

TALLINN UNIVERSITY OF TECHNOLOGY

SCHOOL OF BUSINESS AND GOVERNANCE
DEPARTMENT OF BUSINESS ADMINISTRATION

Polina Lutsevitsh

**Structural and Psychological Empowerment: The Moderating Role of
Developmental Networks**

Master thesis

Supervisor: Liina Randmann (Ph.D)

Work and organisational psychology

2017

Declaration

I hereby declare, that this thesis is entirely the result of my own work and submitted for the Degree of Master of Science in Tallinn University of Technology. For the present thesis no degree has been conferred on me before either in this or in any other university.

Author: Polina Lutsevitsh

“ “ 2017

The work meets the stated requirements for master thesis

Supervisor: Liina Randmann, Ph.D

“ “ 2017

Approved “ “ 2017

Master's theses defence committee chairman in the Department of Business Administration

Table of Contents

ABSTRACT	4
Introduction	5
1 Theoretical background	6
1.1 Psychological Empowerment	6
1.2 Developmental Networks	11
1.3 Structural Empowerment	13
2 The empirical study	16
2.1 Purpose of the study.....	16
2.2 Hypotheses	17
3 Method.....	17
3.1 Sample	17
3.2 Procedure	17
3.3 Measures	18
3.3.1 Sociodemographic data registry	18
3.3.2 Psychological Empowerment	18
3.3.3 Developmental Networks	19
3.3.4 Structural Empowerment.....	19
3.4 Statistical analyses	20
3.4.1 Hypothesis testing	26
4 Results	28
5 Discussion.....	29
5.1 Practical implications.....	32
5.2 Limitations	33
6 Conclusions	34
7 References	36
8 Appendices	41

ABSTRACT

The aim of this study was to examine the relationship between structural empowerment, psychological empowerment and developmental networks. Structural empowerment leads to psychological empowerment that culminates in positive workplace outcomes such as increased job satisfaction and increased motivation. Empowered individuals perform better as they have the autonomy and capability to do their work in the most effective way. A sample of 135 employees from two different companies in Estonia participated in this study. Results revealed that developmental networks are moderating the relationship between structural empowerment and psychological empowerment. Results confirmed and supported Kanter's structural empowerment theory. Future research should validate created and existing questionnaires on structural empowerment incorporating developmental networks. Current study showed that developmental networks are crucial in the emergence of perceived psychological empowerment in the workplace and thereby can be said that supportive relationships are beneficial at different stages of individual's personal and professional development. Practical implications for future researches were suggested.

Keywords: Structural empowerment, psychological empowerment, developmental networks, moderation.

Introduction

Organisations are requiring more from their employees than ever before. Increased globalisation, teleworking, technology-enabled workplaces, and rapid structural changes are just a few of the conditions at work, which must be taken into account and adapted to accordingly.

Employees in the organisations must learn to take initiative, be creative and innovative, take responsibility, make quick decisions for their actions, and control their own work environment. To perform these tasks traditionally confined within the management level, employees require organizational endorsement and support. In other words, individuals need to be “empowered” to perform at the beneficial level for the organisation.

In the last decade, the concept of empowerment has become popular in work and organisational psychology and management circles (Wall, Wood, & Leach, 2004). It has clearly emerged as an important process in work organisations and will continue to gain importance (Mills & Ungson, 2003).

The concept of empowerment is closely related with an obligation to gain organisational effectiveness through the wise use of human resources. Empowerment is becoming essential for both individual and team performance (Siegall & Gardner, 2000) as well as psychological empowerment, is an important approach to individual and team motivation in the workplace (Seibert, Wang, & Courtright, 2011).

Whereas the word "empowerment" is comparatively new, the interest in the concept of empowerment is still growing. However, employee's performance enhancement has been already known from the previous literature. Different managerial practices and the concept of job enrichment (Hackman, Oldham, Janson, & Purdy, 1975) have been widespread, but only recently assimilated into the construct of empowerment (Menon, 2001).

In motivational terms, Bandura's self- efficacy model (1977) stated that empowerment refers to a process, whereby an individual's belief in his or her self-efficacy is enhanced. Strengthening or weakening individual's belief in personal inefficacy, also called powerlessness, is a process of empowerment (Bandura, 1977). Conger and Kanungo (1988) claimed in their research that it is important to identify conditions within organisations that encourage a sense of powerlessness among workers and then enlarged that approach and confirmed improved self-efficacy through reducing powerlessness.

As work engagement becomes progressively the objective in organisations, empowerment initiatives will have to go beyond delegation and participation in decision-

making should have an explicit emphasis on engaging workers through shared organisational vision (Arciniega & Menon, 2013).

Empowered individuals and teams are highly motivated to perform well because they believe they have the autonomy and capability to perform meaningful work that can have a positive outcome in their organisation (Chen, Kirkman, Kanfer, & Rosen, 2007).

By now, there is evidence about employee empowerment antecedents and consequences and it is possible to distinguish psychological empowerment (Speitzier, 1995; Menon, 2001) from the structural empowerment (Kanter, 1993). Psychological and structural empowerment has been linked to several organisational outcomes, which are important in creation of the high-quality work environment and thus affecting employee well-being (Wright & Cropanzano, 2000).

This study aims to explore the relationship between structural empowerment, developmental networks and employee psychological empowerment.

1 Theoretical background

1.1 Psychological Empowerment

Theorists of the past century tried to define empowerment explicitly. Conger and Kanungo (1988) defined empowerment as the motivational concept of self-efficacy. Later, Thomas and Velthouse (1990), building their work on Conger and Kanungo (1988) related psychological empowerment to the internal state of the empowered individual. In their work, empowerment was described through task assessments, which were four cognitive dimensions of meaningfulness, competence, choice, and impact. Spreitzer (1995) relied on this approach and came up with four cognitive dimensions of meaning, competence, self-determination, and impact. In 2001, Menon came up with an integrative measure of psychological empowerment.

Menon defined the psychological empowerment as a cognitive state where employee has strong perceived competence and control, and goal internalisation of the organisation. Thus, based on previous theories, we can define psychological empowerment as the psychological state of perceiving and presence of empowering behaviour.

Psychological empowerment is an essential component of workplace empowerment, revealing intrinsic task motivation, or employee rewards that are intrinsic to empowering

work conditions (Laschinger, Finegan, & Wilk, 2009) and can be seen as a possible mechanism through which the other forms of the empowerment affect performance and are based on motivational assumptions (Wall, Wood, & Leach, 2004).

The major number of empirical studies on employee empowerment has integrated the psychological perspective (Spreitzer, 1996; Menon, 2001; Avolio et al., 2004, Arciniega et al., 2013), which focuses on individual's feelings and experiences of being empowered. At the same time, it was found that psychological empowerment is the employees' psychological reaction to presence or absence of empowering contextual conditions in the workplace (Laschinger, Finegan, Shamian, & Wilk, 2004). This assumption is appropriate with Spreitzer (1995) theory where he stated that an employee's perception of their work environment formulates feelings of empowerment and that structurally empowering conditions cannot be fully realised unless the individual is psychologically acceptable.

Majority of researchers on psychological empowerment has used the Spreitzer (1995) model, where psychological empowerment is defined as a motivational construct, which consist of four cognitional dimensions of competence, self-determination, impact and meaning, as the basic framework. In this approach, competence is related to an individual's job performance and the confidence they present in performing to their best competency. Self-determination involves the control individuals' perceive in their work environments and indicates the autonomy in the creation and continuation of work behaviours and processes. Dimension of impact describes how much influence employees feel that they have over important organisational outcomes. Meaning refers to the fit between employees' behaviours and job requirements and systemic organisational goals (Spreitzer 1995). Meaning is the value of a work goal or purpose, considered in relation to an individual's own established standards (Thomas & Velthouse, 1990). It was also found that meaning dimension of empowerment completely mediates the relationship between job characteristics and organisational commitment (Liden, Wayne, & Sparrowe, 2000).

In parallel with the well-known Spreitzer (1995) model, author wants to raise the less known and used Menon's (2001) model where psychological empowerment is described through three dimensions of perceived competence, perceived control and goal internalization.

Menon (2001) associated perceived competence with Bandura's (1977) self- efficacy theory where it is defined as a one's belief in one's own ability to complete tasks and reach goals. People tend to stay off situations where they lack of coping skills, but they do get involved in activities that they believe they can handle and be successful at. Perceived

competence and enhancing self-efficacy has been also discussed in empowerment researches by Conger and Kanungo (1988), and Thomas, and Velthouse (1990).

Perceived control includes beliefs about authority, autonomy, and decision-making and is related to experiencing control of individual's work environment (Menon 2001). Workers who are in a control of their own work environment can decide independently and feel that their actions make a difference in the organisation. Empowering strategies such as increased participation, delegation, providing information and resources (Kanter, 1993) can increase importance of perceived control for psychological empowerment. These aspects of experienced control have been related to self-determination, impact, and choice (Spreitzer 1995; Thomas and Velthouse, 1990) as well as perceived control (Arciniega & Menon, 2013). Perceived control and competence will become baseline requirements for psychological empowerment (Arciniega & Menon, 2013).

Goal internalization refers to employee identification with the goals of the organisation, which in turn provides meaning to the work performed (Menon, 2001). Menon also postulated that goal internalization captures the energising effect of organisational levels, goals, and aspirations. Menon's (2001) research extended existing perspectives on empowerment, as empowerment cannot entirely be elucidated in a single dimensional construct.

