Nursing the Nurses

A qualitative study on the nurse perspective of leadership's role in supporting job satisfaction, during different phases of a prolonged crisis.

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Abstract

The COVID-19 pandemic has struck hard on our healthcare system, and ICU nurses in particular. Their wellbeing and job satisfaction suffered immensely, which weakened the clinical backbone of our healthcare system, and the need to strengthen managerial processes to prevent a situation like this from repeating itself is urgent. This cross-sectional, qualitative study aims to describe what leadership styles can be leveraged in various phases in a prolonged crisis, in order to facilitate and enhance nurses' job satisfaction. The sample consists of thirteen ICU nurses in total, who worked during the COVID-19 pandemic during one or several contamination waves. Pearson and Mitroff's Crisis Management Framework, as well as the Full Range Leadership Model which presents Transformational, Transactional and Passive Aviodant leadership, serve the purpose of analyzing and comprehending the findings of the study. The study broadens the understanding on how nurse leaders can support nurse staff's job satisfaction during a prolonged crisis using certain leadership requirements depending on the life cycle phase of the crisis. From the analysis, multiple leadership requirements, especially in accordance with Transformational and Transactional leadership, emerged. Consequently, this thesis can be used as guidance for nurse leaders and other healthcare leaders to support their staff members as they are facing potential future crises similar to the recent pandemic.

Keywords: Crisis Leadership, Healthcare, ICU Nurses, COVID-19, Job Satisfaction

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Definitions

Table 1. *Definitions*

CONCEPT	DEFINITION
Nurse Leader	A person at an Intensive Care Unit with a leading position who can command a group of nurses within that unit (USAHS, 2020; Karolinska, 2022).
Nurse Manager	The highest leading person (in this study) at an Intensive Care Unit who has an overall responsibility for integrating care, research and education, as well as employee job satisfaction (USAHS, 2020; Karolinska 2022)
Crisis	A sudden event that often means intense difficulty or danger (Cambridge Dictionary, 2019)
Understudy	A person who learns another person's occupation, with a purpose to act in their absence, usually with short notice (Cambridge Dictionary, 2021).

Abbreviations

Table 2. *Abbreviations*

ABBREVIATION	DEFINITION
ICU	Intensive Care Unit
CM	Crisis Management
KS	Karolinska Sjukhuset
SÖS	Södersjukhuset Stockholm

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1. INTRODUCTION

1.1 Background

The tragic COVID-19 pandemic has been active for over two years now, and the pandemic has had a greater psychological impact on nurses and other healthcare staff, than any other recent pandemic or natural disaster (Xue et al., 2020; Zhou et al., 2020). In Sweden, the Intensive Care Unit (ICU), has been one of the most important units in treating patients during the pandemic (Gerdin, 2021).

There are several types of ICU's in one hospital, such as the Medical ICU or Trauma ICU (SIR, 2020), but during the pandemic, hospitals in Stockholm, Sweden, quickly had to merge various ICU's and transform them into Covid-classified departments that could treat critically ill COVID-19-patients. Due to staff shortage, hospitals needed to bring in understudies from other healthcare departments as support (Nationella Vårdkompetensrådet, 2020). The number of ICU patients per nursing team increased and the workload quickly became overwhelming for ICU nurses and their nurse leaders who are their closest manager, in the hierarchical leader structures of ICUs (USAHS, 2020; Karolinska, 2022). Between 2020 and 2022, Sweden experienced four pandemic waves in relation to COVID-19, (Socialstyrelsen, 2022, see appendix 1), and nurses at some of the hospitals under Region Stockholm were forced to work under so-called Crisis Agreements, with strict working conditions of 12-hour shifts (Vårdförbundet, 2021).

During a healthcare crisis, such as pandemic outbreaks, natural disasters or wars, nurses constitute the front line response and clinical backbone for our health care system (Edmonson et al., 2016; Xue et al., 2020). Such circumstances can result in nurse trauma and other psychological means (Maunder et al., 2004; McAlonan et al., 2007; Lee, Hong & Park, 2020). In fact, nurses who worked during the pandemic have suffered from various psychological distress symptoms (Appelbom et al., 2021). This is an alarming fact, and the consequences could ultimately affect patient safety (Xue et al., 2020; Kaczorowski, 2020). How can this scenario be prevented from replaying itself, in a future potential crisis similar to the pandemic? According to Phillips et al. (2021) organizational leadership could be one way to resolve these issues and improve the well-being of staff. Hence, it is important to understand how nurse leaders can support other nurses' well-being during a crisis such as the pandemic, which in turn is crucial to secure patient safety. (Vera San Juan et al., 2020; Aughterson et al., 2021).

