## Master thesis

The effect of servant leadership on healthcare employee psychological safety and employee behaviours that lead to job thriving and performance.

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## **Abstract**

**Purpose**: There has been increasing attention in the media regarding the job pressure of nurses and the shortage of nurses in healthcare. The aim of this research was to examine nurses, from different Dutch hospitals, perceptions of psychological safety. We wanted to see if certain behaviours occur among these nurses in term of their perception of psychological safety in their workplace. Ultimately we wanted to see if the servant leadership style of the team leader has an effect on the psychological safety of nurses and if so, what kind of behaviours and do these result in thriving and job performance. **Design/methodology/approach**: Five different Dutch hospital teams were analysed for this study. We used a mix-method approach; individual interviews were held among the team leaders (n=5), an observation was done during the regular staff meetings (n=5); and there was also a survey for the team leaders and the nurses (n=81). **Findings/practical recommendations**: The results show that servant leadership has an effect on psychological safety and thriving of employees. Additional behaviours were found to be related to psychological safety like voice, back-up and innovative work behaviour. The results also show that the nurses seem to be under serious work pressure. These findings were supported by the interviews and the naked-eye observations we made in this study.

innovative work behaviour, job performance, thriving, health care, hospitals, nurses.

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## 1 Introduction

Few industries have more at stake when teams learn or fail to learn than healthcare. Increasingly, cross-disciplinary teams are responsible for delivering care to patients in settings ranging from primary care to critical acute care, chronic care, geriatrics, and end-of-life care (Institute of Medicine, 2001). In this environment, the combined challenges of teamwork and learning are emerging as central to the healthcare delivery enterprise, in particular because research has shown that 70 to 80% of medical errors are related to interactions within the healthcare team (Mayo & Woolley, 2016; Schaefer et al., 1994).

However the workload in Dutch hospitals over the last years has increased drastically. Employees from different Dutch hospitals have admitted that they feel like there is little to no room for them to schedule their work activities to their own preference. The CBS stated that the emotional stress in Dutch hospitals is much higher than the average in the sector(CBS & TNO, 2016). A Dutch survey from 2016 stated that employees of hospitals often think about finding a job in another sector due to job pressure and budget cut backs (Skipr, 2016). According to a research done by a Dutch university the workload of nurses isn't the real definition of the problem. Making mistakes has a great impact on nurses, resulting in sleepless nights and insecurity. The high workload contributes to the amount of mistakes being made (Zorgnu, 2016). According to the Job demands resources model these high demands will make it difficult for employees to allocate their attention and energy efficiently, this will affect their work performance negatively (Bakker et al., 2004). Employees extra role performance is a reflection on employee's availability of resources in the organization, especially when social support and possibilities for development are high. Extra role behaviour is also an important factor in job performance. In exchange for the availability of resources, employees are willing to go beyond their personal roles and engage in activities which will benefit the whole organisation (Bakker et al., 2004).

Because of nurses' high workload, behaviour such as voice, back-up and innovative work are very important. Voice behaviour means speaking up about certain issues in the organization, when concerns are expressed actions can be taken, also speaking up with alternative ideas or voice problems can improve team effectiveness (Weiss et al., 2018).

Back-up behaviour involves the manner of being able or willing to lend a hand to others for instance assisting a co-worker who is struggling or staying late to cover another's shift (Gonzales-Mulé et al., 2014). Another role-behaviour which can support in the improvement of nurses' working conditions is innovative work behaviour. Innovative behaviour occurs when teams and employees use new ideas to enhance a product, service of process (Scott & Bruce, 1994).

For employees to be willing to use their voice to address issues in the team, help others on the team or try to share ideas for innovation they must experience a certain level of psychological safety. Psychological safety is defined as "a shared belief that the team is safe for interpersonal risk taking" (Edmondson, 1999, p. 354) which is further elaborated on by Baer and Frese (2003, p. 50) as a climate for psychological safety describes a work environment where employees are safe to speak up without being rejected or punished". Out of self-protection people tend not to ask questions or to be critical of plans. They are afraid to be seen as ignorant, incompetent, intrusive or negative by others and therefore don't speak up. When a team has a high psychological safety there will be more room to learn from others in the team by their questions and mistakes which will lead to more innovation and motivation in a team (Edmondson, 2014).

This paper examines psychologically safety among nurses in Dutch hospitals. Under which conditions are they willing to speak up during meetings and suggest new ideas? When do they feel safe to admit mistakes? Are they afraid to not laugh at a silly joke a manager makes? All these questions come down to how psychologically safe the employees feel, at work.

Research suggests that leader inclusiveness, meaning words and deeds by the leader that invite and appreciate others' contribution, will lead to a higher perception of psychological safety (Nembhard & Edmondson, 2006). In this study we will examine servant leadership, which is considered not to be motivated by self-interest but rather motivated by serving the needs of others (Greenleaf, 1977). We assume that servant leaders will improve employee's perception of psychological safety.

In addition to the style of leadership we want to analyse if the emotional intelligence of the leader has an effect on the psychological safety. Due to the focus servant leadership puts on the people rather than the company in combination with emotional intelligence we assume high psychological safety in these teams. If the psychological safety is high this should result into a high level of voice behaviour where employees feel it is safe to speak up and call out errors. Also this should improve back-up behaviour of employees where they feel the need to ask for help or assist co-workers when possible, and finally this would also have a positive effect on the innovative behaviour in the nursing teams. Meaning they will use new ideas to enhance services they provide.

We assume that employees who experience high levels of psychological safety and express this in different behaviours would be more inclined to thrive; that is, they may grow or develop well and they may prosper and be successful. Thriving is defined as the psychological state in which individuals experience both a sense of vitality and learning. Thriving in a job matters because it enhances the health and personal development of employees (Spreitzer et al., 2005). Because we stated earlier that nurses experience a lot of job pressure, thriving can be used as a means to mitigate burnout. Therefore thriving not only benefits the employee but also the organization (Maslach & Leiter, 2007). Because thriving can only be measured by asking employees themselves we will control for any bias by team leaders assessment of employee's job performance. Job performance is the effectiveness with which employees perform activities that contribute to the organization's technical core (Borman & Motowidlo, 1993).

Using a combination of surveys, observations and interviews, this research strives to contribute to a better understanding of the psychological safety of nurses in Dutch hospitals and perceived level of job thriving of these nurses. Our main research question is thus formulated as follows:

RQ: How does a leader's emotional intelligence moderate the relation between servant leadership and nurses perception of psychological safety, so that they may display certain extra-role behaviours and, consequently, job thriving and job performance?

## 2 Literature review

In this chapter hypotheses are built that will be examined in this research.

## Job thriving and performance

Organizations need to maintain a thriving workforce through different strategies in order to sustain their performance (Prem et al., 2016).

Thriving is defined as the joint experience of a sense of learning (growing and getting better at what one does at work) and a sense of vitality (feeling energized and alive at work). Thriving in a job matters because it enhances the health and personal development of employees, which also benefits organizations through increased performance and lower healthcare cost (Spreitzer et al., 2005). The two dimensions of thriving: learning and vitality can signify some progress on their own towards growth and personal development at work. Only used together these dimensions enhance one and other to form the experience of thriving. If an employee is learning but feels depleted, thriving suffers. Conversely, if an employee feels energized and alive while working but finds personal learning to be stagnant, the experience of thriving is limited (Porath et al., 2012).

Research found that thriving narratives sometimes reflects intrinsic motivation; people were thriving when they were passionate about their work content or work relationships, at other times these narratives emphasized achievement and recognition (Spreitzer et al., 2005).

Employees who experience job thriving are less inclined to have a burnout and more likely to take an active role in developing a successful career path, which is particularly important given in today's multifaceted careers. Recent studies suggest that organizations can help achieve job thriving through decision-making discretion, broad information sharing, feedback and a climate of civility (Maslach & Leiter, 2007). A more recent study showed that collective thriving at work positively relates to collective affective commitment, which in turn positively relates to overall unit performance (Walumbwa et al., 2017).

Job performance, on the other hand, can be defined as the effectiveness with which employees perform activities that contribute to the organization's technical core either by directly implementing a part of the process or indirectly by providing it with needed materials or services (Borman & Motowidlo, 1993). Later the behavioural episodes that an individual carries out over a period of time was added to the definition of job performance (Motowidlo & Kell, 2012). Some researchers suggest that job performance is actually composed of three parts; task performance, organizational citizenship and counterproductive work (Dalal, 2005). For this study we focus on the task performance aspect of job performance because we want to see how team leaders rate the employee job performance as a control for how employees see themselves as thriving in the organization.

## Servant leadership

For the purpose of this research we choose servant leadership as the style of leadership, this because it contributes to job performance (Dierendonck van, 2011) and thriving (Jaiswal & Dhar, 2017) of employees.

A servant leader is not motivated by self-interest but rather motivated by serving the needs of others (Greenleaf, 1977). With knowledge of each follower's unique characteristics and interests, servant leaders can assist followers in achieving their potential. Servant leaders serve as a role model, they inspire trust, provide information, feedback and resources. Servant leadership differs from traditional approaches to leadership in that it stresses personal integrity and focuses on forming strong long-term relationships with employees (Graham, 1991).

Research suggests that servant leadership relates to a variety of important outcomes such as citizenship behaviours, creativity, innovation and performance. It also emphasizes the importance of follower outcomes in terms of personal growth and accountability by giving people clear goals to strive for but also holding them responsible for achieving these goals and requiring managers to share knowledge and information to ensure that employees develop the necessary skills (Dierendonck van, 2011). According to the same research from van Dierendonck (2011) servant leadership can be dived into six dimensions; Empowering and developing people, humility, authenticity, interpersonal acceptance, providing direction and stewardship. Empowering and developing people is a motivational concept focused on enabling people (Conger, 2000). Empowering leadership behaviour includes aspects like encouraging self-directed decision making and information sharing and coaching for innovative performance (Konczak et al., 2000).

Humility refers to the ability of the team leader to put its own accomplishments in a proper perspective, servant leaders admit that they can benefit from the expertise of others and actively seek the contribution of others. Humility shows to which extent a leader puts the interest of others first and facilitates their performance and provides the essential support (Greenleaf, 1996).

Authenticity for a servant leader means manifesting itself in various aspects: doing what is promised, being visible within the organization, honesty (Russell & Stone, 2002) and vulnerability (Luthans & Avolio, 2003). Another perspective on authenticity is behaving in such a way that professional roles remain secondary to who the team leader is as a person (Halpin & Croft, 1966).

Interpersonal acceptances mean understanding and experience the feelings of others and where people are coming from (George, 2000) and being able to let go of perceived wrongdoings and not carry a grudge into other situations (McCullough et al., 2000). For servant leaders it is important to create an atmosphere of trust where people feel accepted, are free to make mistakes, and know that they will not be rejected (Ferch, 2005).

**Providing directions** 

Providing direction ensures that people know what is expected of them, which is beneficial for both employees and the organization (Laub, 1991). A servant leader's take on providing direction is to make work dynamic and "tailor made" (based on follower abilities, needs, and input). In this sense, providing direction is about providing the right degree of accountability, which has been suggested as a salient dimension of high-quality dyadic interpersonal relations (Ferris et al., 2009).

Stewardship is the willingness to take responsibility for the larger institution and to go for service instead of control and self-interest (Block, 2005). Leaders should act not only

as caretakers but also as role models for others. By setting the right example, leaders can stimulate others to act in the common interest.

Some leadership styles have overlap with servant leadership like Transformational leadership. For creating a more psychological safe work environment we assume a leader that helps their followers grow is a better fit. Transformational leaders like servant leaders encourage others to visualize the future of the organization and are persuasive by offering compelling reasons to get others to do things (Barbuto et al., 2006). A clear definition of the main distinction between these two styles of leadership is: "The transformational leader's focus is directed toward the organization, and his or her behaviour builds follower commitment toward organizational objectives, while the servant leader's focus is on the followers, and the achievement of organizational objectives is a subordinate outcome." (Stone et al., 2004, p. 349).