In the research conducted by Dimitriades (2005) was confirmed the usefulness of a view of empowerment characterised by the dimensions of perceived control (self-determination and impact), perceived competence, and goal internalization.

While comparing Spreitzer (1995) and Menon (2001) approaches to empowerment, there were some similarities found between them. Spreitzer's competence cognition reflects Menon's perceived competence dimension. Spreitzer's self-determination and impact equals to Menon's dimension of perceived control. At the same time, there is no connection between Spreitzer's meaning and Menon's goal internalization (Menon & Hartmann, 2002).

Kraimer, Seibert, and Liden (1999) suggested that Spreitzer's (1995) multidimensional model of psychological empowerment should include a direct relationship between self-determination and impact. Self-determination indicates power potential, and impact reflects actual power. Thus, potential power is a necessary condition for actual power in the work context (Kraimer, Seibert, & Liden, 1999).

Consistent with Kraimer and colleagues study in 1999, more recent study by Boudrias and colleagues (2004) suggests that the self-determination and impact dimensions have something in common. Self-determination and impact fall into the perceived personal

control at work, which is a single dimension in Menon's (2001) empowerment questionnaire (Boudrias, Gaudreau, & Laschinger, 2004).

Nonetheless, psychological approach to empowerment developed by Menon (2001) has no strict parallel in the Spreitzer empowerment scale (1995). The meaning dimension in the Spreitzer scale is mainly focused at the level of work performed, while the goal internalization dimension reflects the alignment between organisational goals and the individual's work (Arciniega & Menon, 2013).

Study, based in a manufacturing plant in Venezuela, used the more recent Menon (2001) three-factor model partially because of empirical evidence of discriminant validity issues between impact and self-determination mentioned in Spreitzer (1996) and Kraimer (1999) works earlier (Arciniega & Menon, 2013).

Based on the theoretical framework of psychological empowerment described above, there was numerous outcomes found that were affected by psychological empowerment.

Study on social structural characteristics of psychological empowerment (Spreitzer, 1996) found that high-involvement social structures (low role ambiguity, working on a boss who has wide spans of control, socio-political support, access to information, access to resources and a participative climate) create opportunities for empowerment in the workplace. In addition, it was found that psychological empowerment is positively related to intrinsic task motivation (Spreitzer, 1996; Zhang & Bartol, 2010).

Researchers have linked psychological empowerment to a numerous outcomes such as job satisfaction (Wang & Lee, 2009), stress, and effectiveness (Spreitzer, Kizilos, & Nason, 1997). Laschinger and colleagues (2004) stated that psychological empowerment is the individual's reaction to structural empowerment.

Corsun and Enz (1999) found in their research, that when working in a positive environment and having a supportive relationships with co-workers, it is likely that employees will be more psychologically empowered (Corsun & Enz, 1999).

Avolio, Bass, and Jung (1999) found that transformational leadership theory emphasizes the role of empowerment as a central mechanism building commitment to the organisation's objectives. In later research by Avolio and colleagues (2004) were argued that empowered employees will see themselves as more capable and will influence their job and organisations in a more meaningful way (Avolio, Zhu, Koh, & Bhatia, 2004).

Longitudinal study by Laschinger (2004) found that perceptions of psychological empowerment are predictive of burnout and job satisfaction over time, suggesting that being psychologically empowered might be a protective factor against burnout.

While testing structure of psychological empowerment among genders, it was indicated that psychological empowerment, based on Spreitzer's theoretical framework, is equivalent across genders.

According to Pieterse and colleagues (2010), psychological empowerment seems to be a pre-condition for an innovative behaviour. These results are in line with previous research that highlighted the importance of psychological empowerment for innovative behaviour (Spreitzer, 1995; Thomas & Velthouse, 1990). In other words, creative self-efficacy can be quite strongly related to psychological empowerment, because perceived competence is an important part of psychological empowerment as well as of creative self-efficacy (Pieterse, Van Knippenberg, Schippers, & Stam, 2010).

Boudrias, Gaudreau, Savoie, and Morin (2009) found in their study that if supervisors are able to create and sustain a high level of psychological empowerment, they can increase the probability to observe genuinely empowered behaviours among their employees. Supervisors must take appropriate actions leading employees to experience positive psychological cognitions (meaning, competence, self-determination, and impact) and therefore feel personal ownership in their work role. To sum up, supervisors' empowering management practices are strongly related to psychological empowerment (Boudrias et al. 2009).

Menon and colleagues (2007) found that different cultural groups have different perceptions, and that these differences could influence the interpretation of psychological constructs and how the different groups exactly understand the concept of empowerment (Kotze, Menon, & Vos, 2007).

Looking closer among psychological empowerment, it was found that high psychological empowerment is associated with greater job satisfaction and well-being as well as it brings better organisational commitment and improved task performance (Seibert, Wang, & Courtright, 2011). Similarly to Seibert and colleagues (2011) work, a positive and relationship between psychological empowerment, work engagement and job satisfaction was observed in the study by Moura, Orgambidez- Ramos, and Jesus (2015). They found that highly psychologically empowered workers have higher well-being and satisfaction.

In our study, we proceed with a Menon's approach, where empowerment is characterized by the dimensions of perceived control, perceived competence, and goal internalization and this is the foundation for the current research. Another reason why the author will use Menon's approach is to enrich empirical studies, provide a comparison, and give a fresh, more sophisticated perspective on psychological empowerment.

1.2 Developmental Networks

Developmental networks will act as a moderator on the relationship between structural empowerment and psychological empowerment. The moderator variable will show the strength or direction of the relationship between the independent or predictor variable and the dependent variable (Baron & Kenny, 1986).

Theorists argue that to achieve success in the business, working with a mentor is a key, but in a modern world, this alone is not enough. Individuals need more. They need a set of relationships that help them to get their work done, advance their careers, and provide both personal and professional support (Higgins & Kram, 2001).

While “developmental networks” is a relatively new term, the interest in the concept of developmental networks is persistent because relationships with mentors may be essential in the constantly changing career environment of the twenty-first century (Murphy & Kram, 2010). Mentoring researches has expanded over the past decade from traditional dyadic relationship perspective to examine the phenomena of developmental networks (Dobrow, Chandler, Murphy, & Kram, 2012).

Over a thirty years ago, Kram (1985) found in her research that individuals receive mentoring types of support from a set or so called “constellations“ of developmental relationships which consist of peers, subordinates, friends, family, and bosses - in brief, from more than a single person.

Higgins and Kram (2001) define an individual's developmental networks as the set of people and relationships the protégé names and who are taking an active interest in and action to advance the protégé’s career at a particular point in time by being important to his or her career development. Developmental relationships are likely to exist both within and outside work organisations (Higgins and Kram, 2001).

Higgins and Kram (2001) pointed out the two dimensions of developmental networks that are diversity and strength of the developmental relationships. An effective developmental network is a diverse one as diversity of contacts exists across hierarchy and departments, of contacts in and outside of the organisation. Strength of network can be defined through the level of emotional affect, reciprocity, and frequency of communication (Higgins & Kram, 2001). The conception of network diversity can be linked to Kanter’s (1993) structural empowerment theory: if management endorses autonomous development, employees are more likely to seek out contacts from diverse sources, and feeling they have

more opportunities and social capital in their jobs, which ,in turn, leads to psychological empowerment in a way.

In the research by Higgins and Thomas (2001) was found that the quality of an individual's primary developmental relationship does affect short-term career outcomes such as work satisfaction and intentions to remain in the company. For longer term, career outcomes such as organisational growth and career advancement an individual need a whole “constellation” of developmental relationships.

Chandler and Kram (2005) suggested that the developmental networks are a key tool for learning, development, and successful performance outcomes in challenging assignments. Having a strong developmental network to rely on can also be extremely valuable in the context of global and multicultural business environments when moving abroad as an individual come across of many challenges (Kram & Higgins, 2008).

In longitudinal research by Dobrow and Higgins (2005), was found that people construct their identities through their developmental networks. Their longitudinal study suggested that people might be able to improve their careers through changing their developmental networks, particularly during their early-career years as well as network composition and structure will shape which career outcomes are realized (Dobrow & Higgins, 2005).

Receiving mentoring from individual’s entire developmental network is positively related to career-related self-efficacy and perceptions of career success (Higgins, Dobrow, & Chandler, 2008). Developmental networks are also valuable for promotion and career advancement (Singh, Ragins, & Tharenou, 2009), clarity of professional identity (Dobrow & Higgins, 2005) and are associated with higher levels of optimism in later career (Higgins, Dobrow, & Roloff, 2010).

According to qualitative research by Murphy and Kram (2010) was found that non-working developmental relationships provided more overall support than work developmental relationship (Murphy & Kram, 2010). Furthermore, Murphy and Kram (2010) found non-working relationships were positively associated with career satisfaction and life satisfaction as well as they developed more stable and long-term relationships (Cummings & Higgins, 2006) while work developmental relationships were positively associated with salary level and career satisfaction. Thus, differences in the sub-functions and quality of support offered by work versus non-work relationships has been found (Murphy & Kram, 2010). This may be because supervisors and co-workers may change over a time.

Developmental networks are beneficial for employee development. Work developers can empower protégés through belief that they can behave in a like manner (Conger & Kanungo, 1988). High quality of those relationships increase a sense of empowerment (Kram & Higgins, 2009). Organisations can take action to empower employees to be accountable for their own development (Chandler, Hall, & Kram, 2010).