1.2 Previous Research and Research Gap

Previous studies have investigated leadership competencies, in relation to Crisis Management (CM) and specific crisis phases (Wooten and James, 2008; Jaques, 2012; Crandall, Parnell and Spillan, 2014); Kumalo and Scheepers, 2018; Bhaduri, 2019), as well as in healthcare settings (Cummings et al., 2010; Boyd et al., 2014; Edmonson et al., 2016; Morsiani, Bagnasco and Sasso, 2016), and the COVID-19 pandemic has brought additional research on crisis leadership within the nurse profession (Hartney et al., 2021; Phillips et al., 2021, Bergman et al., 2021; Jankelová et al., 2021). However, most studies have only been conducted from the leaders' perspective (Coleman, 2015; Bowen et al., 2019; Robinson et al., 2019). The dissonance between executed leadership and perceived leadership by nurses, and the fact that there is a lack of studies having investigated the nurses' perceptions nurse leadership and its effect on level of job satisfaction suggests that more studies should be done through the lens of nurses (Kramer et al., 2007; Feather, 2015). The restricted focus on one *particular* healthcare setting, such as the ICU, as well as tailored leadership recommendations in relation to specific crisis phases are also missing. Conceptual models on leadership in relation to CM, especially in times of natural disasters, such as a pandemic, are also poor, according to the authors' knowledge (Phillips et al., 2021).

1.3 Aim and Research Question

The aim of this study is to investigate what leadership requirements that best facilitate a nurse's wellbeing in terms of job satisfaction, during different phases of a prolonged crisis, such as the COVID-19 pandemic (PAHO, 2021). Even though every crisis situation might be unique, encouraging nurse leaders to act upon every phase of a crisis helps nurses take adequate actions in order to solve the unique challenges that come with every phase (Prewitt and Weil, 2011). For instance, nurses' demands on their leaders may have changed throughout the pandemic due to reasons, such as enhanced learning processes, lower patient demands, better organizational environment etc. (Hartney et al., 2021). In order to capture nurses' updated experiences, this makes a cross-sectional study throughout the whole pandemic all the more important. By identifying important leadership requirements in different phases of the pandemic, this will hopefully contribute to important implications on how leaders can facilitate nurses' job satisfaction during a prolonged crisis, and thus secure patient safety (Xue et al, 2020; Kaczorowski, 2020). Furthermore, this could be incorporated into competency-based training programs for nurse leaders, as they prepare for potential future crises (ibid). The research question is:

How can leaders support nurses' job satisfaction in different phases of a prolonged crisis?

1.4 Primary Focus and Delimitation

The focus of this study will solely be on the ICU department and their nurses, since they have been under immense pressure during the COVID-19 pandemic (Maben and Bridges, 2020; da Silva and Barbosa, 2021, Gerdin 2021; Moreno-Mulet et al., 2021). Furthermore, this study has been delimited to investigating the relationship between ICU nurses and their so called nurse leaders. The study specifically wanted to examine nurses' preferred leadership requirements in leaders they are closely positioned to in their daily work, why leadership according to a higher level of hierarchy was not chosen. Employee job satisfaction as an outcome of leadership was chosen instead of another term linked to psychological well being, to avoid having respondents share personal, sensitive data about their health, such as stress levels or burnout syndromes etc. Lastly, the study has been limited to Region Stockholm, based on the fact that this region was one of the worst affected regions in Sweden during the COVID-19 pandemic (Socialstyrelsen, 2022).

2. LITERATURE REVIEW

This thesis studies the intersection of two fields: leadership and job satisfaction, in a crisis context. First, crisis management in terms of life cycle models are explained and related to the leadership field. Thereafter the concept of job satisfaction, in relation to leadership is discussed.

***Figure 1**: Illustration of chosen research fields ina crisis context*

2.1 Crisis Management; Life Cycle Models

A crisis situation is usually a novel event that entails high consequences, risk, uncertainty, and disruptive business practices (Gregory, 2005). Crises can be internal, e.g. change in leadership, ethical failures, or external, e.g. pandemic threats, stock market crashes or natural disasters (Bowers, Hall and Srinivasan, 2017). A crisis can affect the organization negatively in many ways, and emotions like anxiety, fear and an increased need for trust and security often emerges among employees, which impose a higher demand on leaders' CM skills (Liu and Yang, 2018). CM addresses the organizational process of handling a crisis (Mitroff and Alpaslan, 2003; Jaques, 2007), and leadership emerges to facilitate effective communication and build trust, with the aim to restore the situation to normal, with minimum cost (Gultekin, 2002; Lockwood, 2005; Cener, 2007).