We assume that servant leadership will positively influence thriving of employees for several reasons. Servant leaders want to provide employees with opportunities to develop and they are more likely to experience vitality because they are engaged in their work (Spreitzer et al., 2005). In addition to this we assume that servant leadership will positively influence job performance of employees because servant leaders inspire followers to take an active role in serving the organization (Liden et al., 2008). This assumption is graphically represented in Figure 1 with the corresponding hypothesis presented below:

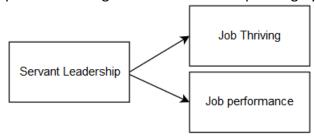


Figure 1: Servant leadership – Job Thriving & Job performance

Hypothesis 1: Servant leadership has a positive effect on employee's job thriving and job performance.

#### **Psychological safety**

Having a servant leadership style has a positive effect on the psychological climate and can result in trust according to van Dierendonck (2011). Psychological safety describes perceptions of the consequences of taking interpersonal risks in a context such as a workplace. Psychological safety refers to a climate in which people are comfortable being (and expressing) themselves. It consists of taken-for-granted beliefs about how others will respond when one puts oneself on the line, such as by asking a question, seeking feedback, reporting a mistake, or proposing a new idea (Edmondson, 2003). People feel 'safe' when they perceive that they will not suffer for expressing their true selves at work. In a safe environment, people understand the boundaries surrounding acceptable behaviours. However, unsafe conditions exist when situations are ambiguous, unpredictable and threatening (May et al., 2004). Psychological safety promotes learning from failures, which in turn can predict unit performance. When people feel safe in their work environment to speak up about made mistakes or other point of improvement co-workers can also learn from the made mistakes and work on avoiding these in the future.

The relation with one's immediate manager can have a significant impact on an individual's perceptions of the safety of a work environment, a supportive, and not

controlling, relation should foster perceptions of safety (Edmondson, 1999). Supervisory and co-worker behaviours that are supportive and trustworthy in nature are likely to produce feelings of safety at work. The determinants of psychological safety explored include supervisory relations, co-worker relations and behavioural norms (May et al., 2004). A study done by Carmeli et al. (2012) proposed that relational leadership improves decision quality, which psychological safety and learning from failures as mediator. The findings show that trust mediated a relationship between CEO relational leadership and team learning from failures. We can say that based on the existing literature the leader of a team has an impact on the psychological safety of the people working in that team. When people in teams feel psychological safe, there will be a positive effect on thriving. When psychological safety in teams is high there will be more information sharing and more learning from each other. This can result into job thriving over time. A recent study by Frazier (2016) showed that employees that have a high perception of psychological safety will foster feelings of thriving at work. In addition we assume that psychological safety will add to the job performance of employees. According to research based on Kahn (1990) "supportive management and interpersonal relationships foster feelings of psychological safety that increase willingness to engage fully in work roles" (Rich et al., 2010, p. 621). Meaning this will result in better job performance. In a study done by Brown (1996)employees that perceived the workplace to be motivating and involving psychologically were related to higher job performance.

This is graphically represented in Figure 2 with the corresponding hypothesis presented below:



Figure 2: Psychological safety- Job Thriving & Job performance Hypothesis 2: Employee's perception of psychological safety mediates the effect between servant leadership and job thriving and job performance.

#### **Emotional intelligence of the team leader**

Emotional intelligence involves the accurate perception, understanding, and regulation of not only one's own emotions but also those of others and covers "the active and purposeful integration of feelings and thoughts" (George, 2000). Another definition emotional intelligence involves the ability to carry out accurate reasoning about emotions and the ability to use emotions and emotional knowledge to enhance though (Mayer et al., 2008). Emotionally intelligent people (a) perceive and understand their own emotions well, (b) perceive and understand the emotions of others well, (c) control expressions of own emotions well, and (d) channel own and others' emotions toward constructive activities. Emotionally intelligent individuals use their ability to reason through and solve small and large daily problems in social encounters. There is ample evidence that Emotional Intelligence is related to the quality of social interaction (Brackett et al., 2006; Mayer et al., 2008). Emotional Intelligence competencies have also been shown to be significantly related to individual performance (Boyatzis, 1982). Emotional Intelligence can be used as a predictor

of significant outcomes in social relations, workplace performance and mental and physical well-being (Mayer et al., 2008).

Leaders with emotional intelligence can use this skill to affect their employees. They are able to offer team members solutions to problems that confront them, redefine goals, reframe performance situations, and interpret ambiguous work situations (Jordan & Lawrens, 2009). A recent study implies that leaders that favour the before style of leadership have higher levels of emotional intelligence compared to leaders that favour the delayed style of leadership these leaders have the lowest level of emotional intelligence (Li et al., 2016).

Emotionally intelligent leaders respect different opinions in a team, overcome frustration with team members, have a contagious degree of enthusiasm, and create a cheerful team atmosphere (George, 2000). A recent study shows that emotional intelligence and servant leadership are positively associated and, in turn, are positively associated with development and goal orientation (Lee, 2018).

For this research we use emotional intelligence as a moderator between servant leadership and psychological safety because we assume that emotional intelligence will enhance the servant leadership qualities and therefor will make the perception of psychological safety among employees higher. The reason emotional intelligence was chosen to be a moderator was because we want to see how this will affect the correlation between servant leadership and psychological safety. This is graphically represented in Figure 3:

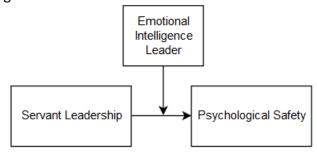


Figure 3: Emotional intelligence as a mediator on the effect for servant leadership on psychological safety Hypothesis 3: Emotional intelligence moderates the effect of servant leadership on employee's perception of psychological safety.

## **Voice Behaviour**

Employee failure to speak up with concerns or ideas can have critical consequences when for example in hospitals when nurses are silent about medical problems (Edmondson et al., 2001). In most cases employee silence concerns more routine matters, for instance employees speak up with alternative ideas or voice problems they can improve team or organizational effectiveness (Weiss et al., 2018).

Managers may believe that day-to-day employee voice about problems or opportunities is distracting and not worth the time. Because hierarchies often block voice behaviour from those with lower status, scholars have emphasized the importance of team leaders and supervisors in encouraging subordinates to speak up (Detert & Treviño, 2010). Numerous studies have shown that people are more likely to speak up and contribute to the team if the leader is perceives as open and appreciative to subordinates input (Detert & Burris, 2007; Edmondson, 2003; Ilies et al., 2007; Nembhard & Edmondson, 2006; Tangirala & Ramanujam, 2012).

Because Servant leadership puts the focus on people we believe this could be perceived as an open leader and voice would be a logical effect when people feel psychological safe in their working environment. Employees who fear speaking up to those above them or believe that it is useless to do so are likely to remain silent or to simply give in when they truly disagree. Only prosocial, improvement-oriented voice: the provision of genuine, constructive input about problems and possibilities for change presents those in power with information that might actually spark learning and change (Pinder & Harlos, 2001). When people in teams feel psychological safe the possibility people speak up will increase. When people speak up in teams with alternative ideas or voice problems they can improve job thriving and their overall job performance. This is graphically represented in Figure 4:

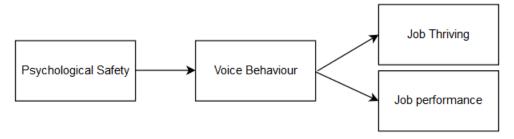


Figure 4: Psychological safety-Voice Behaviour Hypothesis 4: Psychological safety will have a positive effect on voice behaviour.

#### **Back-up behaviour**

Back-up behaviour is considered as helping behaviour which is defined as members discretionary behaviours intended to benefit other work group members or the group as a whole (Porter et al., 2002). behaviours help build and strengthen interpersonal relationships (Sparrowe et al., 2006). Examples of helping behaviour are assisting a co-worker who is struggling or staying late to cover another's shift (Gonzales-Mulé et al., 2014).

Given the highly interdependent nature of teams, back-up behaviours are essential to their viability and effectiveness (Podsakoff et al., 2009). Higher quality exchange relationships provide focal members with greater opportunity to meet the performance expectations of the supervisor. Therefore employees having higher team member exchange should be rated as better performers (Seers, 1989).

Earlier research done by Carmeli et al. (2010) implies that leadership inclusiveness has an effect on helping behaviour (back-up behaviour) and is an instrument on positive outcomes in work groups. A more recent study by Randel et al. (2016) also concluded that the inclusiveness of the team leader has a great effect on the back-up behaviour of the team members. It also suggests that helping behaviour is based on the extent to which the employee feels obligated to reciprocate good treatment (or lack thereof).

We assume that when people feel psychological safe in their working environment they will be more inclined to offer help to co-workers when they feel like it is necessary. When people ask and provide guidance, the learning aspect in the team will increase therefor job thriving and job performance of employees will increase. This is graphically represented in Figure 5:

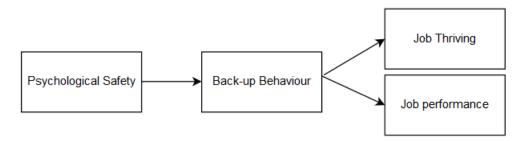


Figure 5: Psychological safety- Back-up Behaviour
Hypothesis 5: Psychological Safety will have a positive effect on back-up behaviour.

#### Innovative work behaviour

Innovative behaviour occurs when teams and employees suggest and apply new ideas to enhance a service, product or process. Research found that leadership, support for innovation, managerial role expectation and systematic problem-solving style to be significantly related to individual innovation behaviour. The study provides evidence that innovative behaviour is related to the quality of the supervisor-subordinate relationship (Scott & Bruce, 1994).

Individuals' innovative behaviours in the workplace are the foundation of any high-performance organization. This is especially apparent in a knowledge-based economy where intangible assets come to the forefront (Carmeli & Tishler, 2004).

Researchers have identified communication and information exchange as important aspects for innovative behaviour (Sanders & Shipton, 2012). Others highlight knowledge sharing as a specific behavioural mechanism influencing innovative behaviour (Sanders & Lin, 2016).

While innovative behaviour is very desirable for an organization it poses a risk to employees. They can be criticized for questioning existing work methods. It could also potentially increase the workload while the change is implemented (Bednall et al., 2007).

In order for employees to feel comfortable to speak up and to exchange information there has to be a certain level of psychological safety present in the team (Edmondson, 1999). When healthcare teams are psychologically safe they are more likely to engage in quality improvement and team learning initiatives that promote innovative improvements (Salas et al., 2018). We assume that when people feel psychological safe they will be more likely to share new ideas to enhance the service they provide, resulting in higher job thriving and job performance. This is graphically represented in Figure 6:

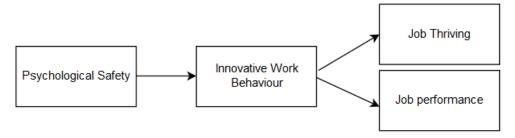


Figure 6: Psychological safety- Innovative Work Behaviour Hypothesis 6: Psychological safety will have a positive effect on Innovative work behaviour.

All the above stated hypotheses from this chapter together form the hypothetical model for measuring job thriving and job performance: figure 7.

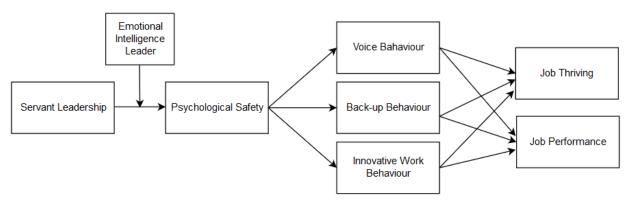


Figure 7: Hypothetical model for measuring job thriving & job performance

## 3 Methodology

## Research design

For this research we chose mixed methods. The qualitative methods include observations and interviews. The observations were done during regular team meetings of nurses and their team leaders in Dutch hospitals. The interviews were held individually among the team leaders. The quantitative method involves a survey. The reason for this mixed methods approach was that careful analysis of both qualitative and quantitative data increases confidence that the explanations of the studied phenomena are more plausible than alternative interpretations. Because the field of research in leadership style and possible arising behaviours is in the intermediate state of theory, this mixed approach is the appropriate fit (Edmondson & McManus, 2007). Intermediate theory describes a zone in which enough is known to suggest formal hypotheses, but not enough is known to do so with numbers alone or at a safe distance from the phenomenon (Edmondson, 1999; Edmondson & McManus, 2007).