Based on intriguing theoretical framework of developmental networks, the author considered to take this phenomena as a third variable in the current study and see, does it affect on the direction and/or strength of the relationship between independent and dependant variable by providing the new approach.

1.3 Structural Empowerment

One of the earliest presenters of empowerment was Rosabeth Moss Kanter. In her book, *Men and Women of the Corporation* (1993), she indicated that characteristics of the organisation determine empowerment. Kanter (1993) defined structural empowerment as employees' access to social structures within their work settings that enable them to accomplish their work in meaningful ways.

Based on Kanter's theory, Laschinger and colleagues described structural empowerment as the perception of presence or absence of empowering conditions in the workplace (Laschinger, Finegan, Shamian, & Wilk, 2004). Structural factors in the workplace are important conditions for empowering employees (Laschinger et al., 2004; Lautizi et al., 2009; Orgambídez-Ramos et al, 2014).

Kanter identified three dimensions of structural empowerment: the structure of opportunity- the opportunity to learn and grow and future prospects; the structure of power- the ability to mobilize resources "to get things done" through access to information, resources and support; and proportional distribution of people of different kinds (the social composition of peer clusters).

Access to these empowerment structures is facilitated through formal and informal systems within the organisation. Kanter (1993) theorizes that these workplace characteristics are more influential to employees' attitudes and behaviours than personal characteristics.

These sources of empowerment are facilitated by the extent to which employees have developed a network of connections in the organisation- informal power and through jobs that are important to organisational goals- formal power (Kanter, 1993).

Formal power results from jobs that promote visibility, support discretion, offer recognition and contribute to key organisational objectives. Informal power refers to the personal relationships or associations made within the system, for example, with sponsors, peers, and subordinates, together with external professional contacts.

Although personal characteristics play a role in employees' workplace behaviours, Kanter maintains that situational conditions can constrain optimal job performance, regardless of positive personal tendencies or predispositions and, therefore, lower organisational productivity.

Kanter (1993) described power as the ability to get things done, to mobilize human and material resources, to get and use whatever it is that a person needs for the goals he or she is attempting to meet. However, when people are empowered- that is, allowed to have control over the conditions that make their actions possible- then the more is accomplished, more gets done. Thus, the meaning of power is closer to "mastery" or "autonomy" than the domination or control over others. Empowering more people through generating more autonomy, more participation in decisions, and more access to resources increases the total capacity for effective action rather than increases domination. Power could be accumulated as the result of the performance- the job related activities people engaged in (Kanter, 1993).

Access to information includes having knowledge of organisational changes and policies and having the required technical information and expertise to perform one's position. Opportunity is provided for workers when they have access to learning and development and can advance in the organisation. Opportunity structure should motivate performance in the job. Access to support involves receiving feedback and guidance from subordinates, peers, and superiors. This support facilitates autonomous decision-making and innovation by minimizing the need for multiple layers of approval (Kanter, 1993). Last, access to resources refers to the individual's ability to access supplies, resources, and materials that are required to reach organisational goals (Kanter 1993). Having access to these working conditions increases an empowerment to accomplish work.

Structural empowerment differs from psychological empowerment, which refers to employees' psychological response to empowering work conditions (Spreitzer 1995). Structural empowerment leads to psychological empowerment that culminates in measurable positive workplace outcomes such as increased job satisfaction (Wang & Lee, 2009) as well as empowered workers have greater authority and responsibility for their work (Conger & Kanungo 1988).

Research exploring the relationship between structural empowerment and psychological empowerment is relatively recent (Faulkner & Laschinger, 2008), but studies on structural empowerment has indicated that increased structural empowerment and psychological empowerment lead to reduced burnout (Wagner, et al., 2010).

In study by Laschinger, Sabiston and Kutzscher (1997) was found that informal power had a direct effect on access to work empowerment, and an indirect effect on control over the content of autonomy. In addition, empowerment had a strong direct effect on perceived autonomy. They also found that job activities that allow discretion, recognition, and relevance and jobs that encourage the development of strong connections increase access to opportunity, information, support, and resources (Laschinger, Sabiston, & Kutzscher, 1997).

Numerous researches (Laschinger et al., 2004; Lautizi et al., 2009; Wagner, et al., 2010; Wong, 2013) have shown a strong relationship between high levels of structural empowerment and job satisfaction as well as authentic leadership, which creates empowering work conditions, leads to increased job satisfaction (Wong & Laschinger, 2013). Empowering leadership has a strong impact on employees psychological empowerment (Zhang & Bartol, 2010) as well as structurally empowering work environments are the likely outcome of leadership practices that foster employees' feelings of respect and trust (Laschinger & Finegan, 2005).

Faulkner and Laschinger (2008) found in their research that employees who have access to empowering structures in the workplace have more positive attitudes towards their work as personal empowerment and respect. These findings supports Kanter's (1993) theory of workplace empowerment, which asserts that empowering work conditions have positive effects on organisational attitudes and behaviours.

Work environments that provide access to information, support, and resources and opportunities to learn and grow, as well as flexible job activities and strong connections with co-workers can create professional and supportive work settings (Laschinger, Almost, & Tuer-Hodes, 2003).

Higher levels of structural empowerment may offset the amount of work stress experienced, as empowering working structures are particularly important to managing stress (Lautizi, Laschinger, & Ravazzolo, 2009).

Laschinger, Wilk, Cho, and Greco (2009) found in their research on empowering work conditions on work engagement and effectiveness that empowerment has a strong effect on work engagement and influences work effectiveness. Creating empowering work

environments promote work engagement, which lead to greater feeling of work effectiveness (Laschinger, Wilk, Cho, & Greco, 2009).

Yet, many organisations have not fully embraced employees' empowerment, but research on influential factors of empowerment suggest that in adopting employee empowerment, organisations need to place greater accent on ensuring that procedures are in place to ensure that employees are directly involved in decision making and are provided with the power to make decisions. Thus, there is a great potential for organisations to increase the level of empowerment within their organisation (Baird & Wang, 2010). Mentioned study contributed to the literature evaluating employee empowerment in respect to the structural perspective.

As shown above, several research studies demonstrated that structural empowerment leads to psychological empowerment and that psychological empowerment is the individual's response to structural empowerment. Thus, our aim of this study is to test a model to explain the process by which structural empowerment influences employee psychological empowerment and see, if developmental networks moderate the relationship between structural empowerment and employee psychological empowerment. This kind of moderating relationship has not been previously studied at any circumstances. The moderator function in our study is as a third variable, which represents the generative mechanism through which the independent variable is able to influence the dependent variable, in our case psychological empowerment (Baron & Kenny, 1986).

It should also be taken into account, that majority of the studies on structural empowerment are conducted in nursing administration field, which is quite specific field in terms of the nature of work and its environment. At the same time, there is considerable support for Kanter's empowerment theory in nursing populations.

2 The empirical study

2.1 Purpose of the study

The aim of this study was to test a model to explain the process by which structural empowerment influence employee psychological empowerment and does developmental networks have a moderating effect on that relationship.

2.2 Hypotheses

Based on theories and research findings on psychological empowerment, developmental networks and structural empowerment author derived proposition and hypothesizes, which are going to be tested in this study. Research focuses on testing the moderation model and overall construct.

First proposition in study states that developmental networks will moderate the relationship between structural empowerment and employee psychological empowerment.

Hypothesis 1 will predict that developmental networks will positively predict psychological empowerment.

Hypothesis 2 predicts that structural empowerment dimensions will affect each psychological empowerment component in the different way.

Hypothesis 3 predicts that those, who create close working developmental networks, are more ready to be empowered.

3 Method

3.1 Sample

The sample consisted of 135 individuals whose answers were gathered through from two different Estonian companies in IT field and governmental institution. As for sample's sociodemographic characteristics, 43 (31, 9%) were men and 92 (68, 1%) were women. The average age of the respondents were 37.82 years (SD=11.4). The youngest respondent was 21 years old and the oldest respondent was 70 years old. The average work tenure of the sample was 8.04 years (SD= 7.24). The lowest working tenure was 1 month and the highest was 26 years.

3.2 Procedure

A pilot study was carried out in February 2017 and every participant gave a constructive feedback on comprehensibility of the questionnaire. Study itself was carried out between March and April 2017. All the participants were informed of the study's objective and the

confidentiality of their data. As the surveys were completed, each was reviewed for completeness and data were entered into the SPSS database.

3.3 Measures

3.3.1 Sociodemographic data registry

Information was collected on sex, age, working tenure and occupation (current position in the organisation). Multivariate and correlation analysis were conducted to examine significant relationships. No significant correlations between the demographic variables (age, sex, working tenure, and occupation), developmental networks, psychological and structural empowerment were found.

3.3.2 Psychological Empowerment

To measure psychological empowerment, the author used English 15 item version of the Psychological Empowerment Scale by Menon (2001). Scores for the Menon's (2001) Psychological Empowerment were computed. Psychological Empowerment Scale consists of 15 items distributed into 3 sub-scales: perceived control (5 items), perceived competence (5 items) and goal internalization (5 items). Responses were given on a Likert-type scale from 1-6, where 1 means „Strongly disagree” and 6 means „Strongly agree“. The sub-scale reliabilities were: perceived control .80, perceived competence .85 and goal internalization .92. All three sub-scales have acceptable alpha reliabilities higher than .80. To compare, scores of reliability on the study by Menon and Hartmann (2002), which tested the generalizability of the psychological empowerment, were perceived control .87, perceived competence 0.81 and goal internalization .86 (Menon & Hartmann, 2002). Sub-scale scores were calculated by summing up the items forming each subscale. Overall scale reliability was .91. Reliability results in the current study show factor stability and the subscales have very good reliability values.