Academia has created various crisis life cycle models that often accompany CM to provide increased understanding of the crisis situation and suggest managerial actions. Some models use three stages in their description, e.g. Smith's three-stage framework (1990), whereas more detailed models use up to five stages, such as Pearson and Mitroff's model (1993) (Coombs, 2007). Most models include the same overarching sequence of events; how and when a crisis emerges, the

triggering events, the consequences of the crisis and the resolutionary state when the crisis is over (Fink, 2002; Bowers et al., 2017).

2.1.1 Leadership in Crisis

As previously mentioned, leaders play a vital part in CM, by facilitating the restructure of the organization and navigating stakeholders through the crisis (Jankelová et al., 2021). Scholars have noted that crisis leadership seems to be a dynamic and learnable process that evolves over time, thus requiring sensemaking-and perception skills by the leader in order to enforce adequate actions, such as dealing with various stakeholders and managing the learnings stemming from the crisis (Walsh, 1995; Denis, Lamothe and Langley, 2001; Weick, 2005). In addition, crisis leaders also need to establish a foundation of trust, in order to motivate stakeholders to act in line with the leader (Schoenberg, 2005), support followers and develop human capital (Wooten and James, 2008).

Especially within healthcare, other important leadership qualities are supporting teamwork (Vainieri et al., 2017) and providing accurate information to reduce uncertainty in healthcare professionals (Bai et al., 2004). Deitchman (2013) claims that some leadership skills, especially required in healthcare settings, are not regularly taught in the public health curricula. Pihlainen, Kivinen and Lammintakanen (2016) declare that leaders within healthcare sometimes have insufficient management expertise, due to the fact that they were appointed management positions based on their professional skills. Their lack of basic management skills thus suggest that they may fail in effectively managing a crisis. During the crisis of the pandemic, leadership has specifically been classified as a main factor for effective stress management among employees, in the context of for instance authentic leadership (Mehta, Chandani and Sarvaiya, 2020; Gallagher, 2020), which is characterized by relational transparency and open information-sharing (Malila, Lunkka and Suhonen, 2018).

2.2. Job Satisfaction

In brief, job satisfaction can be explained as the affective reactions and emotional feelings of like or dislike that employees have about their job (Smith Kendall and Hulin, 1975; Mester et al., 2003; Muchinsky and Howes, 2019). It is a multifaceted term including several aspects of satisfaction related to work, pay, supervision, organizational practices, benefits, relationships with coworkers and professional opportunities (Misener et al., 1996). Several authors have described two facets of values to job satisfaction, intangible aspects of the work such as personal and professional development opportunities, autonomy and recognition, and tangible job aspects such as working conditions, company policy, opportunity for promotion, salary and benefits, company policy (Tari and Feij, 2001; Szecsenyi et al., 2011; Klopper et al., 2012).

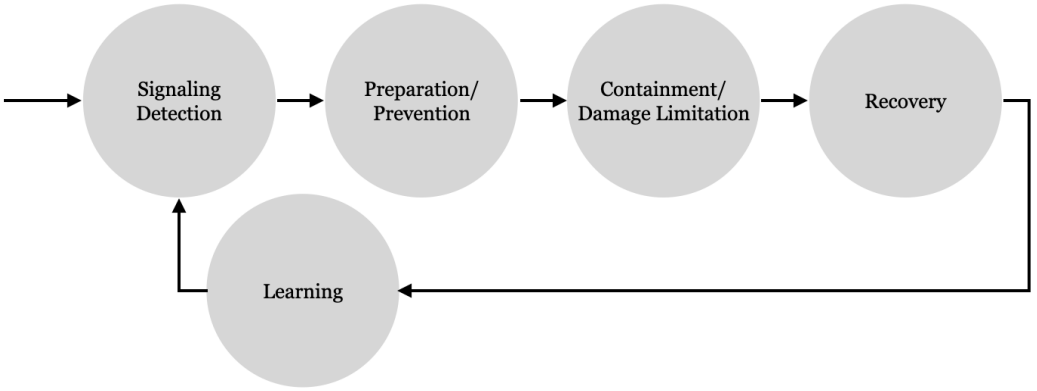
Furthermore, scholars suggest a relationship between employee job satisfaction levels and the leadership styles of superiors (Govender, Arbharran and Loganathan, 2013; Hosseini and Trang, 2017). In relation to healthcare, previous research has shown that staff nurses' perceptions of their leaders' leadership behavior are significantly linked to nurse job satisfaction (McNeese-Smith, 1996). Studies on job satisfaction in a clinical nurse setting have suggested that drastic changes to nurses' ways of working and their perceptions of threats are related to low job satisfaction and distress in nurses (Baumann et al., 2001; Rybojad, Aftyka and Milanowska, 2019).