For this reason using only quantitative data will lack reliability and eternal validity and suffer in comparison to existing measures. The results would be less convincing, reducing potential contribution to the literature and influence on others understanding of the topic (Edmondson & McManus, 2007).

For the psychological safety part the survey will be complemented by the observations by examining individual's perception of psychological safety. The results of both measures can be compared to understand the differences and similarities between the results from the survey and the observed results (O'Donovan et al., 2019).

Another aspect kept in mind while conducting this survey was the type of bias that could occur in the data. When the survey questions were asked to only the employees we could risk common source bias. To reduce this type of bias we asked certain parts of the survey to the team leaders. The job performance was asked from the team leaders for this purpose. Another type of bias which can occur is common method bias, this occurs when the instrument used causes a bias. To reduce this we used multiple instruments for this research, the survey, the observation scale and interviews. The combination of qualitative data to help elaborate a phenomenon with quantitative data to provide preliminary tests of relationships can promote both insight and rigor when appropriately applied (Jick, 1979; Yauch & Steudel, 2003).

#### Sampling procedure

For this research we approached 25 Dutch hospitals from all over the Netherlands. From these 25 hospitals the majority did send the research around in their hospitals and responded that they did not have the time to participate right now. A few already said no in the first contact, the reason was a lack of time and a staff shortage. In total seven teams showed interest in this research, one team decided to not participate last minute due to their team meeting being too late to observe. They were offered other options to participate regardless but they refused. Another team showed interest but never responded to email after being asked for a date to come observe. Only five teams in total wanted to participate in this research.

The online survey was send to the hospitals on 3th of June this year. The hospital teams had one month to fill in the survey questions. In this month weekly reminders were send to the team leaders with updates regarding the amount of filled in surveys. Due to a lack of response the limit to fill the survey in within one month was extended with two weeks extra,

the survey was closed on the 20th of July. In the introduction of the survey all respondents got informed that the survey data would be collected anonymous. This was added to the survey to make sure the respondents could answer the questions honest and open.

The observations took place in June and July of this year in the hospitals during these meetings permission was asked to record the meeting, only one of the five teams gave permission to record. The reason for the four other teams were in two because of the team leader who did not wanted to participate in recordings due to the new law in the Netherlands (AVG law). In the other two cases the team was asked and they wished not to be recorded because they felt it would be uncomfortable.

**Table 1**Descriptive statistics

B coompetive statistics			
Item	Ν	Mean	Std. Deviation
Servant leadership by team members	70	4,9122	,76692
Psychological safety team leader	65	7,7641	1,28478
Psychological safety peers	67	7,8209	1,12330
Psychological safety team	64	6,0365	,89505
Voice behaviour	67	4,4403	,80544
Back-up behaviour	66	5,3593	,89556
Innovative work behaviour	65	4,5709	,85411
Job performance	57	5,5482	1,08298
Job thriving	64	5,2141	,87212
Servant leadership by team leader	6	5,5238	,52424
Emotional intelligence	6	5,9688	,37028

**Table 2**Hospital overview

Hospital	Nurses	Team leader	Total
Hospital A	15	1	16
Hospital B	11	1	12
Hospital C	20	1	21
Hospital D	3	1	4
Hospital E	26	2	28
Total	75	6	81

**Table 3**Demographical overview

	ļ	Sex		Α	ge			Work	ing exp	erience			Educ	ation	
Hospital	Males	Females	20- 30	30- 40	40- 50	50+	0-10	10- 20	20- 30	30-40	40+	MBO	НВО	WO	Other
Α	1	15	6	2	2	5	7	2	2	4	1	4	7	1	4
В	1	11	1	4	1	6	2	4	2	4	0	2	8	1	1
С	1	20	2	5	2	11	4	4	3	9	1	12	8	1	0
D	0	4	0	0	3	1	1	1	3	0	0	0	3	0	1
E	0	28	11	7	1	6	3	3	3	5	1	3	23	0	2
Total	3	78	20	18	9	29	17	14	13	22	3	21	49	3	8

## Sample descriptions

For this research we could only observe a part of the population due to lack of time and resources. We used a simple random sample; every individual in the target population had an equal chance of being part of the sample. For this quantitative research to be valid we needed a sample of 200 nurses. For the qualitative part of this research the groups that were observed have to contain 5 to 7 nurses in order to be able to split the sample. The amount of observed meetings in order to be valid needs to be 40.

**Tabel 4** Methodology schematically

Methode	Variable	Team members	Team leaders
Survey	Servant leadership	Х	Χ
	Emotional Intelligence		x
	Psychological safety	Х	
	Voice behaviour	Х	
	Back-up behaviour	Х	
	Innovative work behaviour	Х	
	Job thriving	Х	
	Job performance		x
Observation	Psychological safety	Х	x
	Voice behaviour	Х	x
	Back-up behaviour	Х	x
	Innovative work behaviour	Х	Х
Interview	Servant leadership		X
	Emotional Intelligence		X

#### Measures

#### Survey

The data for this study was collected through an e-survey that was send to the nurses of different Dutch hospitals. These hospitals were also the places where the observations were done. The survey was built on various well known scales and one new developed scale. Most of these scales were developed in English and were translated to Dutch before using them. In order to correctly translate these surveys and to limit bias we used the translation-back translation method (Brislin, 1970).

For servant leadership of the team leaders Liden's shorted 7-item measure (SL-7) was used. This was asked to the nurses about the team leaders. This survey showed if there is servant leadership among the team leaders in the hospitals (Liden et al., 2015). There was already a Dutch translation for this survey available which limited the chance of translation bias for this research. The questions about servant leadership were asked to the nurses in the teams. An example item from this survey: My leader can tell if something work-related is going wrong. When performing the Chronbach's alpha to the items of servant leadership a score of .733 was discovered, a score of 7 and higher is considered suitable.

Emotional intelligence of the team leaders was measured by using the short 16 items survey version of Wong and Law Emotional Intelligence Scale (WLEIS) (Law et al., 2004). This scale was send to the team leaders of the nurses to answer. For this survey there was already a Dutch translation available which also means the chance of translation bias was eliminated. An example item from this survey: I understand my emotions well. When performing the Chronbach's alpha to the items of emotional intelligence a score of .794 is discovered and is suitable.

Psychological Safety of the nurses was measured by the survey developed by O'Donovan. This survey was based on Edmondson's well-known scale for psychological safety (Edmondson, 1999). In this measurement O'Donovan et al. adjusted some of the terms and questions of Edmondson. They did this with the help of healthcare professionals. The survey has been pilot-tested for validity and reliability, and therefore should enable healthcare teams, their leaders and coaches to gain a better understanding of psychological safety within their team (O'Donovan et al., 2019). The questions for psychological safety were asked to the nurses in the teams. The questions are divided into three categories; psychological safety in relation to the team leader, psychological safety in relation to the peers and psychological safety in relation to the team. The category team leader had a Cronbach's alpha of .953. An example item from this survey: If I had a question or was unsure of something in relation to my role at work, I could ask my team leader. The category peer had a Cronbach's alpha of .955. An example item from this survey: If I had a question or was unsure of something in relation to my role at work, I could ask my peers. The category team had a Cronbach's alpha of -.270 we reverse code the first question and got a score of .637 which is below .700 but because we only measure three items here the score is expected to be lower. An example item from this survey: People in this team are usually comfortable talking about problems and disagreements related to work issues. When performing the Chronbach's alpha to all the items of psychological safety together a score of .900 is discovered and is suitable.

The voice behaviour of the nurses were measured by Dyne van &Lepine (1998). These questions were asked to the nurses in the teams, not the team leaders. An example item from this survey: This particular co-worker develops and makes recommendations concerning issues that affect this work group. When performing the Chronbach's alpha to the items of voice behaviour a score of .802 was discovered and is suitable.

The back-up behaviour of the nurses was also measured by the same study from Dyne van & Lepine (1998) as the voice behaviour these questions was also asked to the nurses of the teams, not the team leaders. An example item from this survey: This particular co-worker volunteers to do things for this work group. When performing the Chronbach's alpha to the items of back-up behaviour a score of .936 was discovered and is suitable.

To measure the amount of *innovative work behaviour* among the nurses we used the measurement scale of Janssen. This scale was used to measure the innovative work because the scale originally was written in Dutch so we did not have to rewrite it (Janssen, 2000). An item example of this survey: How often do you pay attention to issues that are not part of your daily work? When performing the Chronbach's alpha to the items of innovative work behaviour a score of .918 was discovered and is suitable.

To measure the level of *thriving* among the nurses in this research we used the measurement developed by Porath et al. (2012). This measurement scale uses the factor vitality and learning which are both interesting for what we want to research for our study. An example item from this survey: This particular co-worker volunteers to do things for this work group. When performing the Chronbach's alpha to the items of thriving a Cronbach's alpha score of .631 was discovered. When we changed item 4 and 6 which where reverse coded we got a Cronbach's alpha score of .749.

Job performance was measured by using five items of the developed scale by Williams & Stella (1991) We used the five items of this scale with the highest factor loadings reported in other studies to reduce the amount of items the team leaders had to answer (Williams & Stella, 1991). An example item from this survey: This employee adequately

completes assigned duties. When performing the Chronbach's alpha to the items of job performance a score of, 710 was discovered and is suitable.

As a control variable we included: gender, age, years of work experience, team size, will function as control variables. Work pressure of employees will also be used as a control variable. To measure work pressure the QEEW scale was used (Veldhoven & Meijman, 1994).

**Table 5**Reliability overview

Reliability overview				
Construct	Scale	N items	Cronbach's Alpha	Filled in by
Servant leadership	Liden's shorted 7-item measure (SL-7)	7	,733	Team leaders and team members
Emotional Intelligence	Wong Emotional Intelligence Scale (WLEIS)	16	,794	Team leaders
Psychological safety overall	O'Donovan et al. Psychological safety	19	,900	Team members
Psychological safety in relation to team leader	O'Donovan et al. Psychological safety	9	,953	Team members
Psychological safety in relation to peers	O'Donovan et al. Psychological safety	7	,955	Team members
Psychological safety in relation to the team	O'Donovan et al. Psychological safety	3	,637	Team members
Voice behaviour	Lepain Voice behaviour	6	,802	Team members
Back-up behaviour	Lepain Helping behaviour	7	,936	Team members
Innovative work behaviour	Janssen innovative work behaviour	9	,918	Team members
Thriving	Porath Thriving at work (TAW)	10	,749	Team members
Job performance	Williams Organizational citizenship behaviour (OCB)	4	,914	Team leaders
Control variable	Veldhoven Work pressure (QEEW)	4	,710	Team members

We ran a pilot test for this survey with three people, consisting of one male and two female in the age category 25-35. Two of them had a hbo diploma and one of them a mbo diploma. One of them is working for the Dutch tax authorities as a representative. One of them is a part-time student and part-time employee of a production team and the last person was working for the government in a financial department fulltime. The feedback we received from the pilot was about the way they could see how many pages they still had to fill in to finish the survey this was not visible on mobile devices. We adjusted this so people can see how far they already are. There were also some minor errors in the text we

adjusted. They said they would prefer to see a next page button instead of an arrow; this would be clearer on all devices. Overall their opinion was that the survey questions were clear, it's easy to read and they were very keen about the design and colour usage. The final survey can be found in appendix 1 for the nurses and in appendix 2 for the team leaders.

#### **Meeting observation**

For the second part of this research observations of regular staff meetings were held. The amount of observations that have been held was five this was because other hospitals that we approached did not want to participate. The amount of hospitals approached and their reasons not to participate are discussed in the sampling procedure of this chapter. To measure psychological safety several team meetings of nurses with their team leaders were observed. For these observations a recently developed checklist was used. This checklist was developed by O'Donovan et al. (2019). During the observations, the number of times the researcher observed certain behaviours was noted using this checklist. The observation scheme was developed with researchers specialized in team observations, based on seminal research on indicators of psychological safety. Examples of behaviour in this checklist are: Voice behaviour, Defensive voice behaviour, silence behaviour, supportive behaviour, unsupportive behaviour, learning or improvement orientated behaviour and familiarity behaviour (O'Donovan et al., 2019). The checklist has a separate column for the times certain behaviour is observed by an employee and for team leaders. In order to limit observer bias we asked if we could video record the team meetings. From the five observations only one team agreed for the meeting to be video recorded. In two of the other teams the team leader decided recording was not possible, and in the other two teams certain team members did not feel comfortable being video recording during the meeting. The length of these meetings was different for each team, to vary from two to three hours. The meeting that was recorded had a duration of three hours and consisted out of three parts but only the last hour was recorded because the first part of this meeting consisted of a hospital presentation and the second part was a workshop we could not video record. The recording we made was uploaded to the database of the university. They are stored safely here and will only be accessible with approval from the department.