3.3.3 Developmental Networks

Developmental networks instrument elicits information about individual's current developmental relationships and the network they compose. To measure those relationships, author used Developmental Network Questionnaire by Monica Higgins (2004), where participants were asked for information about the people who provide developmental assistance in their career. Questionnaire was modified and adopted for the purpose of the study. Respondents were asked to think back over the past year and think about people, developers, who took an active interest in and concreted action to help to advance their careers by providing professional and/ or personal guidance. Respondents had to evaluate how emotionally close they are with each respondent on a Likert-type scale from 1-4, where 1 means "Distant" and means "Very close". Respondents had to rate each developer on a scale from 1-5 based on the assistance they provide, where 1 means "Never", 2 means "Rarely", 3 means "Sometimes, 4 means "Often" and 5 means "Always". Developers were distributed into 8 different categories: family; spouse/partner; friends outside of work, work friends; colleagues; head of the department; heads of other departments and other specialists in the organisation. Respondents had to rate developers in 6 sections: helps me get work done; helps advance my career; provides personal support; is a role-model for me; supports my professional development; and helps me personally in work related problems.

3.3.4 Structural Empowerment

To measure structural empowerment, the author created and adopted 15 item scale (see Appendix 1), derived from Kanter's (1993) description of structural determinants. Items were distributed into 3 sub-scales of opportunity (5 items), power (5 items) and proportions (5 items). Scores for the Structural Empowerment scales were totalled and a mean score was computed. Responses were given on a Likert-type scale from 1-5, where 1 means "Strongly disagree" and 5 means "Strongly agree". The sub-scales reliabilities were: opportunity .83, power .73 and proportions .64. All three sub-scales have different internal consistency varying from questionable up to good. Overall scale reliability, despite the results of the subscales, was .89.

To determine the validity of the structural empowerment questionnaire, a factor analysis was conducted and considered the Kaiser-Meyer-Olkin (KMO) measure of .882 and the significant Bartlett test ($\chi^2 = 894.468$; $p < 0.0001$). A KMO value of .882 indicated

that the sample size was sufficient for factor analyses and the significant results of the Barlett test showed that the correlation matrix of the scale items was appropriate for factor analyses. To determine the factor structure of the structural empowerment questionnaire, a principal component analysis with varimax rotation was conducted. Three factors, accounting for 58,596 % of the variance, appeared.

3.4 Statistical analyses

Statistical analyses were performed using Statistical Package for Social Sciences version 23 for Windows. A descriptive analysis of the demographic data was conducted to describe the sample characteristics including mean and standard deviations for the demographic variables. To test the internal consistency of the used instruments, Cronbach's alpha coefficient was calculated through the reliability analysis.

Psychological empowerment overall scale indicated that respondents felt moderate to highly empowered ($M=72.53$; $SD= 10.50$). Lowest sub-scale score is 5 and highest sub-scale score is 30. Respondents' answers showed that this sample had moderate to high perceived control ($M =23.44$; $SD= 4.25$), high perceived competence ($M =25.70$; $SD= 3.18$) and more than moderate goal internalization ($M =23.39$; $SD= 5.33$) (see Table 1). The internal consistency coefficient (Cronbach's alpha) was .91 for the total scale and varied between .80 and .92 for the three sub-scales. In the item analysis correlations ranged from .12 to .86. The items of the goal internalization subscale had the highest inter-correlations.

To evaluate the scale of structural empowerment, the author proceeded with an assessment of Menon's scale. Based on that, the lowest possible total score is 15 and the highest total score is 75. Lowest sub-scale score is 5 and highest sub-scale score is 25. Structural empowerment overall scale indicated that respondents felt moderate to highly empowered ($M=51.30$; $SD=9.70$). Lowest score was 23 and the highest score was 73. Therefore, respondents showed moderate perception of opportunity ($M=17.49$; $SD= 4.08$), moderate perception of power ($M=18.04$; $SD= 3.49$) and moderate perception of opportunity ($M=15.76$; $SD= 3.27$) (see Table 1).

Table 1.

Descriptive Statistics of Psychological Empowerment Scales and Structural Empowerment Sub-Scales

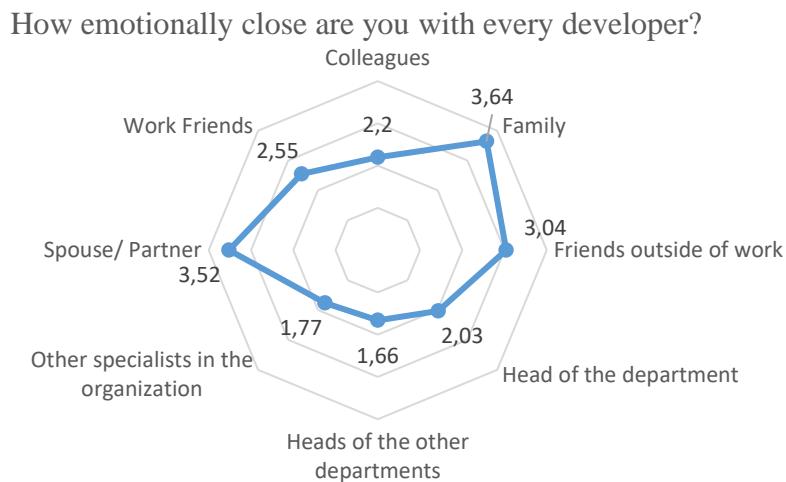
	Range of Scores			
	<i>m</i>	<i>SD</i>	<i>min</i>	<i>max</i>
Psychological Empowerment				
Perceived Control	23.44	4.25	13	30
Perceived Competence	25.70	3.18	16	30
Goal Internalisation	23.39	5.33	5	30
Structural Empowerment				
Opportunity Sub-Scale	17.49	4.08	5	25
Power Sub-Scale	18.04	3.49	9	25
Proportions Sub-Scale	15.76	3.27	6	25

Note: N = 135

Emotional closeness scores were predictable and showed that the most close emotional relationships are with a family (M=3.64; SD= .56) and this result means that on a scale from 1-4 this falls between close and very close. Second emotionally closest was spouse/partner (M=3.52; SD= .88). Those results might indicate that very close relationships are shaped over a time. Heads of other departments had the lowest score (M =1.66; SD= .74) and on a scale from 1-4 this falls between distant and less than close relationship. Those results can be explained through the matter, that person might not face and meet heads of other departments often/in a daily manner and their communication might be mediated through the head of the department, colleagues, e-mails, phone calls etc. (see Table 2).

Table 2.

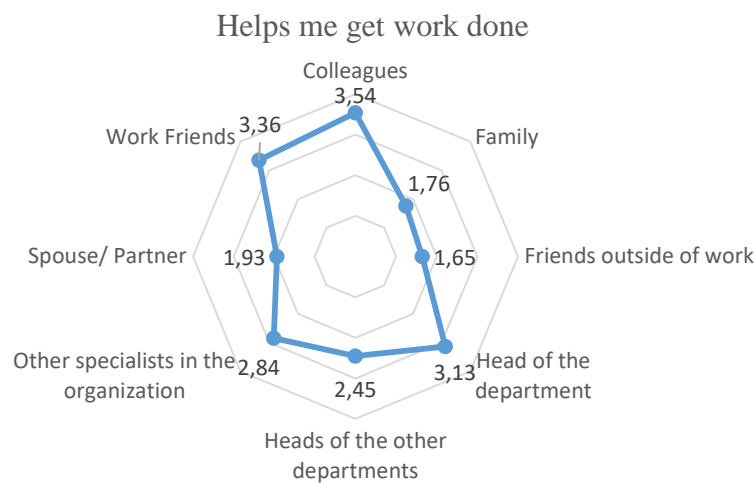
Emotional closeness



Results on who helps to get work done were predictable again. Colleagues were the most helpful (M=3.54; SD= .93), followed by work friends (M=3.36; SD= 1.08). On a scale from 1-5 those results are falling between “sometimes” and “often”. The lowest contribution showed friends outside of work (M=1.65; SD= .99). This score falls between “never” and “rarely”. This can be explained through the matter that you can obtain help from the people who are working in the same field/area and have knowledge about work specifics and tasks (see Table 3).

Table 3.