3. THEORETICAL FRAMEWORK

3.1 The Crisis Management Framework

Pearson and Mitroff (1993) CM framework consists of a model that maps out five distinct crisis phases; Signal Detection, Preparation/Prevention, Containment/Damage Limitation, Recovery and Learning, along with a CM analysis that maps out appropriate leadership competencies for each phase (Wooten and James, 2008).

***Figure 2**: The Crisis Management Framework (Pearson and Mitroff, 1993)*



Phase 1; *Signaling Detection*, is where you detect early warning signs that a crisis might be emerging. This stage often implies the creation of crisis teams, simulation exercises and crisis training (Hutchins and Jia Wang, 2008). Important leadership competencies tied to this phase include sensemaking, which facilitates detection of early warning signs and sharing these between organizational members to assist them in making sense of the crisis (Wooten and James, 2008). Furthermore, sensemaking is associated with transformational leadership behaviors, such as providing followers with an inspiring vision of the future (Landrum, Howell and Paris, 2000; Goldman and Casey, 2010; Carter and Greer, 2013). Phase 2, *Preparation/Prevention*, is about elevating the protection and the safety net in order to mitigate the risks of a potential crisis (Hutchins and Jia Wang, 2008). Here, creativity and agility are vital leadership competencies in order to promote various crisis preparations to all parts of the organization (Wooten and James, 2008).

Phase 3, *Containment/Damage Limitation*, represents when the crisis has arrived, in which focus lies on minimizing the damages of the crisis on the organization (ibid). Competencies such as effective communication and the ability to take risks and decisions under pressure becomes vital. Phase 4, *Recovery*, focuses on repairing damages and resuming normal operations (ibid; Hutchins and Jia Wang, 2008). In this phase, exuding integrity and promoting organizational resilience become relevant leadership factors. Phase 5, *Learning*, puts emphasis on cultivating learnings incurred from the crisis, by leveraging leader-and culture-adapting behaviors to improve CM practices. This is, according to Jia Wang (2008) and Wooten and James (2008), the most important phase, where the open mindset of organizational members enables reflection upon the crisis. The leaders' orientation towards learning becomes crucial to this phase, thus suggesting that transformational leadership is the most fitting, also in this phase (ibid).

3.2 Full Range Leadership Model

According to Northouse (2019), leadership can be described as "a process whereby an individual influences a group of individuals to achieve a common goal". The influence of leadership can be categorized into task-focused, non-relationally, focused leadership styles and relationally focused leadership styles. Task-oriented behaviors include leadership styles such as laissez-faire leadership which is characterized by passive avoidance of decision-making and responsibility (Avolio, Bass and Jung, 1999), and transactional leadership which underline the exchange relationship between the leader and subordinates (Bass and Avolio, 1994). In contrast, examples of relational leadership behaviors include resonant leadership that focuses on inspiring, developing coaching and including other (Goleman et al., 2002; Boyatzis and McKee, 2005), and transformational leadership which motivates people to perform beyond their own expectations (Bass and Avolio, 1994). Several studies have specifically contrasted transformational leadership with transactional leadership (Ogbonna and Harris, 2000). Although the leadership styles are conflictingly different, their characteristics can co-exist and be respectively displayed within the same leader (Mackenzie, Rich and Podsakoff, 2001). The transformational leadership style, introduced by Burns (1978), is one of the most common approaches to leadership in research since the early 1980s. Its concept was later refined by (Bass, 1998; Avolio and Bass, 2004.) who provided an expanded version of transformational leadership, the Full Range Leadership Model. The model describes a single continuum (Yammarino, 1993) and complete range of leadership from transformational to passive avoidant leadership (Nawaz and Bodla, 2010). The current form of the Full Range Leadership Model consists of four transactional leadership factors, three transactional leadership factors and one non-transactional leadership factor (Northouse, 2019).