To control for the behaviours observed in this research another student or employee of the university will need to have permission and the checklist. This person will have to watch the entire video recording and will have to observe with the observation scheme just like we did in this research during the team meetings. When the observations match each other we can reject the possibility of observer bias in this research, which will make the findings in this research stronger. The observation scheme can be found in appendix 3 of this paper. To control for the fact these observed meetings didn't differ much from the other meetings the team members have filled in a small questionnaire after the meeting was done, this questionnaire consisted out of three questions about how much the meeting differs from others and how much the behaviour of the people in this meeting was different from other meetings. The scale of this questionnaire was a 7 point likert scale with items starting with entirely different to exactly the same.

#### **Interviews**

The last part of this research consists out of the interviews. These were held among the team leaders. The interviews were conducted via telephone after the observations. The reason for this was to make sure the team leader was not influenced by the questions asked in the interview before the observation was done. The team leader could possibly realize what we wanted to observe when asked the interview questions and act different during the meeting. The respondents were informed at the start of the interview that the interview would be audio-recorded as the interviews needed to be documented for the thesis. The respondents gave their permission to make these recordings. The interview schedule was semi-structured; we started with general information followed by questions about the leadership style. The questions of the interview were open questions. The questions were the same for all five team leaders. The interview questions used for this study can be found in appendix 4.

## **Data-analysis**

## Survey

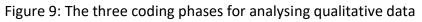
The data of the survey will be analysed with the statistical software programme SPSS. The quantitative results will be analysed via regression analysis and a Sobel test. To measure if the items together measure the save construct we use Cronbach's alpha. With the results from the data we can test the hypotheses stated in this research.

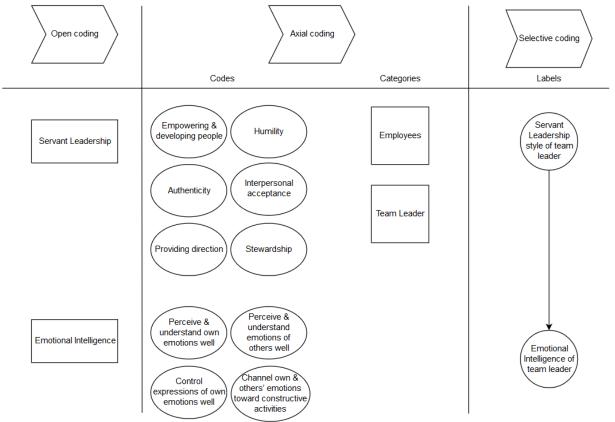
#### **Observations**

The results of the observations will be compared with the survey and interview data to detect if the behaviour during the meeting is similar to what would be expected based on the other data collected.

#### **Interviews**

The interviews were audio-recorded and transcribed. After this step the transcriptions were coded. The coding method was based on "the grounded theory" by Corbin and Strauss (1990). The theory encodes in three phases: open, axial and selective coding. As presented in figure 9 in the first part called the open coding phase all the text that referred to Servant leadership and Emotional Intelligence are selected and highlighted. In the second part which is called the axial coding the highlighted text was studied to determine what the servant leadership had in common (Development, motivation and support). The same was done for Emotional Intelligence (Trust, negotiability, and approachability). In the last phase called selective coding the connections between the categories were analysed and put into labels.





## **4 Results**

This chapter contains the findings of this research. We start with the quantitative research which was conducted via survey for both the team leader and team members. The second part of the results consists out of the qualitative research which was conducted via interviews with the team leader and observations of the regularly held meetings of team leaders and team members.

## **Quantitative research**

#### Surveys

A survey was held consisting of three parts, the first part was held among team members (n=75) and two other parts of the survey were held among the team leaders (n=6). The part of the survey which was done by the team members was about the servant leadership of the team leader, the perception of psychological safety, voice behaviour, back-up behaviour, innovative work behaviour, and thriving at the job. The team leaders were asked to fill out questions about servant leadership and their own emotional intelligence in the first part of the survey. The second part of the survey the team leader had to fill out was about the job performance of team members. The descriptive statistics of this research can we found in table 1, 2 and 3 of chapter 3.

#### **Correlations**

By analysing the zero-order correlation we noted whether the supposed coherence was present. A high correlation coefficient means a strong relationship between two variables. As shown in table 6 there is a high significant correlation between the perception of nurses about the servant leadership style of their team leader and the perception of psychological safety in relation to the team leader (,713\*\*). Another right correlation is found between back-up behaviour and psychological safety in relation to the team (,706\*\*). There is also a strong significant correlation between education and the emotional intelligence of the team leader (,890\*). The other correlations variance between weak and moderate the reason for the lack of significant meaningful data could be because of the small sample in this study.

**Table 6**Correlations

Variable	М	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
			1	2	<u> </u>	4	J	U		0	,	10	11	12	13	14	13
1. Servant by nurses	4,9122	,76692	1														
2. Back-up behaviour	5,3593	,89556	,328**	1													
3. Voice behaviour	4,4403	,80544	,358**	,153	1												
4. Innovative work	4,5709	,85411	,292*	,005	,600**	1											
behaviour																	
5. Job performance	5,5482	1,08298	,263	,270	,213	,107	1										
6. Thriving	5,2141	,87212	,494**	,319*	,348**	,280*	,077	1									
7. Psychological safety	7,7641	1,28478	,713**	,203	,463**	,328**	,382**	,485*	1								
team leader																	
8. Psychological safety	7,8209	1,12330	,195	,596*	,287*	,146	,338*	,278*	,271*	1							
peers																	
9. Psychological safety	7,8209	1,12330	,299	,706**	,116	-,037	,209	,233	,156	,624**	1						
team																	
10. Emotional	5,9688	,37028	-	-	-	-	-	-	-	-	-	1					
intelligence team																	
leader																	
11. Servant by team	5,5238	,52424	-	-	-	-	-	-	-	-	-	.644	1				
leader																	
12. Experience	5,9688	,37028	,044	,279*	,131	-,107	,019	,068	,036	,162	,230	,593	,890*	1			
13. Sex	1,96	,190	-,172	-,050	-,163	-,211	-,025	,206	-,219	-,225	-,260*	-,588	-,915*	-,166	1		
14. Education	5,07	1,093	-,005	-,266*	,050	-,038	-,114	-,131	-,054	-,126	-,017	,894*	,796	,105	,288**	1	
15. Work pressure	2,8134	,45299	,034	,158	-,251*	-,207	,120	-,038	-,028	-,078	-,052	-	-	,153	,154	-,237	1

<sup>\*\*</sup>. Correlation is significant at the 0.01 level (2-tailed).

 $<sup>^{\</sup>star}$ . Correlation is significant at the 0.05 level (2-tailed).

#### Regression analysis

The control variable we used in the regression analysis was sex.

## The effect of servant leadership on job thriving and job performance of employees.

The linear regression for servant leadership and the effect of it on job thriving of employees has a significance score of sig=.000 which is smaller than alpha 0.05. The significance score for job performance is sig=.060 which is bigger than alpha. The  $R^2$  of employee thriving is .336 which means 33,6% of thriving is explained by servant leadership, for job performance this score is 6,9% with an  $R^2$  of .069. H1 suggests that servant leadership would have a positive effect on job thriving and job performance of employees. Table 7 shows that this could be supported for job thriving ( $\beta$ =.551, P<.001) and not supported for job performance as shown in table 8 ( $\beta$ =.267, p=.060>.05). This means the hypothesis is supported for job thriving but rejected for job performance.

Table 7

		Thriving			
	R <sup>2</sup>	В	SE B	β	Sig.
Servant	.336	.618	.121	.551	.000
leadership					

Table 8

Job performance								
	R <sup>2</sup>	В	SE B	β	Sig.			
Servant	.069	.364	.190	.267	.060			
leadership								

# Employee's perception of psychological safety mediates the effect between servant leadership and job thriving and job performance.

The linear regression for this hypothesis has to be done twice in several steps because we work with mediation. This regression consists of four steps the first regression is between servant leadership and employee thriving. This is the same regression as done in the previous hypothesis this was supported ( $\beta$ =.551, P<.001) see table 7 and 9. The second step is between servant leadership and perceived psychological safety. Table 10 shows that this could be supported ( $\beta$ =.550, P<.001). The R<sup>2</sup> here is 0.375 which means 37,5% of psychological safety is explained by servant leadership. The third step is between perceived psychological safety and thriving. As shown in table 9 this can be supported ( $\beta$ =.611, P<.001). The R<sup>2</sup> here is .385 which means that 38,5% of thriving can be explained by psychological safety. The fourth step is between servant leadership, perceived psychological safety and thriving. As shown in table 9 servant leadership ( $\beta$ =.345, p=.006 <0.05) and psychological safety ( $\beta$ =.410, p=.002<0.05) are both significant and the relation can be supported. The R<sup>2</sup> for these variables is .462 which means that 46,2% of thriving can be explained by servant leadership and psychological safety. The Sobel test in table 11 for this regression analysis computed a P value of 0.00 which is smaller than alpha which shows that this hypothesis can be supported for job thriving.

Table 9

		Thriving	5		
	R <sup>2</sup>	В	SE B	β	Sig.
Servant leadership	.336	.618	.121	.551	.000
Psychological safety	.385	.611	.109	.611	.000
Servant leadership + psychlogical	.462	.384	.135	.345	.006
safety					
Servant leadership + psychlogical	.462	.409	.124	.410	.002
safety					

Tal	ble	10
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	Psychological safety								
	R²	В	SE B	β	Sig.				
Servant	.375	.616	.118	.550	.000				

Table 11

	Input:		Test statistic:	Std. Error:	<i>p</i> -value:
а	0.616	Sobel test:	3.82025165	0.09852126	0.00013332
b	0.611	Aroian test:	3.78810686	0.09935728	0.0001518
$s_{a}$	0.118	Goodman test:	3.8532289	0.09767808	0.00011657
s <sub>b</sub>	0.109	Reset all		Calculate	

The second part of the regression analysis is for job performance and the first step is a regression between servant leadership and job performance. The significance here as shown in table 12 is .060 which is bigger than alpha which means the relationship between servant leadership and job performance is not supported. The second step is between servant leadership and perceived psychological safety the relationship is supported as shown in table 13 ( $\beta$ =.550, P<.001) The R² is .375 which means 37,5% of psychological safety can be explained servant leadership. The third step is between perceived psychological safety and job performance. As shown in table 12 ( $\beta$ =.448, P=.003<.05) this relation can be supported. The R² here is .179 meaning 17,9% of job performance can be explained by psychological safety. The fourth step is between servant leadership, perceived psychological safety and job performance. As shown in table 12 for servant leadership ( $\beta$ =.021, p=.904) the relation is not supported and for psychological safety ( $\beta$ =.432, p=.021<0.05) the relation can be supported. The Sobel test in table 14 for this regression analysis computed a P value of 0.00 which is smaller than alpha which shows that this hypothesis can be supported for job performance with the Sobel test.