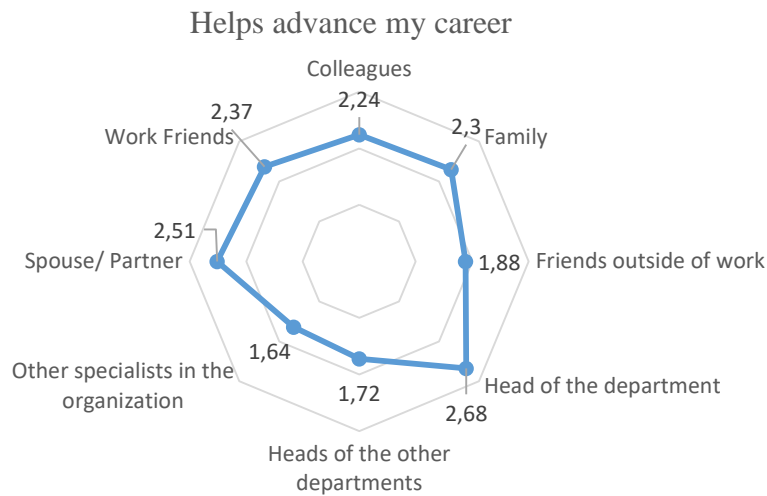
Helps me get work done



Results of developers who help to advance career were predictable as well, but scores were much lower than expected and therefore there is no strong differentiation. All results were ranging from 1.64-2.68 where the highest score of 2.68 (SD= 1.28) between “rarely” and “sometimes” was attributed to the head of the department, following by partner/spouse (M=2.51; SD= 1.41). The lowest score as a developers had other specialists in the organisation (M=1.64; SD= .89). Heads of the department are responsible for ensuring employee development and sustainability and should support subordinate’s progress meanwhile when other specialists might be distant and communication happens only when necessary to perform work tasks (see Table 4).

Table 4.

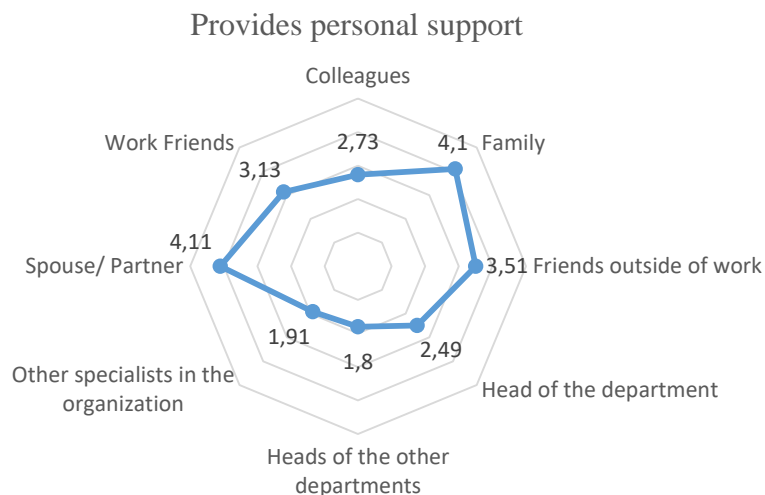
Helps advance my career



Scores of developers who provide personal support were expected. Family (M =4.10; SD= 1.17) and spouse/partner (M=4.11; SD= 1.37) were almost even. Those results fall between “often” and “always”, which means that emotionally closest developers provide most commonly personal support as they know you the best and can provide support on the basis of your peculiarities and trust. Heads of other departments got again the lowest score (M=1.80; SD= .96) which falls between “rarely” and “never”. Again, this is expected, as respondents of this study were the least emotionally close with a heads of other departments (see Table 5).

Table 5.

Provides personal support

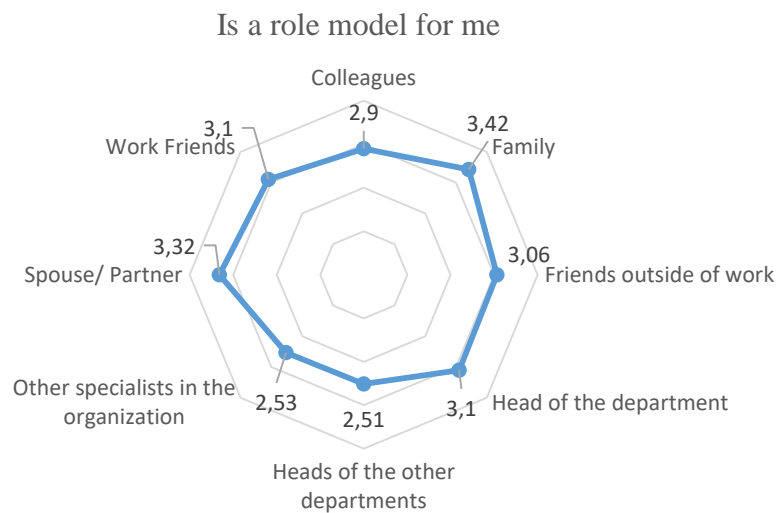


As a role-model respondents had to evaluate a person, who is looked to by him/her as an example to be imitated. The greatest role model were family (M=3.42; SD= 1.19),

following by spouse/partner (M=3.32; SD= 1.3) and equally by work friends (M=3.10; SD=.91) and head of the department (M=3.10; SD= 1.3). Those results are falling between “sometimes” and “often” which means that family, spouse/partner, work friends, and head of the department inspire respondents the most. The lowest score had once again heads of other departments (M=2.51; SD= 1.13). Those results can be explained to the matter that people try to act and behave the way, which ensures the growth and development. People want to identify themselves with childhood role models (parents) and want to achieve success by seeing themselves in a higher status (head of the department) or position promotion (work friends) (see Table 6).

Table 6.

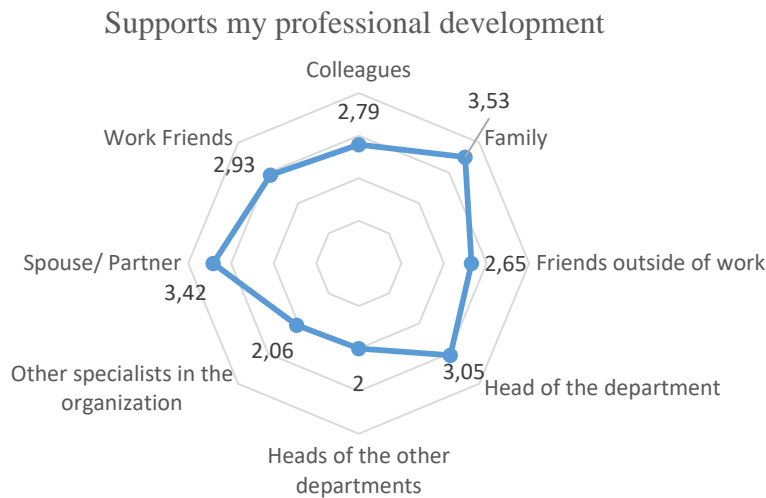
Is a role model for me



Distribution of developers who support professional development was interesting. Results showed that family supports professional development the most (M=3.53; SD= 1.43). Spouse/partner support was the next (M=3.42; SD= 1.52) and head of the department was rated third (M=3.05; SD= 1.25). Those results are falling once again between “sometimes” and “often”. The least professional development support give heads of other departments (M= 2.00; SD= 1.00). It was intriguing, that professional development is supported the most by the people who are outside of working network. We can rely on the matter that this may be due to the fact that supervisors and co-workers may change over a time, but relationship with family is more stable (see Table 7).

Table 7.

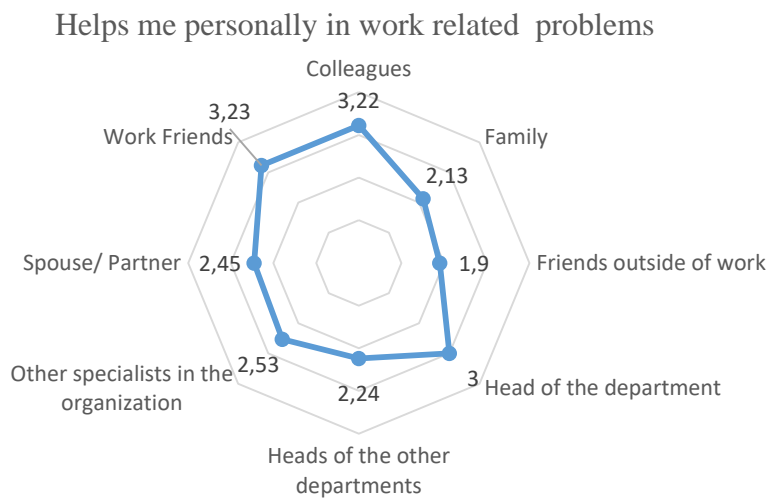
Supports my professional development



Developers, who helped personally in work related problems, were similar with those, who helped to get work done. Work friends (M=3.23; SD= 1.12) and colleagues (M=3.22; SD= 1.02) are almost even due to the fact that they might perform same tasks and so can give advice and help, because their work might be affected by the results of respondents work. Friends outside the work help personally the least in work related problems (M=1.90; SD= 1.13). On a scale from 1-4 those results fall between “rarely” and “never” meanwhile when work friends and colleagues results fall between “sometimes” and “often”. It stems from the matter that friends outside of work are not familiar with a nature of respondents’ work (see Table 8).

Table 8.

Helps me personally in work related problems



Altogether, based on six categories that were investigated in this study, we can say that developmental relationship between respondents and developers were more than moderate and respondents found personal and professional help and support. Those findings support several researches where was also found that non-working developmental relationships provide more overall support and help (Murphy & Kram, 2010). Non-working relationships develop more stable and long-term relations (Cummings & Higgins, 2006) due to the matter that people change jobs and they colleagues and heads are changing over a time.

3.4.1 Hypothesis testing

Correlation analysis of the study variables were conducted using Spearman's rank correlation coefficient (Spearman's rho). A two-tailed test of significance set at .05 was used to test the hypothesized relationships. The correlation matrix was analysed to determine if the structural and psychological empowerment variables are significantly related to developmental networks. Different regressions were performed to determine if significant relationships among study variables exist in order to test the moderation model. Regression analysis was used to test the moderation model and revealed that the developmental networks subscales have significant results.

