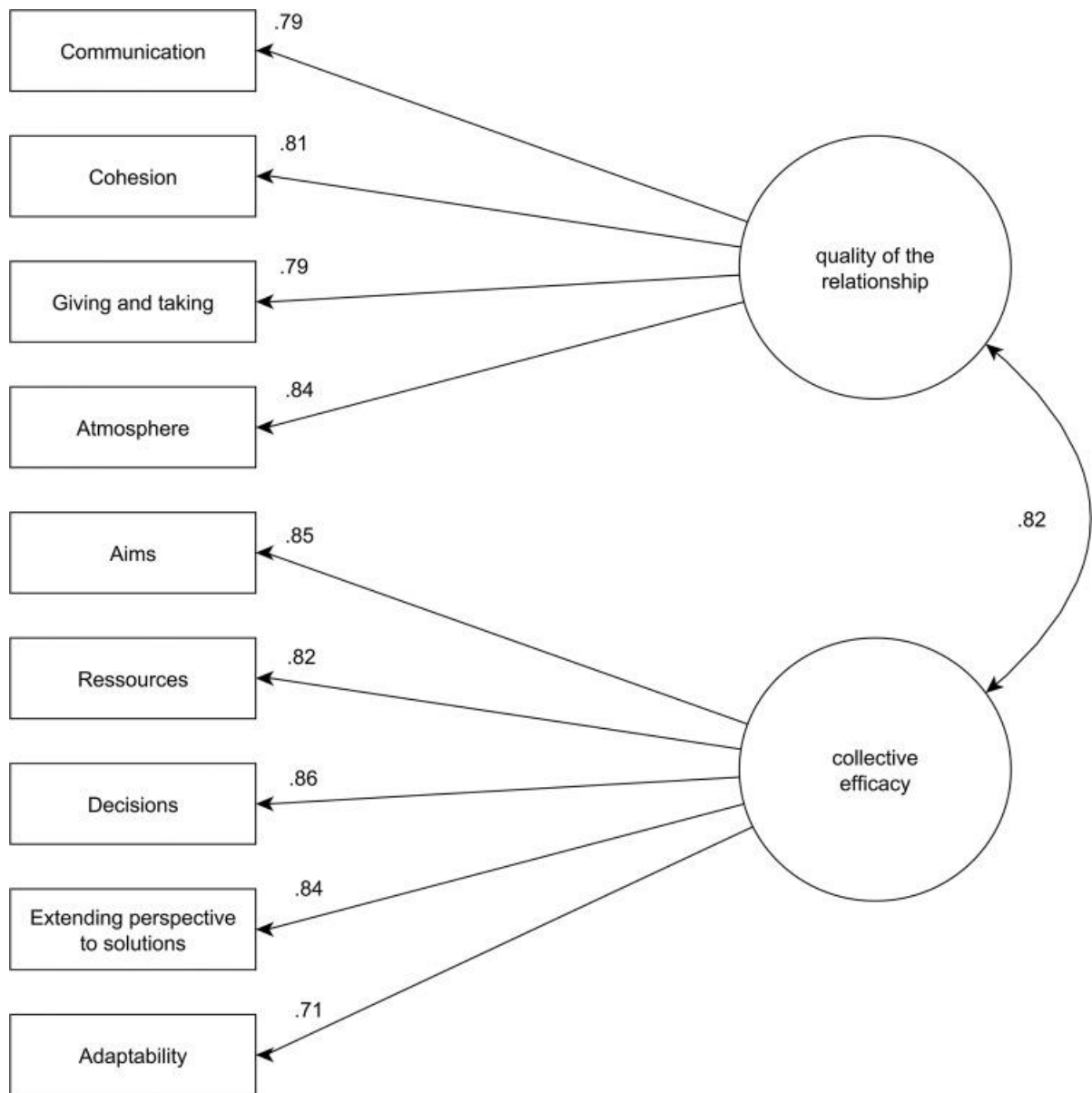
- (Circle One Number)
- All of the time.....1
 - Most of the time.....2
 - Some of the time.....3
 - A little of the time.....4
 - None of the time.....5

How TRUE or FALSE is *each* of the following statements for you.

	(Circle One Number on Each Line)				
	Definitely true	Mostly true	Don't know	Mostly false	Definitely false
33. I seem to get sick a little easier than other people...	1	2	3	4	5
34. I am as healthy as anybody I know.....	1	2	3	4	5
35. I expect my health to get worse.....	1	2	3	4	5
36. My health is excellent.....	1	2	3	4	5

Source: Hays, Sherbourne & Mazel, 1993 (Paper Screenshots)

Appendix K: EVOS - Factor Model depicting standardized Factor Loadings.⁴⁸⁰



Source: Aguilar-Raab, Grevenstein & Schweitzer, 2015 (Paper Screenshot)

⁴⁸⁰ Aguilar-Raab, C; Grevenstein, D. & Schweitzer, J. (2015): Measuring Social Relationships in Different Social Systems: The Construction and Validation of the Evaluation of Social Systems (EVOS) Scale. PLoS ONE 10(7): e0133442. p. 11.