Table 12

	Job performance					
	R <sup>2</sup>	В	SE B	β	Sig.	
Servant leadership	.069	.364	.190	.267	.060	
Psychological safety	.179	.581	.184	.448	.003	
Servant leadership + psychological	.177	.029	.235	.021	.904	
safety						
Servant leadership + psychlogical	.177	.558	.233	.432	.021	
safety						

Table 13

Davida da sisal safatu

	Psychological safety							
	R <sup>2</sup>	В	SE B	β	Sig.			
Servant	.375	.616	.118	.550	.000			

Table 14

	Input:	-	Test statistic:	Std. Error:	p-value:
а	0.616	Sobel test:	2.70180899	0.13246532	0.00689634
Ь	0.581	Aroian test:	2.66623151	0.1342329	0.00767068
sa	0.118	Goodman test:	2.73884978	0.13067383	0.00616545
s <sub>b</sub>	0.184	Reset all		Calculate	

# Emotional intelligence moderates the effect of servant leadership on employee's perception of psychological safety.

Because of the small sample size it was not possible to conduct this hypothesis by regression in SPSS. This is why this hypothesis will be partly answered by tables and descriptions. The linear regression for servant leadership and psychological safety shows a  $R^2$  of .375. Table 15 shows that the effect of servant leadership on psychological safety can be supported ( $\beta$ =.550, P<.001). The linear regression for servant leadership on emotional intelligence shows a  $R^2$  of .415 and as shows in table 16 the effect of servant leadership on emotional intelligence cannot be supported ( $\beta$ =.648, P=.595>0.5) meaning this is rejected. The linear regression between emotional intelligence and psychological safety could due to the small sample not be computed in SPSS. We make an assumption based on table 17 for this part. As is presented in table 17 the team leaders all seem to score on the positive side meaning the team leaders all think they are emotional intelligence.

Table 15

Table 13									
	Psychologi	Psychological safety							
	R <sup>2</sup>	В	SE B	β	Sig.				
Servant	.375	.616	.118	.550	.000				
Table 16									
	Emotional	intelligence							
	R <sup>2</sup>	В	SE B	β	Sig.				
Servant	.415	.457	.772	.648	.595				

Table 17

Question	Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree
I have a good sense of why I feel certain feelings most of the time					1	3	2
I have a good understanding of my own emotions.						3	3
I really understand what I feel					1	4	1
I always know whether I am happy or not					1	2	3
I always know my friends' emotions from their behaviour.				1	3	2	
I am a good observer of others' emotions						5	1
I am sensitive to the feelings and emotions of others				1	3	2	
I have a good understanding of the emotions of people around me					2	3	1
I always set goals for myself and then try my best to achieve them			1	1		3	1
I always tell myself I am a competent person				1	3	2	
I am a self-motivating person					2	2	2
I would always encourage myself to try my best					2	3	1
I am able to control my temper so that I can handle difficulties rationally						2	4
I am quite capable of controlling my own emotions					1	3	2
I can always calm down quickly when I am very angry.					1	4	1
I have good control of my emotions.							6

## Psychological safety will have a positive effect on voice behaviour.

The linear regression for psychological safety and the effect on voice behaviour of employees as shown in table 17 tells us that the relation can be supported ( $\beta$ =.477, P<.001). It also shows a R<sup>2</sup>of .237 meaning 23.7% of voice behaviour is explained by psychological safety.

Table 17

	Voice behaviour							
	R <sup>2</sup>	В	SE B	β	Sig.			
Psycholigical	.237	.442	.110	.477	.000			
safety	safety							

## Psychological safety will have a positive effect on back-up behaviour.

The linear regression for psychological safety and the effect on back-up behaviour of employees as shown in table 18 tells us that the relation can be supported ( $\beta$ =.491, P<.001). It also shows a R<sup>2</sup>of .224 meaning 22.4% of back-up behaviour is explained by psychological safety.

Table 18

	Back up behaviour							
	R <sup>2</sup>	В	SE B	β	Sig.			
Psycholigical	.224	.514	.126	.491	.000			
safety	safety							

## Psychological safety will have a positive effect on innovative work behaviour.

The linear regression for psychological safety and the effect on innovative work behaviour of employees as shown in table 19 tells us that the relation can be supported ( $\beta$ =.258, .049<.05). It also shows a R<sup>2</sup>of .105 meaning 10,5% of innovative work behaviour is explained by psychological safety.

Table 19

Innovative work behaviour							
R <sup>2</sup> B SE B β Sig.							
Psycholigical	.105	.256	.128	.258	.049		
safety							

To complete the model we also wanted to test the relations between the behaviours and employee thriving and job performance. In table 20 we can see the relations between the behaviours and thriving. As we can see all of the behaviours seem to be significant for

thriving. In table 21 we can see the relation between the behaviours and job performance. As we can see here none of the behaviours seem to be significant for job performance.

Table 20

		Thrivin	g			
	R <sup>2</sup>	В	SE B	β	Sig.	
Voice behaviour	,194	,429	,127	,395	,001	
Back-up behaviour	,152	,321	,115	,331	,007	
Innovative work	,153	,348	,125	,338	,007	
behaviour						

Table 21

Job performance									
	R <sup>2</sup>	В	SE B	β	Sig.				
Voice behaviour	,045	,311	,202	,215	,129				
Back-up behaviour	,073	,321	,163	,269	,054				
Innovative work	,011	,135	,189	,105	,479				
behaviour	behaviour								

## **Exploitative research**

Because we want to test the new psychological safety measurement of (O'Donovan et al., 2019) we did some extra analysis. The first one is to test the different items within the psychological safety measure. As we can see in table 22 all three dimensions seem to have a relation with thriving of employees. Also the R<sup>2</sup> of the Psychological safety in relation to the team leader is the highest with .341 meaning 34,1% of thriving can we explained by this.

The second variable we wanted to test with psychological safety is job performance. As shown in table 23 only psychological safety in relation with the team (sig=.148) seems not to be significant with an alpha of 0.05. The other two seem to have a relation with job performance.

Table 22

		Thriving	S		
	R <sup>2</sup>	В	SE B	β	Sig.
Psychological safety team	.341	.379	.075	.560	.000
Psychological safety peers	.153	.260	.093	.342	.007
Psychological safety team	.131	.212	.087	.305	.017

Table 23

Job performance						
	R <sup>2</sup>	В	SE B	β	Sig.	
Psychological safety team	.150	.329	.113	.398	.006	
Psychological safety peers	.118	.354	.136	.356	.012	
Psychological safety team	.44	.187	.127	.218	.148	

Another variable we wanted to test with job thriving and job performance of employees was the work pressure. As shown in table 24 and 25 work pressure does not have a significant relation with either thriving (sig=.574) of job performance (sig=.361).

Table 24

		Thriving			
	R <sup>2</sup>	В	SE B	β	Sig.
Work	.047	136	.240	072	,574
pressure					

Table 25

	Job performance					
	R <sup>2</sup>	В	SE B	β	Sig.	
Work	.017	.327	.355	.130	,361	
pressure						

When we look at the overall scores of work pressure all the scores are above the average of 2. The last item had a mean of 3,22 where 4 was the maximum. This item asked the nurses: Are you dealing with backlog in your work? The second highest mean (2,69) was the item: Do you have to work very fast?. Based on the scores in table 26 we can say that the nurses that participated in our research seem to think they are under serious work pressure.

Table 26

Item	Mean
Do you have to work very fast?	2,69
Do you have a lot of extra work to do?	2,72
Do you work under time pressure?	2,63
Are you dealing with backlog in your work?	3,22

## **Qualitative research**

The semi structured interviews focused on servant leadership and emotional intelligence of the team leader (n=5). The findings in this part are based on the data illustrated in table 27.

## Servant leadership

This theme demonstrated the servant leadership of the team members that participated in the interviews. The largest category within servant leadership is empowering and developing people (n=36) followed by interpersonal acceptance (n=20). Almost all team leaders want teams that fully operate by themselves, and work towards this goal at the moment. They are also aware that this cannot be done completely without their guidance because hospital policy is that the team leader has certain information the team doesn't so the team can't work fully by themselves. Furthermore leaders all think development of their team is very important even if this means people will leave the team because they have certain ambitions. The team leaders seem to think giving the teams freedom is very important so that they can learn and develop in their jobs. Two team leaders say that they have access to certain information of the hospital and use this to help people in the team develop within the hospital. An example of this is one team leader is also involved in a lot of other groups within the hospital and knows when they have opportunities and always tries to like this to interests from people in his own team. He said it's important to not only let people come in and do their job but to make them care about the whole department and how we can improve this together. One team leader also said that he prefers a team member to make a mistake and learn from this rather than being afraid of taking initiative.

## Emotional intelligence

This part demonstrated the emotional intelligence of the team leaders that participated in the interviews. The category with the most counts was perceive and understand own emotions well (n=8) followed by perceive and understand emotions of others well (n=5). All team leaders say they have a certain feeling for emotions of others due to experience and people knowledge. When asked how they know the working atmosphere is they answered with having people knowledge and be present on the department. All but one team leader has their office on the same department as the nurse's work. They all state that this helps a lot with making sure you notice everything going on with the people on your team. A few also take on a counter shift to they are really in the middle of the team when working and hear and see everything that is going on. When asked how to make sure people speak up during meetings most said they ask a lot of questions so people will have to speak up. One said she makes all the participants prepare a part of the meeting they want to talk about and they will have to hand this in before the meeting starts so she can prepare it properly. Almost all team leaders say starting the conversation with someone is the best way to make them feel safe in their job.

**Table 27**Qualitative data

Company long days big	Team leader n=5	Percentage of catergory	Example of quote
Servant leadership Empowering & developing people	36	42%	"I want to motivate my team to take control of their own tasks as soon as possible"
Humility	9	11%	"I invite them to inform me about the diabetics because I'm not a nurse I don't know the things they know"
Authenticity	7	8%	"I give them the freedom to make decisions, they also know I have there back when my boss comes and asked why certain things were done certain ways, I will not let them down"
Interpersonal acceptance	20	24%	"I prefer nurses to make a mistake and own up to it later than nurses who are afraid to make decisions because they are afraid of what I would say if they would make a mistake"
Providing direction	6	7%	"I give the team guidelines to work with"
Stewardship	7	8%	"I try to lead by example. I want the team to give more feedback so I give more feedback"
Emotional intelligence			
Perceive & understand own emotions well	8	47%	"I'm not a leader who rules with an iron fist that is not how I want to be, I want to look for solutions together that is how I feel I should act as a leader"
Perceive & understand emotions of others well	5	29%	"When people are shot down when they have an idea, they will think twice before they will open up with an idea the next time"
Control expressions of own emotions well	2	12%	"Someone asked me how I can work with someone like nothing happened after we had a disagreement, and I told them I have to as a leader even if I really don't like the person"
Channel own & others' emotions toward constructive activities	2	12%	"We notice there was a problem with speaking up, we did a small survey and detected we were right, now we try to make sure people open up more by starting the conversation during the next meeting about this and asking why"

#### **Observations**

The second part of the qualitative research was done by observations (n=5) which in total were 12,5 hours of regular staff meetings. As shown in table 28 the amount of times voice behaviour occurred with team members (356) and the team leaders (270) was the highest. The most of these where due to: asking questions, providing information and giving feedback. A more detailed count can be found in appendix 3 of this research. The behaviour that occurred most after voice was supportive behaviour (99) and learning or improvement oriented behaviour (93) with team members. For team leaders learning or improvement oriented behaviour occurred more (119) than of the team members. During the observations no team leader showed defensive voice or silence behaviours. The team members did show these behaviours both the same amount of times (8) for defensive voice behaviour and silence behaviour.

**Table 28**Observations

Observations							
	Observation team members						
Behaviour	А	В	С	D	Е	Total	
Voice behaviours	48	42	63	84	119	356	
Defensive voice behaviours	3	-	-	1	4	8	
Silence behaviours	3	-	2	2	1	8	
Supportive behaviours	14	21	14	33	17	99	
Unsupportive behaviours	17	11	9	4	6	47	
Learning or improvement oriented behaviour	10	12	13	16	42	93	
Familiarity behaviours	14	5	3	3	7	32	
	Observation team leaders						
Behaviour	Α	В	С	D	E	Total	
Voice behaviours	37	25	45	95	68	270	
Defensive voice behaviours	-	-	-	-	-	-	
Silence behaviours	-	-	-	-	-	-	
Supportive behaviours	4	4	20	35	14	77	
Unsupportive behaviours	-	1	1	-	-	2	
Learning or improvement oriented behaviour	17	7	13	33	49	119	
Familiarity behaviours	4	2	2	-	5	13	
Total amount of minutes of meeting	180	150	120	90	180	720	

#### **Results overview**

The results from the interviews suggest that the five team leaders all qualify as servant leaders based on the theoretical framework and the results we found. They all seem to care for the empowerment and development of their teams (n=36). Almost all of them (4/5) said they wanted fully self-operating teams where they only have to provide guidance when necessary. The second item from the interviews was emotional intelligence, the strongest factor here was the understanding of own emotions with the team leaders (n=8). As we can see servant leadership scores are higher than the emotional intelligence scores.