Correlational analysis was conducted between all three dimensions of psychological empowerment (perceived control, perceived competence, goal internalization) and structural empowerment three dimensions (opportunity, power, proportions) and were used to test the hypothesized relationships. Results revealed a strong significant relationship between structural empowerment and psychological empowerment ($\rho = .706$, $p < .001$).

In the first regression, the psychological empowerment (dependent variable) three subscales (perceived control, perceived competence and goal internalization) were regressed with a „supports my professional development“ sub-scale of developmental networks (moderating variable) and indicated that perceived control has a weak, positive and statistically significant relationship with a support of professional development from the head of the department ($\rho = .324$, $p < .001$). Perceived competence had a weak, positive and statistically significant relationship with a support of professional development from a family ($\rho = .304$, $p < .001$). Goal internalization had also weak, positive and statistically significant relationship with a support of professional development from the head of the department ($\rho = .368$, $p < .001$). Findings also indicated that structural empowerment power

sub-scale was a significant predictor of a dependant variable of perceived competence ($\beta = .418$, $p = .001$).

The t-test revealed that men and woman scores on psychological and structural empowerment sub-scales had not a big difference. Means analysis on perceived control average showed that men have higher score of perceived control ($M = 4.93$; $SD = .76$) than women in this sample ($M = 4.57$; $SD = .87$). This might indicate that men in this sample are more autonomous in their work than women.

For the second regression, the psychological empowerment (dependent variable) three sub-scales (perceived control, perceived competence and goal internalization) was regressed with a „helps me personally in work related problems“ sub-scale of developmental networks (moderating variable) and indicated that perceived control has a weak, positive and statistically significant relationship with a personal help in work related problems of family ($\rho = .249$, $p = .004$) and spouse/partner ($\rho = .269$, $p = .002$). Goal internalization had also weak, positive and statistically significant relationship with a personal help in work related problems from the head of the department ($\rho = .238$, $p = .006$). Findings also indicated that structural empowerment power sub-scale ($\beta = .468$, $p < .001$), proportions sub scale ($\beta = .244$, $p = .027$) and developmental network personal help from spouse/partner subscale ($\beta = .293$, $p = .014$) were significant predictors of a dependant variable of perceived competence.

In the third regression, the psychological empowerment (dependent variable) three sub-scales (perceived control, perceived competence and goal internalization) was regressed with a „helps advance my career“ sub-scale of developmental networks (moderating variable) and indicated that perceived control has a weak, positive and statistically significant relationship with a head of the department who helps to advance career ($\rho = .390$, $p < .001$) and other specialists in the organisation ($\rho = .396$, $p < .001$). Goal internalization had also weak, positive and statistically significant relationship with a head of the department who helps to advance career ($\rho = .470$, $p < .001$) and other specialists in the organisation ($\rho = .357$, $p < .001$). Findings also indicated that structural empowerment power sub-scale ($\beta = .407$, $p = .001$) was a significant predictor of a dependant variable of perceived competence. Besides, structural empowerment opportunity sub-scale was significant predictor of a dependent variable of goal internalization ($\beta = .566$, $p < .001$).

Fourth regression between the psychological empowerment (dependent variable) three sub-scales (perceived control, perceived competence and goal internalization) and „is a role-model for me“ sub-scale of developmental networks (moderating variable) indicated that perceived control has a weak, positive and statistically significant relationship with a head

of the department who is a role-model ($\rho = .308$, $p < .001$). Goal internalization had also weak, positive and statistically significant relationship with a head of the department who is a role-model ($\rho = .417$, $p < .001$) and other head of the departments ($\rho = .366$, $p < .001$). Findings also indicated that structural empowerment power sub-scale ($\beta = .407$, $p < .001$), proportions sub-scale ($\beta = .243$, $p = .035$) and developmental network “is a role model for me” from the side of head of other departments subscale ($\beta = .241$, $p = .036$). were significant predictors of a dependant variable of perceived competence. Structural empowerment opportunity sub-scale ($\beta = .575$, $p < .001$) and developmental network “is a role model for me” from the side of friends ($\beta = -.163$, $p = .029$), work friends ($\beta = -.193$, $p = .033$) and colleagues ($\beta = .201$, $p = .035$) were significant predictors of a dependent variable of goal internalization.

This analysis indicates that developmental networks do moderate the relationship between structural empowerment and psychological empowerment in this sample.

4 Results

The purpose of this study was to explore the relationship among structural empowerment, psychological empowerment, and developmental networks. This chapter includes an interpretation of the findings in relation to the theories on structural empowerment (Kanter, 1993; Conger and Kanungo, 1988), psychological empowerment (Spreitzer, 1995; Menon, 2001) and developmental networks (Kram and Higgins, 2001).

In this study it was found that developmental networks moderate the relationship between structural empowerment and psychological empowerment and affect strength of the relationship between them. In general, the control variable, developmental networks, was significantly associated with several sub-scales of the dependent variable. R for the tested four model regressions were between .629-.725, which indicates high degree of correlation. The R^2 value indicated how much of the total variation in the dependent variable, psychological empowerment, can be explained by the independent variable, structural empowerment and moderator variable, developmental networks. In this case, 34, 9 %-52, 5% can be explained, which is moderate. Four different ANOVA analysis showed that $p < .001$, which is less than 0.05, and indicates that, overall, the regression model statistically significantly predicts the dependent variable. Therefore, proposition was supported in this study. Hypotheses based on that proposition are outlined below.

Hypothesis 1 stated that developmental networks would positively predict psychological empowerment. Hypothesis testing revealed a moderate positive relationship between:

1. Perceived control and “supports my professional development” sub-scales
2. Perceived control and “helps me personally in work related problems” sub-scales
3. Perceived control and “helps advance my career” sub-scales
4. Goal Internalization and “helps advance my career” sub-scales
5. Perceived control and “is a role-model for me” sub-scales
6. Goal Internalization and “is a role model for me” sub-scales

Findings of this study supported Hypothesis 1 prediction.

Hypothesis 2 predicted that structural empowerment dimensions would affect each psychological empowerment component in the different way. General Linear Model analysis showed that structural empowerment dimensions of opportunity, power and proportions affect each psychological empowerment component in the different way. Opportunity scale was statistically significant with a perceived competence ($p = .016$) and goal internalization ($p < .001$). Power sub-scale was statistically significant with a perceived control ($p < .001$). Proportions scale was also significant with a perceived control scale ($p = .035$). In general, structural empowerment had a strong, positive and statistically significant relationship with psychological empowerment ($\rho = .706$, $p < .001$). In turn, opportunity ($\beta = .376$, $p < .001$) and power ($\beta = .302$, $p = .002$) sub-scales were significant predictors of dependent variable, psychological empowerment. Therefore, hypothesis 2 was supported.

Hypothesis 3 predicted that those, who create close developmental networks, are more ready to be psychologically empowered. Results indicated that stronger relationship between respondent and developer creates stronger psychological empowerment. The hypothesis was supported by some developers in different developmental networks subscales.

5 Discussion

This research has broadened views of structural and psychological empowerment and developmental networks. However, there has been no previous works to investigate links between structural empowerment, developmental networks and psychological empowerment as it is previously unexamined relationship.

The results of the present study demonstrate that structural empowerment has an effect on psychological empowerment. This means that organisations, which have structural determinants to empower workers, influence workers' perception of psychological empowerment. Those findings support several previous studies where it was found that access to empowering work environment structures will encourage inner perception of psychological empowerment and that that psychological empowerment is the individual's response to structural empowerment (Spreitzer, 1995; Laschinger et al., 2004). Therefore, theoretical proposition were supported once again and is consisted to previous studies. The observed relationship also supports Kanter's theory (1993) where she considered organisational structural factors to be essential for workers' empowerment.

This study also offered several new findings about the relationship between developmental networks and structural and psychological empowerment as this kind of relationship has not been investigated before. Findings revealed that developmental networks are important factor in the process of formation of psychological empowerment in the workplace. Individuals, who tend to have closer relationship with different developers, contribute to have higher levels of psychological empowerment. It was observed in perceived control and goal internalization sub-scales which were related to different assistance scales of developmental networks. Developers, who provide better assistance, are crucial in personal and professional development of and individual and therefore increasing one's cognitive state of empowerment. This statement is supported by Liden and Graen (1980) study where they found that workers, who report good relationships with superiors, in our case with the head(s) of the department(s), were better performers and assumed more responsibility than those who had poor relationships. At the same time, good relations with family are considered to be more advantageous than working relationships, because the nature of the personal relationship is closer than the working relationship (Gabarro, 1990) as well as non-working relationships provide more overall support than work relationship (Murphy & Kram, 2010). Moreover, supportive relationships in work environment shape perceived empowerment (Corsun & Enz, 1999). Developing such a supportive relationships as developmental networks might be beneficial at different stages of individual's career development and growth.

In the current study structural empowerment „power scale“, derived from Kanter's (1993) theory, was a predictor for Menon's (2001) psychological empowerment sub-scale perceived competence. This means, that empowering strategies such a delegation, generating more autonomy, providing information and resources, and increased participation in

decisions (Menon, 2001) can lead to a feel of perceived competence. Therefore, perceived competence is an essential psychological state establishing the experience of empowerment (Menon, 2001) as when individuals' feel that they get involved in activities that they believe to be within their power to handle, they feel more empowered (Kanter, 1993,). In other words, perceived competence can emerge in those environments where are high power structures.