The observation results show that voice behaviour was detected the most among team members (n=356) and team leaders (n=270) followed by learning or improvement oriented behaviour from the team leader (n=119) which shows that the interview results for empowerment and development of the teams shows in practice. For team members the second biggest result was supportive behaviour (n=93) which also match the results for teams that are self-operating as discussed in the interviews.

The surveys were used to control the hypothesis we stated earlier in this research. The first hypothesis was: Servant leadership has a positive effect on employee's job thriving and job performance. As we can see in the quantitative results this hypothesis is only partially true. The results show that servant leadership has an effect on employee thriving but we cannot see an effect on job performance of employees. This hypothesis could not entirely be supported in this research. The second hypothesis: Employee's perception of psychological safety mediates the effect between servant leadership and job thriving and job performance. We can say that this hypothesis is supported based on the results, for both employee thriving and job performance. The third hypothesis: Emotional intelligence moderates the effect of servant leadership on employee's perception of psychological safety. This hypothesis could not be conducted in SPSS due to a lack on data. What we can say is that Servant leadership has an effect on perception of psychological safety of employees and servant leadership does not seem to have an effect on emotional intelligence of the team leader. Also the leaders (n=6) that answers the survey questions about emotional intelligence all seem to consider themselves as emotional intelligence based on the results we seen. To say if emotional intelligence has a moderating effect on psychological safety there will have to be more research done. The fourth hypothesis: Psychological safety will have a positive effect on voice behaviour. The hypothesis can be supported based on the results.

The fifth hypothesis: *Psychological Safety will have a positive effect on back-up behaviour.*This hypothesis is also supported by the results of this research. The sixth and final hypothesis of this research: *Psychological safety will have a positive effect on Innovative work behaviour.* This hypothesis was rejected there was no support for this hypothesis in our results. We looked in the explorative research further for the effects of the behaviours on thriving and job performance of employees. All of the behaviours (voice, back-up and innovative work behaviour) seem to be significant to thriving. There seem to be no significant relation between the behaviours and job performance.

For the explorative research we looked further into the psychological safety detentions and found out that all three dimensions seem to be significant for thriving but all but one was significant for job performance. The dimension that did not score significantly on job performance was perceived psychological safety in relation to the team. We also checked if work pressure was significant to job thriving and job performance both relations

were not supported. What we did discoverer in the results of work pressure was that the team members overall seem to think they are under serious work pressure.

Based on the three sources of data we can see the teams all seem to have a lot of voice behaviour as a result of servant leadership. The data also shows that psychological safety has an effect on voice behaviour which also in the results of the observations was counted a lot. Psychological safety also seems to have an effect on back-up behaviour which was also found in the interviews and observations. Innovative work behaviour was a behaviour that was not discussed in the interviews and was almost none exciting in the observations, based on the quantitative data this behaviour is not in relation with psychological safety. Furthermore servant leadership seems to have an effect on employee thriving which can we supported by the interviews where the team leaders clearly say they encourage employees to develop themselves.

# **5 Discussions**

In today's complex, challenging, and unpredictable healthcare environment, understanding the talent and capability of the people who create or determine effectiveness is a critical success factor (Spano-Szekely et al., 2016). With the increasing attention in the news about staff shortage in healthcare and high work pressure in the healthcare field we wanted to know how the perceived psychological safety is among nurses in different hospitals in the Netherlands.

With this research we tried to answer the research question "How does a leader's emotional intelligence moderate the relation between servant leadership and nurses perception of psychological safety, so that they may display certain extra-role behaviours and, consequently, job thriving and job performance?" We were able to answer this to some degree. This study used three different research methods interviews, observations and a survey. The three instruments together made the results we found stronger to support. But due to a small sample could not test or support all hypotheses.

In the results we found a relation between servant leadership and employee thriving. Employee thriving was also supported in the interviews and the observations: where supportive behaviour and empowerment of development were mentioned a lot. We found in addition to this, a relation between employees perception of psychological safety which mediates the effect between servant leadership and job thriving. This contributes to the existing theoretical framework of servant leadership where it is expected that a servant leader wants to tribute to the development of their employees. There was a relation found between servant leadership and the job performance of employees in this research. This is contributes to the theoretical framework were psychological safety is expected to result in teams sharing information and learning from each other which can result into job thriving over time.

We did not find any relation of servant leadership and job performance being mediated by psychological safety, which is not supporting the existing theory where we expected supportive management and interpersonal relationships increase the willingness to engage fully in work roles and get better results in job performance. Also employees that perceived the workplace to be motivating and involving psychologically were related to higher job performance.

Psychological safety seems to have a relation with voice, back-up and innovative work behaviour like we expected based on the theory. These findings were also found in the observations and the interviews which makes them even stronger. These behaviours can also be related to the employee thriving we found. Based on the theory employees that use their voice improve the learning opportunities in the team which can result in thriving over time. Back-up behaviour is based on the theory benefits others in the team and the team as a whole which can also improve the perception of thriving. Innovative work behaviour helps innovate the services the nurses provide based on the theory which can also improve the perception of thriving with people.

We did not find any relation between servant leadership and emotional intelligence. Due to the lack of data we could not compute the possible relation between emotional intelligence as a mediator of servant leadership and psychological safety. We did find that the team leaders seem to think they are all very emotional intelligent. This was also found in the interviews with the team leaders.

For the control variable we did not find a relation between work pressure and thriving of work pressure and job performance. This could be due to people who are under a lot of pressure don't feel like they are thriving or are doing a very good job.

We also did more research in the dimensions of psychological safety. We found that all three dimensions seem to have a relation with employee thriving. Only two of the three dimensions seem to have a relation with job performance. The dimension psychological safety in relation with the team does not have a significant relation with job performance.

When we looked at the scores of work pressure among the team members we found that overall they seem to think that they are under serious work pressure. This contributes to the existing theory and the articles in the media about the work pressure in healthcare. These results will have to be kept in mind for the others results in this research. A person who is under a lot of work pressure would probably doesn't think of themselves as thriving.

Overall the findings of this study contribute to the existing research that can be found in the theoretical framework. It contributes to the existing theories of servant leadership, psychological safety, voice behaviour, back-up behaviour and thriving of employees.

## Strengths, limitations and future research

In this research we used mixed methods to collect the data. To measure psychological safety we used observations and survey data to explain the results. In this observation voice behaviour, helping behaviour and ideas sharing were also included so these behaviours were also accounted for by survey and observation. This method makes the results we found regarding these items even stronger and gives us the opportunity to check if the self-perception matches the perception of the observation. During the observations we asked permission to video record the meetings. We got permission to video record one meeting which can be used to limit observer bias. It can also be used to improve the observation scheme.

The third method was interviews; we held interviews with all the team leaders (n=5). In these interviews we asked about servant leadership and emotional intelligence to account for the survey the team leaders filled in about being a servant leader and their emotional intelligence. Because we did not have a large sample for the team leaders we used the data from the interviews to control the survey data.

For this research we had a small group of participants, to make the results more strong a bigger sample group would be necessary. The probability that we find statistically significant evidence of a difference between groups has to do with power. A greater power requires a larger sample size, with the sample in this research we cannot make statements about the population. The reason we did not had enough teams to participate in this study was for several reasons, the first being team leaders did not wanted to make the time for this study. The second reason was they did not want the nurses to have to do a survey which will have to be done next to their daily job because they are already understaffed and overworked. To be able to study this subject and do suggestions for all the nurses in the hospitals there will have to be a much larger sample size in the future.

To control for emotional intelligence of the team leader being a moderator between servant leadership and psychological safety there is a lot more data necessary due to the lack of data we could not research this hypothesis. In addition to this the data we did get on emotional intelligence of the team leader is from the interviews and from the surveys. The team leaders were asked to fill in the emotional intelligence they thought they have, which means that we are dealing with self-bias in the emotional intelligence results.

At the start of this research we planned on making video recordings for the observations to reduce observer bias, unfortunately only one team agreed on being video recorded for this research. To control observer bias video recordings are necessary in future research so that someone can check whether the observations that were observed would be the same if someone else would have been at the meeting doing the observation.

A possible bias with the survey is that when employees have to answer questions about their peers and their team leaders they feel uncomfortable. They are afraid there could be consequences to answering even though it is anonymous.

In this study we focused on the individual, for future research a study which focuses on teams could show interesting results. Most studies already look at team psychological safety and there this model could add to the existing theory when it is done in teams. Another aspect of this study was the recent developed observation schedule. There will have to be more testing with this schedule before using it in practice. There will be a study with this model and the differences between Dutch and Irish hospitals (O'Donovan et al., 2019). During the observations it was noticeable the observation schedule may need to be adjusted. The schedule was big and during the observations sometimes during discussions it was hard to keep up the observation. Another point to consider was that in some conversations it was necessary to score different behaviours for the same person in the same moment. There may be some overlap still in the observation schedule. Also in the schedule we talk about the individual and in some cases about the group which can cause confusion during the observation. In the observation in this research the group cases where scored the amount of times they occurred and not as the amount of people who participated in this case.

## Conclusion

This study contributes to the previous research done about psychological safety. It supports that psychological safety has an effect on voice, back-up and innovative work behaviour. It also supports psychological safety having an effect on the perception of thriving among nurses. We also found that psychological safety has an mediating effect between servant leadership and the perception of thriving among nurses. In this research we used a recent developed observation schedule that measures the psychological safety in combination with an survey. The results from the survey and the observation were similar in scores which made the results even stronger.

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# **Appendix**

# **Appendix 1- Survey Team leaders**

#### Controle variables - team leider

- 1. In welk ziekenhuis bent u werkzaam?
- 2. Op welke afdeling bent u werkzaam?
- 3. Wat is de omvang van uw team in FTE?
- 4. Wat is de omvang van uw team in aantal personen?
- 5. Hoeveel jaar werkervaring heeft u?
- 6. Wat is uw geslacht?
- 7. Wat is uw leeftijd?
- 8. Wat is uw hoogste afgeronde opleiding?

#### Servant leadership

Liden et al 2015

Schaal: Helemaal niet mee eens = 1; Niet mee eens = 2; Meer niet dan wel mee eens = 3; Neutraal = 4; Meer wel dan niet mee eens = 5; Mee eens = 6; Helemaal mee eens = 7

Als teamleider van dit team:

- 1. Zie ik wanneer er iets werkgerelateerd fout gaat.
- 2. Maak ik de loopbaanontwikkeling van de mensen in mijn team tot een prioriteit.
- 3. Komen mensen uit dit team bij mij als zij een persoonlijk probleem hebben.
- 4. Benadruk ik het belang van teruggeven aan de gemeenschap.
- 5. Stel ik de belangen van de mensen in dit team boven dat van mijzelf.
- 6. Geef ik mensen in dit team de vrijheid moeilijke situaties naar eigen inzicht op te lossen.
- 7. Zou ik ethische principe niet in gevaar brengen om succes te behalen.

# **Emotional intelligence**

Wong & Law Emotional intelligence Scale (WLEIS) 2007

Schaal: Helemaal niet mee eens = 1; Niet mee eens = 2; Meer niet dan wel mee eens = 3; Neutraal = 4; Meer wel dan niet mee eens = 5; Mee eens = 6; Helemaal mee eens = 7

- 1. Ik heb meestal een goed besef waarom ik bepaalde gevoelens heb.
- 2. Ik begrijp mijn eigen emoties goed.
- 3. Ik weet altijd of ik blij ben of niet.
- 4. Ik begrijp echt wat ik voel.
- 5. Ik kan altijd de emoties van mijn vrienden afleiden uit hun gedrag.
- 6. Ik ben een goede observeerder van emoties van anderen.
- 7. Ik ben gevoelig voor de gevoelens en emoties van anderen.
- 8. Ik begrijp de emoties van mensen om mij heen goed.
- 9. Ik stel mijzelf altijd doelen en doe mijn best om deze te bereiken.
- 10. Ik vertel mezelf altijd dat ik een competent persoon ben.
- 11. Ik ben een zelfmotiverend persoon.
- 12. Ik zal mijzelf altijd aanmoedigen om mijn best te doen.
- 13. Ik ben in staat om mijn kalmte te bewaren, zodat ik moeilijkheden rationeel kan aanpakken.
- 14. Ik ben heel goed in staat om mijn eigen emoties te beheersen.
- 15. Ik kan altijd kalmeren als ik erg boos ben.
- 16. Ik heb goede controle over mijn eigen emoties.

### **Job Performance**

Gibson et al 2009

Schaal: Helemaal niet mee eens = 1; Niet mee eens = 2; Meer niet dan wel mee eens = 3; Neutraal = 4; Meer wel dan niet mee eens = 5; Mee eens = 6; Helemaal mee eens = 7

- 1. Deze medewerker presteert constitent hoog.
- 2. Deze medewerker is effectief.
- 3. Deze medewerker maakt weinig fouten.
- 4. Deze medewerker levert een hoge kwaliteit aan werk.

## **Appendix 2- Survey Team members**

#### Controle variables – Team leden

- 1. In welk ziekenhuis bent u werkzaam?
- 2. Op welke afdeling bent u werkzaam?
- 3. Hoeveel jaar werkervaring heeft u?
- 4. Wat is uw geslacht?
- 5. Wat is uw leeftijd?
- 6. Wat is uw hoogste afgeronde opleiding?

#### Servant leadership

Liden et al 2015

Schaal: Helemaal niet mee eens = 1; Niet mee eens = 2; Meer niet dan wel mee eens = 3; Neutraal = 4; Meer wel dan niet mee eens = 5; Mee eens = 6; Helemaal mee eens = 7

- 1. Mijn teamleider ziet het wanneer er iets werkgerelateerds fout gaat.
- 2. Mijn teamleider maakt mijn loopbaanontwikkeling tot een prioriteit.
- 3. Ik zou hulp zoeken bij mijn teamleider als ik een persoonlijk probleem heb.
- 4. Mijn teamleider benadrukt het belang van teruggeven aan de gemeenschap.
- 5. Mijn teamleider stelt mijn belangen boven die van zichzelf.
- 6. Mijn teamleider geeft mij de vrijheid moeilijke situaties naar eigen inzicht op te lossen.
- 7. Mijn teamleider zou ethische principes niet in gevaar brengen om succes te behalen.

#### **Psychological safety**

O' Donovan et al 2019

Schaal: Helemaal niet mee eens = 1; Niet mee eens = 2; Meer niet dan wel mee eens = 3; Neutraal = 4; Meer wel dan niet mee eens = 5; Mee eens = 6; Helemaal mee eens = 7

**Deel 1** beantwoord de volgende vragen met betrekking tot uw <u>teamleider</u>.

- 1. Als ik een vraag heb of niet zeker ben van iets in verband met mijn rol op het werk, dan kan ik het aan mijn teamleider vragen.
- 2. Ik kan mijn mening over werkkwesties communiceren met mijn teamleider.
- 3. Ik kan met mijn teamleider over persoonlijke problemen of meningsverschillen praten.
- 4. Ik kan aanbevelingen / ideeën voor nieuwe projecten of veranderingen in procedures aan mijn teamleider voorleggen.
- 5. Als ik een fout maak in dit team, dan zou ik mij veilig voelen om dit kenbaar te maken bij mijn teamleider.
- 6. Als ik een collega een fout zie maken, dan zou ik mij veilig voelen om dit kenbaar te maken bij mijn teamleider.
- 7. Als ik mijn mening geef, dan weet ik dat mijn inbreng wordt gewaardeerd door mijn teamleider.
- 8. Mijn teamleider moedigt mij aan en ondersteunt mij om nieuwe taken aan te nemen of te leren hoe ik dingen moet doen die ik niet eerder gedaan heb.
- 9. Als ik een probleem heb ik deze organisatie, dan kan ik rekenen op de steun van mijn teamleider.

Deel 2 beantwoord de volgende vragen met betrekking tot uw collega's.

- 10. Als ik een vraag heb of niet zeker ben van iets in verband met mijn rol op het werk, dan kan ik het aan mijn collega's vragen.
- 11. Ik kan mijn mening over werkkwesties communiceren met mijn collega's.
- 12. Ik kan met mijn collega's over persoonlijke problemen of meningsverschillen praten.
- 13. Ik kan aanbevelingen / ideeën voor nieuwe projecten of veranderingen in procedures aan mijn collega's voorleggen.
- 14. Als ik een fout maak in dit team, dan zou ik mij veilig voelen om dit kenbaar te maken bij mijn collega's
- 15. Als ik een collega een fout zie maken, dan zou ik mij veilig voelen om dit kenbaar te maken bij mijn collega.
- 16. Als ik mijn mening geef, dan weet ik dat mijn inbreng wordt gewaardeerd door mijn collega's.

**Deel 3** beantwoord de volgende vragen met betrekking tot het gehele team.

- 17. Het is moeilijk om andere leden van dit team om hulp te vragen.
- 18. Leden van dit team houden elkaar op de hoogte van werkgerelateerde problemen.
- 19. Er worden echte pogingen gedaan om informatie binnen het team te delen.

#### Voice behaviour

Burris 2012

Schaal: Nooit = 1; Bijna nooit = 2; Soms = 3; Neutraal = 4; Vaak= 5; Bijna altijd = 6; Altijd = 7

Uitdagende stem, 3 items, beoordeeld van 1 "bijna nooit" tot 5 "bijna altijd":

- 1. Ik daag mijn teamleider uit om problemen op te lossen.
- 2. Ik geef mijn teamleider suggesties om dit team beter te maken, zelf als anderen het daar niet mee eens zijn.
- 3. Ik geef ideeën aan bij mijn teamleider betreffende de behoeften en de zorgen van het team.

Ondersteunende stem, 3 items, dezelfde schaal ankerpunten:

- 1. Ik blijf goed geinformeerd over zaken waarin mijn mening nuttig kan zijn.
- 2. Ik ben betrokken bij zaken die van invloed zijn op de kwaliteit van het werk hier.
- 3. Ik spreek mijzelf uit en moedig anderen aan om betrokken te raken bij zaken die van invloed zijn op dit team.

#### Back-up behaviour

L van Dyne 1998

Schaal: Helemaal niet mee eens = 1; Niet mee eens = 2; Meer niet dan wel mee eens = 3; Neutraal = 4; Meer wel dan niet mee eens = 5; Mee eens = 6; Helemaal mee eens = 7

- 1. Leden van dit team bieden vrijwillig aan dingen voor dit team te doen.
- 2. Leden van dit team helpen nieuwe werknemers zich binnen dit team te oriënteren.
- 3. Leden van dit team nemen rollen op zich die dit team helpen.
- 4. Leden van dit team helpen anderen in dit team met werkzaamheden ten behoeve van het team.
- 5. Leden van dit team dragen bij aan dit team.
- 6. Leden van dit team helpen anderen in dit team om meer te leren over het werk.
- 7. Leden van dit team helpen anderen in dit team met hun verantwoordelijkheden op het werk.

#### Innovative work behaviour

Janssen 2000

Schaal: Helemaal niet mee eens = 1; Niet mee eens = 2; Meer niet dan wel mee eens = 3; Neutraal = 4; Meer wel dan niet mee eens = 5; Mee eens = 6; Helemaal mee eens = 7

Geef aan in hoeverre u iemand bent die:

- 1. creatieve ideeën bedenkt voor lastige problemen.
- 2. nieuwe werkwijzen, technieken of instrumenten uitzoekt.
- 3. met originele oplossingen komt voor problemen.
- 4. steun mobiliseert voor vernieuwende ideeën.
- 5. bijval oogst voor vernieuwende ideeën.
- 6. sleutelfiguren enthousiast maakt voor vernieuwende ideeën.
- 7. vernieuwende ideeën uitwerkt tot werkbare toepassingen.
- 8. vernieuwende ideeën planmatig invoert.
- 9. de baten van vernieuwende ideeën evalueert.

#### **Thriving**

Porath et al. 2012

Schaal: Helemaal niet mee eens = 1; Niet mee eens = 2; Meer niet dan wel mee eens = 3; Neutraal = 4; Meer wel dan niet mee eens = 5; Mee eens = 6; Helemaal mee eens = 7

#### Op het werk:

- 1. Merk ik dat ik vaak leer.
- 2. Blijf ik meer leren naarmate de tijd verstrijkt.
- 3. Zie ik mezelf voordurend verbeteren.
- 4. Ben ik niet aan het leren. (R)
- 5. Ontwikkel ik mijzelf persoonlijk veel.
- 6. Voel ik mij levendig en vitaal.
- 7. Heb ik energie en werklust.
- 8. Voel ik me niet erg energiek. (R)
- 9. Voel ik mij alert en wakker.
- 10. Kijk ik uit naar elke nieuwe dag.

## Control variables- Work pressure

(QEEW/VBBA) Veldhoven & Meijman 1994

Schaal: Altijd =1; Vaak =2; Soms =3; Nooit =4.

- 1. Moet u erg snel werken?
- 2. Heeft u veel extra werk te doen?
- 3. Werkt u onder tijdsdruk?
- 4. Heeft u te maken met een achterstand in uw werkzaamheden?

# Appendix 3 – Observations

Observation 1: Hospital A Monday 3th of June 2019 16:00-19:00 recorded from 17:53 untill 19:00.

There were 14 team members and 1 team leader present during this meeting.

Behaviours	Team member behaviour count*	Team leader behaviour count*
Voice behaviours		
Communicating opinions to others even if they disagree	5	1
Asking questions	18	7
Providing information	11	16
Providing feedback	7	6
Providing help or solutions	6	6
Correcting others	1	1
Defensive voice behaviours		
Denying faults or blame others	2	
Showing aggression (Raising voice, large gestures)	1	
Evading confrontation by focusing only on positives		
Silence behaviours		
Facial expression indicates fear		
Facial expression indicates disengagement		
Closed body language (arms closed, lean backwards)	3	
Supportive behaviours		
Sharing procedures, knowledge and experience	6	1
Sharing future plans	3	1
Active listening (verify, paraphrase)	1	3
Use of inclusive language such as "we"		
Agreeing/Responding positively or enthusiastically to input	2	
Acknowledging achievements/ congratulating one another		
Delegating tasks	2	
Unsupportive behaviours		
Interrupting	3	
Discussions within small sub-groups	14	
Reacting cold/ignoring a joke		
Learning or improvement oriented behaviours		
Reviewing own progress and performance	1	1
Asking for feedback		8
Asking for help or solutions		2
Asking for input from all meeting participants	1	4
Informing the team about issues or mistakes related to patient	5	1
Looking for improvement opportunities and speaking up with	3	1
Acknowledging own mistake		
Familiarity behaviours		
Talking about personal, non-work matters (with team members)	2	1
Talking about personal, non-work matters (with team leader)	3	1
Laughing about a joke	9	3

#### Observer ratings after meeting:

Observations	Strongly	Disagree	Somewhat	Neither	Somewhat	Agree	Strongly
	disagree		disagree	agree or disagree	agree		agree
There was enough opportunity for participants to ask for help							х
There was enough opportunity for participants to speak up							X
There was enough opportunity for participants to discuss with the team leader							X
Certain team members dominated the discussion						x	
Decisions were made together, by the entire team					х		
The atmosphere in this team was constructive						х	
People seemed genuine and not to hold back anything						х	

#### Notes.

De afdeling oudsten (dit zijn geen leidinggevenden) kwamen met veel feedback en nieuwe ideeen en delegeerde soms opdrachten.

Er kwam iemand langs van de planning in het eerste deel van de vergadering, hier zijn de negatieve punten in de observatie door ontstaan zoals (small group discussions en raising voice).