Secondly, structural empowerment „opportunity scale“, derived from Kanter's (1993) theory, was a predictor for Menon's (2001) psychological empowerment sub-scale of goal internalization. This finding reveals that expectations, future prospects, mobility and growth as promotion (Kanter, 1993), create an environment where employees' internalise the goals of the organisation. This, in turn, leads to increased feeling of empowerment among employees.

Lastly, structural empowerment „proportions scale“, derived from Kanter's (1993) theory, was a predictor for Menon's (2001) psychological empowerment sub-scale of perceived competence. This finding was interesting and it can be concluded, that employees feel that they have an ability to achieve intended results when the social composition of people is similar. In other words, being “different” from a larger group may lower one's perceived competence and thus, feeling of empowerment.

Looking at the relationships between psychological empowerment and developmental networks, some interesting findings were found. Psychological empowerment sub-scale of perceived control showed statistically significant relationships with developmental network sub-scales of “Supports my professional development”; “Helps me personally in work related problems”; “Helps advance my career” and “Is a role-model for me”. Respondents were provided with a developmental assistance in their career by head of the department, family, spouse/ partner and other specialists in the organisation. Those findings reveal that employees need a set of supportive developmental networks to perceive control over their work. Thereby, those relationships increase individual's control over their work and make them feel confident. With support, help and lead from developers individuals feel that they are more empowered, thus that they are capable to influence and make a difference in their work environment.

Psychological empowerment sub-scale of perceived competence showed statistically significant relationships with developmental network sub-scale of “Supports my professional development” from family perspective. This may be interpreted through the fact that having a close relationship with a family is crucial in professional development as when

employees perceive themselves to be capable, skilled and being able to cope with difficult situations, it leads to a professional development. Finding a support from close ones, family, confirms that perceiving and creates greater feeling of empowerment. High levels of family involvement are associated with higher sense of life satisfaction in general (Adams, King, & King, 1996).

Thirdly, there were found statistically significant results between psychological empowerment sub-scale of goal-internalisation and developmental network sub-scales of “Supports my professional development”; “Helps me personally in work related problems”; “Helps advance my career” and “Is a role-model for me”. In this case, developmental assistance was mainly provided by head of the department and other specialists in the organisation. Those findings can be explained through the matter that employees help an organisation to reach defined goals, because organisational goals are congruent with their personal values and goals.

Therefore, finding a support, help and lead inside an organisation strengthens the feeling of striving toward common goals. Aligning organisational goals with individual values can create a sense of empowerment. Similar results were discovered in the study by Ergeneli, Ari, and Metin (2007) where they found that individuals, whose personal goals can only be reachable with the cooperation of others in the organisation, have higher perception of psychological empowerment (Ergeneli, Ari, & Metin, 2007).

It can be concluded, that people do not feel empowered only when they have a personal control over conditions and resources, they feel also empowered when they find a support and help from working and non-working developmental networks. Developmental networks are beneficial and support empowering structures in the emergence of psychological empowerment in the workplace. At the same time, it can be assumed, that low levels of empowerment might be caused by an absence of supportive relationships in the work environment, as they are essential for a positive structural change within an organisation.

5.1 Practical implications

This research discovered relationship between structural and psychological empowerment and phenomena of developmental networks, and thus offers several practical implications. While understanding how psychological empowerment is formed, developmental networks might be crucial because of their changing nature, diversity and

strength. This, in turn, offers the prospect that people might be able to feel more empowered through changing their developmental networks.

It is important to note that it might be beneficial to have different developmental networks as they might influence personal and professional development in a different way. This could identify new gaps in literature and be relevant to examine in the future studies.

Whereas family is important by supporting individual's development and career growth, then organisations should pay more attention on work-family balance. In addition, organisations should create more career and development supportive activities, because family supports individual's development with emotional involvement and time resource.

Moderating effect of developmental networks might change in a different occupational context and current model might not apply to all kinds of work. Therefore, future research in a different occupational fields is needed to examine applicability of a current model.

Easy digital accessibility of contacts on social media channels should be also considered as one possible factor, which can reduce the strength of developmental networks. Normalisation of developmental networks today via social media might influence the moderating effect on employee's empowerment. Social media changes the way people interact with one another, share and gather information and therefore social media tends to obscure the true nature of close and formal relationships. Wider accessibility to the tools of social networks should be investigated together with developmental networks.

Well-designed empowerment and intervention programs should be considered if there is need to manage workplace attitudes and behaviours.

5.2 Limitations

It is necessary to take into account certain limitations that the current study had. Since the relationship between structural empowerment, psychological empowerment and developmental networks have not been studied before, the sample size might be the major limitation of this study. The sample was comprised with a small number of people which may had an effect on the results. Moreover, the sample in the current study was overrepresented by women. Sample size may influence research findings. Therefore, future studies with other sample and additional demographic factors are warranted as an appropriate sample renders the research more efficiently. Further studies are needed to determine and confirm findings in this study.

Secondly, because data were collected from different organisations, there could be intra organisational random effects that have not been considered in current study. Although there might be some organisational level difference in the data, the majority of the differences are at the individual level.

A third limitation is the lack of scientific evidence and data on investigated relationships. No one has yet funded research to examine the issue or the current study and it is a previously unstudied relationship.

Another limitation is the validity and reliability of the created questionnaire of structural empowerment measurement. Factor analysis was conducted in this research, but psychometric properties were not tested in this study. Despite the fact, that Cronbach's alpha coefficients and predictive validity supported validity and reliability of the questionnaire, future researches should examine questionnaire psychometric data to see does it fit to the data.

Must be also considered that developmental networks might not always lead to empowerment, but disengagement, because employee might find other opportunities with inter-organisational contacts.

Lastly, this research focuses on the interaction effects of the outcome variable, psychological empowerment. Future research should investigate other outcome variables related to psychological empowerment such a job satisfaction, well-being and improved performance as well as other theories of employee behaviour and their relations with developmental networks.

6 Conclusions

This study presents the results of a unique study of developmental networks and its relationship to a structural and psychological empowerment. The author found that developmental networks moderate the relationship between structural empowerment and psychological empowerment and presence of developmental networks strengthens perception of personal control over psychological side of an empowerment. This research provides novel insights to the developmental network and empowerment literatures and provides several ideas for the future research. It should be mentioned that nowadays social networks and other social media channels are increasingly becoming the communication medium of choice, allowing people to communicate within and outside of their networks

with ease and in turn strengthening or weakening developmental networks. Future research is needed to explore complex nature of developmental networks and empowerment. Understanding the comprehensive nature of developmental networks and its relationship to psychological empowerment, this study opens up opportunities for the future research, while also answering questions about how developmental networks are emerged. Hopefully, this research will create a base for future researches, which will examine how developmental networks evolve and the impact of evolving on empowerment in different occupational contexts.

7 References

- Adams, G. A., King, L. A., & King, D. W. (1996). Relationships of job and family involvement, family social support, and work–family conflict with job and life satisfaction. *Journal of applied psychology, 81*(4), 411.
- Arciniega, L. M., & Menon, S. T. (2013). The power of goal internalization: studying psychological empowerment in a Venezuelan plant. *The International Journal of Human Resource Management, 24*(15), 2948-2967.
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership. *Journal of occupational and organizational psychology, 72*(4), 441-462.
- Avolio, B. J., Zhu, W., Koh, W., & Bhatia, P. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *Journal of organizational behavior, 25*(8), 951-968.
- Baird, K., & Wang, H. (2010). Employee empowerment: Extent of adoption and influential factors. *Personnel Review, 39*(5), 574-599.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review, 84*(2), 191.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology, 51*(6), 1173.
- Boudrias, J. S., Gaudreau, P., & Laschinger, H. K. (2004). Testing the structure of psychological empowerment: Does gender make a difference? *Educational and Psychological Measurement, 64*(5), 861-877.
- Boudrias, J. S., Gaudreau, P., Savoie, A., & Morin, A. J. (2009). Employee empowerment: From managerial practices to employees' behavioral empowerment. *Leadership & Organization Development Journal, 30*(7), 625-638.
- Chandler, D. E., & Kram, K. E. (2005). Applying an adult development perspective to developmental networks. *Career Development International, 10*(6/7), 548-566.
- Chandler, D. E., Hall, D. T., & Kram, K. E. (2010). A Developmental Network & Relational Savvy Approach to Talent Development:: A Low-Cost Alternative. *Organizational Dynamics, 39*(1), 48-56.
- Chen, G., Kirkman, B. L., Kanfer, R. A., & Rosen, B. (2007). A multilevel study of leadership, empowerment, and performance in teams. *Journal of Applied Psychology, 92*(2), 331.
- Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of management review, 13*(3), 471-482.