# Observation 2: Hospital B Tuesday 18th of June 2019 17:30-20:00.

# There were 11 team members and 1 team leader present during this meeting.

Behaviours	Team member behaviour count*	Team leader behaviour count*
Voice behaviours		
Communicating opinions to others even if they disagree	3	
Asking questions	18	5
Providing information	4	15
Providing feedback	11	1
Providing help or solutions	2	4
Correcting others		
Defensive voice behaviours		
Denying faults or blame others		
Showing aggression (Raising voice, large gestures)		
Evading confrontation by focusing only on positives		
Silence behaviours		
Facial expression indicates fear		
Facial expression indicates disengagement		
Closed body language (arms closed, lean backwards)		
Supportive behaviours		
Sharing procedures, knowledge and experience	13	1
Sharing future plans		2
Active listening (verify, paraphrase)	2	1
Use of inclusive language such as "we"	2	
Agreeing/Responding positively or enthusiastically to input	3	
Acknowledging achievements/ congratulating one another	1	
Delegating tasks		
Unsupportive behaviours		
Interrupting	1	
Discussions within small sub-groups	10	1
Reacting cold/ignoring a joke		
Learning or improvement oriented behaviours		
Reviewing own progress and performance	1	2
Asking for feedback		
Asking for help or solutions	3	
Asking for input from all meeting participants	2	3
Informing the team about issues or mistakes related to patient safety	4	2
Looking for improvement opportunities and speaking up with ideas		
Acknowledging own mistake		
Familiarity behaviours		
Talking about personal, non-work matters (with team members)	3	
Talking about personal, non-work matters (with team leader)		
Laughing about a joke	2	2

#### Observer ratings after meeting:

Observations	Strongly	Disagree	Somewhat	Neither	Somewhat	Agree	Strongly
	disagree		disagree	agree or disagree	agree		agree
There was enough opportunity for participants to ask for help							x
There was enough opportunity for participants to speak up							x
There was enough opportunity for participants to discuss with the team leader							x
Certain team members dominated the discussion		X					
Decisions were made together, by the entire team						х	
The atmosphere in this team was constructive						х	
People seemed genuine and not to hold back anything						х	

#### Notes.

18:00 Presentatie over heupoperatie /18:15 Presentatie over Postoperatieve unrine retentive van een medewerkster uit het team ze had een onderzoek gedaan en vertelde het team over haar bevindingen. Er was een vragenronde tijdens de vergadering met betrekking tot het melden van fouten bij het ziekenhuis. Hier gaven mensen aan dat ze het moeilijk vinden dingen te melden. Vaak omdat het zich meteen al oplost en omdat een meerderen bijvoorbeeld een arts zegt dat het gewoon door moet gaan en de fout genegeerd word. De meldingen die wel worden gedaan gaan het vaakst over fouten met medicatie en communicatie fouten. Er waren in deze vergadering veel onderlinge discussies, die ze vervolgens niet deelde met de teamleider. Het viel op dat er over de uren (roostertechnisch) de meeste discussie ontstond.

# Observation 3: Hospital C Wednesday 26th of June 2019 16:00-18:00.

# There were 15 team members and 1 team leader present during this meeting.

Behaviours	Team member behaviour count*	Team leader behaviour count*
Voice behaviours		
Communicating opinions to others even if they disagree	2	1
Asking questions	22	10
Providing information	5	21
Providing feedback	24	2
Providing help or solutions	8	9
Correcting others	2	2
Defensive voice behaviours		
Denying faults or blame others		
Showing aggression (Raising voice, large gestures)		
Evading confrontation by focusing only on positives		
Silence behaviours		
Facial expression indicates fear		
Facial expression indicates disengagement		
Closed body language (arms closed, lean backwards)	1	
Supportive behaviours		
Sharing procedures, knowledge and experience	12	7
Sharing future plans		8
Active listening (verify, paraphrase)		
Use of inclusive language such as "we"		1
Agreeing/Responding positively or enthusiastically to input	1	2
Acknowledging achievements/ congratulating one another	1	1
Delegating tasks		
Unsupportive behaviours		
Interrupting	1	
Discussions within small sub-groups	9	1
Reacting cold/ignoring a joke		
Learning or improvement oriented behaviours		
Reviewing own progress and performance	2	
Asking for feedback		2
Asking for help or solutions	3	3
Asking for input from all meeting participants		6
Informing the team about issues or mistakes related to patient safety	2	
Looking for improvement opportunities and speaking up with ideas	6	1
Acknowledging own mistake		1
Familiarity behaviours		
Talking about personal, non-work matters (with team members)		
Talking about personal, non-work matters (with team leader)		
Laughing about a joke	3	2

#### Observer ratings after meeting:

Observations	Ctoonell	D:	C	Maidean	C	Α	Ctoonelis
Observations	Strongly disagree	Disagree	Somewhat disagree	Neither agree or	Somewhat agree	Agree	Strongly agree
	uisagi ee		disagree	disagree	agree		agree
There was enough opportunity for participants to ask for help						X	
There was enough opportunity for participants to speak up							x
There was enough opportunity for participants to discuss with the team leader						X	
Certain team members dominated the discussion						X	
OSTANI ISAN NONESIS GOTINIAGO NO GIOGGOSTO						^	
Decisions were made together, by the entire team					X		
The atmosphere in this team was constructive						X	
People seemed genuine and not to hold back anything							x

#### Notes.

Uit de eigen survey van het zgt kwam als eerste verbeterpunt de werkdruk.

Tijdens deze observatie werd er veel informatie gegeven door de leidingevende over verschillende onderwerpen later in de vergadering kwamen de teamleden ook zelf meer aan het woord. Twee teamleden hadden vooral de overhand in het gesprek deze kwamen met de nieuwe ideeen en met opmerkingen over de gang van zaken. Om 17:30 kwam er vanuit het management iemand een presentatie geven over de financiele zaken bij het zgt zodat de medewerkers op de hoogte zijn van deze zaken.

# Observation 4: Hospital D Wednesday 10th of July 2019 15:45-17:15. There were 5 team members and 1 team leader present during this meeting.

Behaviours	Team member behaviour count*	Team leader behaviour count*
Voice behaviours		
Communicating opinions to others even if they disagree	5	1
Asking questions	14	31
Providing information	26	17
Providing feedback	29	18
Providing help or solutions	17	23
Correcting others	3	4
Defensive voice behaviours		
Denying faults or blame others		
Showing aggression (Raising voice, large gestures)	1	
Evading confrontation by focusing only on positives		
Silence behaviours		
Facial expression indicates fear		
Facial expression indicates disengagement	1	
Closed body language (arms closed, lean backwards)	1	
Supportive behaviours		
Sharing procedures, knowledge and experience	19	19
Sharing future plans	4	7
Active listening (verify, paraphrase)		
Use of inclusive language such as "we"	7	7
Agreeing/Responding positively or enthusiastically to input	3	
Acknowledging achievements/ congratulating one another		
Delegating tasks		2
Unsupportive behaviours		
Interrupting	2	
Discussions within small sub-groups	2	
Reacting cold/ignoring a joke		
Learning or improvement oriented behaviours		
Reviewing own progress and performance	4	1
Asking for feedback	3	9
Asking for help or solutions	3	5
Asking for input from all meeting participants	2	13
Informing the team about issues or mistakes related to patient	1	1
Looking for improvement opportunities and speaking up with	3	2
Acknowledging own mistake		2
Familiarity behaviours		
Talking about personal, non-work matters (with team members)	1	
Talking about personal, non-work matters (with team leader)	1	
Laughing about a joke	1	

#### Observer ratings after meeting:

Observations	Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree
There was enough opportunity for participants to ask for help							X
There was enough opportunity for participants to speak up							Х
There was enough opportunity for participants to discuss with the team leader							Х
Certain team members dominated the discussion		X					
Decisions were made together, by the entire team						X	
The atmosphere in this team was constructive							X
People seemed genuine and not to hold back anything							X

#### Notes.

In deze meeting viel het op hoe anders deze was van de andere observaties. Het was meer een echt gesprek en overleg van iedereen. De input was van vrijwel iedereen gelijk. Dit team mocht zelf punten aan de agenda toevoegen en aankaarten waar ze het over wouden hebben. Daarbij stelde juist de teamleider meer vragen om vervolgens sturing te geven in deze punten. Dit team leek erg zelfredzaam en erg ondernemend. De dingen wie werden besproken waren heel inhoudelijk en open. De teamleider gaf veel informatie over hoe ze dingen konden aanpakken en waarom op die wijze. Een medewerker gaf aan veel moeite te hebben met het afsluiten van verantwoordelijkheid en dingen niet kunnen loslaten. Hier werd heel open en behulpzaam mee omgegaan. Het hele team gaf haar tips en voorbeelden van hoe ze dit kan doen en waarom ze dat zo moest proberen te doen.

# Observation 5: Hospital E Thursday 11th of July 2019 15:00-18:00.

# There were 21 team members and 2 team leader present during this meeting.

Behaviours	Team member behaviour count*	Team leader behaviour count*
Voice behaviours		
Communicating opinions to others even if they disagree	11	
Asking questions	38	22
Providing information	12	24
Providing feedback	48	12
Providing help or solutions	10	6
Correcting others		4
Defensive voice behaviours		
Denying faults or blame others	1	
Showing aggression (Raising voice, large gestures)	3	
Evading confrontation by focusing only on positives		
Silence behaviours		
Facial expression indicates fear		
Facial expression indicates disengagement		
Closed body language (arms closed, lean backwards)	1	
Supportive behaviours		
Sharing procedures, knowledge and experience	7	6
Sharing future plans	3	7
Active listening (verify, paraphrase)		1
Use of inclusive language such as "we"	3	
Agreeing/Responding positively or enthusiastically to input	4	
Acknowledging achievements/ congratulating one another		
Delegating tasks		
Unsupportive behaviours		
Interrupting	3	
Discussions within small sub-groups	3	
Reacting cold/ignoring a joke		
Learning or improvement oriented behaviours		
Reviewing own progress and performance	16	
Asking for feedback	1	10
Asking for help or solutions	2	8
Asking for input from all meeting participants	2	29
Informing the team about issues or mistakes related to patient	8	
Looking for improvement opportunities and speaking up with	14	2
Acknowledging own mistake		
Familiarity behaviours		
Talking about personal, non-work matters (with team members)		
Talking about personal, non-work matters (with team leader)		
Laughing about a joke	7	5

#### Observer ratings after meeting:

Observations	Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree
There was enough opportunity for participants to ask for help						X	
There was enough opportunity for participants to speak up							Х
There was enough opportunity for participants to discuss with the team leader							Х
Certain team members dominated the discussion						X	
Decisions were made together, by the entire team					X		
The atmosphere in this team was constructive				X			
People seemed genuine and not to hold back anything					Х		

#### Notes.

Dit team is samengesteld in het verleden uit verschillende bestaande teams. Het is nogsteeds merkbaar dat er bij sommigen nog geen groepsgevoel heerst. Er zijn een aantal mensen vrij duidelijk over het ontbreken van groepsgevoel en willen hier ook graag aan werken.

Verder werd er de 2020 regel besproken waarbij twee mensen kenbaar onzekerheid uitte naar de teamleider hierover. Vragen zoals krijgen studenten straks de leiding over mij werden gesteld. Er was ook merkbaar irritatie over deze regel ze vinden dat de zorg verschraalt door deze ontwikkelingen. Er werd door twee medewerkers een presentatie gegeven over hoe de dagstart werkt en iets over de focus van de week.

Om meer groepsgevoel te creeren vroeg de teamleider het team verschillende oefeningen te doen een daarvan was een complimenten douche. Hierbij staat iedereen in een circle en omstebeurt word je overspoeld door complimenten van de team. Hier werd merkbaar erg positief op gereageerd.

# **Appendix 4- Interview questions Team leaders**

#### Interview team leader

- 1. Kunt u iets over uzelf vertellen, onder andere wat uw rol binnen de organisatie precies is en wat uw achtergrond is binnen of buiten deze organisatie?
- 2. Over wat dat u heeft bewerkstelligt binnen dit team bent u het meest trots? Kunt u uitleggen waarom?
- 3. Hoe zou u zichzelf als leidinggevende omschrijven?
- 4. Wat wilt u met uw leiderschapsstijl graag bewerkstelligen voor de medewerkers?
- 5. Hoe zou u graag als leidinggevende worden gezien door de medewerkers?
- 6. Hoe zorgt u ervoor dat tijdens teamvergaderingen alle teamleden actief deelnemen of zich vrij voelen bij te dragen aan het overleg?
- 7. In hoeverre komen medewerker met nieuwe ideeën over het werk? Hoe stimuleert u dit gedrag?
- 8. Hoe merkt u op hoe de sfeer binnen uw team is?
- 9. Waar kijkt u naar wanneer u moet beoordelen of medewerkers zich veilig voelen zich te uiten over zaken binnen dit team?
- 10. Wat doet u om deze veiligheid binnen het team te vergroten?