- Corsun, D. L., & Enz, C. A. (1999). Predicting psychological empowerment among service workers: The effect of support-based relationships. *Human relations*, 52(2), 205-224.
- Cummings, J. N., & Higgins, M. C. (2006). Relational instability at the network core: Support dynamics in developmental networks. *Social Networks*, 28(1), 38-55.
- Dimitriadis, Z. S. (2005). Employee empowerment in the Greek context. *International Journal of Manpower*, 26(1), 80-92.
- Dobrow, S. R., & Higgins, M. C. (2005). Developmental networks and professional identity: A longitudinal study. *Career Development International*, 10(6/7), 567-583.
- Dobrow, S. R., Chandler, D. E., Murphy, W. M., & Kram, K. E. (2012). A review of developmental networks incorporating a mutuality perspective. *Journal of Management*, 38(1), 210-242.
- Ergeneli, A., Arı, G. S., & Metin, S. (2007). Psychological empowerment and its relationship to trust in immediate managers. *Journal of business research*(60), 41-49.
- Faulkner, J., & Laschinger, H. (2008). The effects of structural and psychological empowerment on perceived respect in acute care nurses. *Journal of nursing management*, 16(2), 214-221.
- Gabarro, J. J. (1990). The development of working relationships. Intellectual teamwork: Social and technological foundations of cooperative work. 79-110.
- Greco, P., Laschinger, H. K., & Wong, C. (2006). Leader empowering behaviours, staff nurse empowerment and work engagement/burnout. *Nursing Leadership*, 19(4), 41-56.
- Hackman, J. R., Oldham, G., Janson, R., & Purdy, K. (1975). A new strategy for job enrichment. *California Management Review*, 17(4), 57-71.
- Higgins, M. C., & Kram, K. E. (2001). Reconceptualizing mentoring at work: A developmental network perspective. *Academy of Management Review*, 26(2), 264-288.
- Higgins, M. C., & Thomas, D. A. (2001). Constellations and careers: Toward understanding the effects of multiple developmental relationships. *Journal of Organizational Behavior*, 22(3), 223-247.
- Higgins, M. C., Dobrow, S. R., & Chandler, D. (2008). Never quite good enough: The paradox of sticky developmental relationships for elite university graduates. *Journal of Vocational Behavior*, 72(2), 207-224.
- Higgins, M., Dobrow, S. R., & Roloff, K. S. (2010). Optimism and the boundaryless career: The role of developmental relationships. *Journal of Organizational Behavior*, 31(5), 749-769.
- Kanter, R. M. (1993). *Men and Women of the Corporation*. Basic books.
- Kotze, E., Menon, S. T., & Vos, B. (2007). Psychological empowerment in the South African military: The generalisability of Menon's Scale. *SA Journal of Industrial Psychology*, 33(2), 1-6.

- Kraimer, M. L., Seibert, S. E., & Liden, R. C. (1999). Psychological empowerment as a multidimensional construct: A test of construct validity. *Educational and Psychological Measurement, 59*(1), 127-142.
- Kram, K. E. (1985). *Mentoring at Work: Developmental Relationships in Organizational Life*. Glenview, IL: Scott Foresman.
- Kram, K. E., & Higgins, M. C. (2008). A new approach to mentoring. *The Wall Street Journal, 22*, 2008.
- Kram, K. E., & Higgins, M. C. (2009). A new mindset on mentoring: creating developmental networks at work. *MIT Sloan Management Review, 1-7*.
- Laschinger, H. K., & Finegan, J. (2005). Using empowerment to build trust and respect in the workplace: A strategy for addressing the nursing shortage. *Nursing economics, 23*(1), 6.
- Laschinger, H. K., Almost, J., & Tuer-Hodes, D. (2003). Workplace empowerment and magnet hospital characteristics: making the link. *Journal of nursing administration, 33*(7/8), 410-422.
- Laschinger, H. K., Finegan, J. E., Shamian, J., & Wilk, P. (2004). A longitudinal analysis of the impact of workplace empowerment on work satisfaction. *Journal of Organizational Behavior, 25*(4), 527-545.
- Laschinger, H. K., Gilbert, S., Smith, L. M., & Leslie, K. (2010). Towards a comprehensive theory of nurse/patient empowerment: applying Kanter's empowerment theory to patient care. *Journal of Nursing Management, 18*(1), 4-13.
- Laschinger, H. K., Sabiston, J. A., & Kutzcher, L. (1997). Empowerment and staff nurse decision involvement in nursing work environments: testing Kanter's theory of structural power in organizations. *Research in nursing & health, 20*(4), 341-352.
- Laschinger, H. K., Wilk, P., Cho, J., & Greco, P. (2009). Empowerment, engagement and perceived effectiveness in nursing work environments: does experience matter? *Journal of nursing management, 17*(5), 636-646.
- Laschinger, H. K., Wong, C. A., & Grau, A. L. (2013). Authentic leadership, empowerment and burnout: a comparison in new graduates and experienced nurses. *Journal of nursing management, 21*(3), 541-552.
- Laschinger, H., Finegan, J., & Wilk, P. (2009). Context matters. The impact of unit leadership and empowerment on nurses' organizational commitment. *Journal of Nursing Administration, 39*(5), 228-235.
- Lautizi, M., Laschinger, H. K., & Ravazzolo, S. (2009). Workplace empowerment, job satisfaction and job stress among Italian mental health nurses: an exploratory study. *Journal of nursing management, 17*(4), 446-452.
- Liden, R. C., & Graen, G. (1980). Generalizability of the vertical dyad linkage model of leadership. *Academy of management Journal, 23*(3), 451-465.

- Liden, R. C., Wayne, S. J., & Sparrowe, R. T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes. *Journal of applied psychology, 85*(3), 407.
- Menon, S. (2001). Employee empowerment: An integrative psychological approach. *Applied Psychology, 50*(1), 153-180.
- Menon, S. T., & Hartmann, L. C. (2002). Generalizability of Menon's Empowerment Scale Replication and Extension with Australian Data. *International Journal of Cross Cultural Management, 2*(2), 137-153.
- Mills, P. K., & Ungson, G. R. (2003). Reassessing the limits of structural empowerment: Organizational constitution and trust as controls. *Academy of Management Review, 28*(1), 143-153.
- Moura, D., Orgambidez-Ramos, A., & Jesus, S. N. (2015). Psychological empowerment and work engagement as predictors of work satisfaction: A sample of hotel employees. *Journal of Spatial and Organizational Dynamics, 3*(2), 125-134.
- Murphy, W., & Kram, K. E. (2010). Understanding non-work relationships in developmental networks. *Career Development International, 15*(7), 637-663.
- Orgambidez-Ramos, A., & Borrego-Alés, Y. (2014). Empowering employees: Structural empowerment as antecedent of job satisfaction in university settings. *Psychological Thought, 7*(1), 28-36.
- Pieterse, A. N., Van Knippenberg, D., Schippers, M., & Stam, D. (2010). Transformational and transactional leadership and innovative behavior: The moderating role of psychological empowerment. *Journal of Organizational Behavior, 31*(4), 609-623.
- Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organizations: a meta-analytic review.
- Siegall, M., & Gardner, S. (2000). Contextual factors of psychological empowerment. *Personnel Review, 29*(6), 703-722.
- Singh, R., Ragins, B. R., & Tharenou, P. (2009). What matters most? The relative role of mentoring and career capital in career success. *Journal of Vocational Behavior, 75*(1), 56-67.
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of management Journal, 38*(5), 1442-1465.
- Spreitzer, G. M. (1996). Social structural characteristics of psychological empowerment. *Academy of management journal, 39*(2), 483-504.
- Spreitzer, G. M., Kizilos, M. A., & Nason, S. W. (1997). A dimensional analysis of the relationship between psychological empowerment and effectiveness satisfaction, and strain. *Journal of management, 23*(5), 679-704.
- Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of management journal*(53), 107-128.

- Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An “interpretive” model of intrinsic task motivation. *Academy of management review*, *15*(4), 666-681.
- Wagner, J. I., Cummings, G., Smith, D. L., Olson, J., Anderson, L., & Warren, S. (2010). The relationship between structural empowerment and psychological empowerment for nurses: a systematic review. *Journal of nursing management*, *18*(4), 448-462.
- Wall, T. D., Wood, S. J., & Leach, D. J. (2004). Empowerment and performance. *International review of industrial and organizational psychology*, *19*, 1-46.
- Wang, G., & Lee, P. D. (2009). Psychological empowerment and job satisfaction: An analysis of interactive effects. *Group & Organization Management*.
- Wong, C. A., & Laschinger, H. K. (2013). Authentic leadership, performance, and job satisfaction: the mediating role of empowerment. *Journal of advanced nursing*, *69*(4), 947-959.
- Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of occupational health psychology*, *5*(1), 84.

8 Appendices

APPENDIX 1.

Structural Empowerment Questionnaire

Please read each statement carefully in the context of your own work and indicate the extent of your agreement or disagreement with each statement by marking ONE (1) number from 1 to 5.

1. Our organisation makes me feel committed and I believe in its goals.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

2. Our organisation makes me feel that I am a member of the larger organisation rather than the local unit.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

3. Our organisation supports employee's upward mobility and career growth.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

4. Our organisation provides validation and feedback from high power people to employees to further personal development.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

5. Our organisation has high aspirations and it is challenging employees to increase skills and learn something new.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

6. Our organisation provides opportunities for subordinates to move along with them, find talented subordinates and groom them for better things.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

7. Our organisation delegates more control and allows subordinates more freedom and judgement.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

8. Our organisation has high group morale.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

9. People in our organisation behave in more cooperative and less critical way, therefore being more open to help others.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

10. Our organisation allows me to communicate freely in meetings with high power people and acquire help and advice from them.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

11. Our organisation makes me feel as one of the group.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

12. Our organisation pressures me to conform and make fewer mistakes.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

13. Our organisation allows me to be supported by higher status organisational members.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

14. Our organisation allows every employee equal opportunity to gain credibility for high uncertainty positions, such as some management jobs.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

15. Our organisation makes me experience less personal stress.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5