According to most studies, transformational leadership is associated with higher levels of job satisfaction than the two latter (Mester et al., 2003; Emery and Barker, 2007; Specchia et al., 2020).

However, research by Madlock (2008) and Govender et al. (2013) also indicates that employees reveal the highest job satisfaction when they perceive their leaders to use both transformational and transactional leadership behaviors.

3.2.1 Transformational Leadership

According to the Full Range Leadership Model, transformational leaders motivate their followers by being charismatic, inspiring, and stimulating their intellectual and individual needs. Transformational leadership incorporates the following factors: idealized influence- behaviors, inspirational motivation, intellectual stimulation and individualized consideration (Nawaz and Bodla, 2010).

Idealized Influence

Transformational leaders embrace ethical and moral values and stress the mission through idealized influence (Bass and Avolio, 1995; Northouse, 2019). Furthermore, the leader identifies with followers and reinforces loyalty and respect in them by acting as a role model who leads by example, displaying courage and dedication as well as making self-sacrifices in the interest of benefiting followers (Flynn, 2009; Yukl, 2010).

Inspirational Motivation

This factor stresses the ways leaders communicate high expectations on followers, motivating and inspiring them to achieve the shared vision and goals within the organization (Northouse, 2019), by framing a compelling vision of the organization, building a sense of optimism and enthusiasm about the future and providing followers with a purpose for the goals to be achieved (Antonakis et al., 2003; Bodla, 2010; Purit, 2016) Leaders further promote team spirit and stress group members' collective efforts through this type of leadership (Northouse, 2019). In fact, studies on transformational leadership effect on human resource management suggest that transformational leaders are knowledgeable about employees' compatibility (Purit, 2016) and empower group effectiveness by encouraging employees to carry out their job independently from the leader, as shown in a study by Jung and Sosik (2002).

Intellectual Stimulation

This component stimulates follower innovation and creativity, by encouraging followers to search for new ideas and engage in problem solving (Mester et al., 2003; Antonakis et al., 2003; Nawaz and Bodla, 2010; Northouse, 2019). The leader seeks different perspectives (Bass and Avolio (1995) and provides support and training to encourage followers to examine problems from new angles (Yukl, 2010). They also ask for followers' input (Bass, 1985). Research has found that elements of transformational leadership, including inspirational motivation, individualized consideration and intellectual stimulation directly influences followers' participation (Puspasari, Sukmawati and Sumertajaya, 2017).

Individual Consideration

Individual consideration as a facet to transformational leadership refers to leadership behavior that respects each follower as an individual (Purit, 2016). Leaders contribute to follower satisfaction by considering their individual needs (Northouse, 2019). The leader pays attention to followers' individual requirements, skills and stimulates learning experiences by providing training (Bass and Avolio, 1995; Lowe, Kroeck and Sivasubramaniam, 1996; Purit, 2016), and feedback (Podsakoff, Todor and Skov, 1982) to help followers realize their potential. Additionally, transformational leaders assign followers roles according to their skills (Almohtaseb et al., 2021). Hence, effective leaders recognize that skills and experiences differ between followers, thus requiring the leader to personally understand their followers in order to attend to these needs on an individual basis (Govender et al., 2013). Gardner and Stough (2002) recognized that this ability, described as emotional intelligence, is a crucial element for actualizing individual consideration.

3.2.2 Transactional Leadership

This leadership is characterized by control, decisive behaviors (O'Kane and Cunningham, 2012; Schoenberg, Collier and Bowman, 2013) and centralized command (Battilana et al., 2010; Boyd, 2011). According to the Full Range Leadership Model, a transactional style consists of the following three factors: contingent reward, management-by-exception active and management-by-exception passive (Nawaz and Bodla, 2010).

Contingent Reward

This factor describes the process of exchange in the leader-follower interaction. Leaders assign and clarify task and role requirements and provide rewards contingent on the achievement of these expected obligations (Antonakis et al., 2003; Northouse, 2019). The leader aims to obtain agreement with followers on success criteria of performance and consequential payoffs, and with positive reinforcement implicitly clarifies performance standards (Xirasagar, 2008).

Management by Exception Active

This component refers to the vigilance of a leader, who supervises and monitors errors and interferes to take corrective actions to ensure that standards are met (Bass and Avolio, 1995; Antonakis et al., 2003). The leader closely supervises followers for mistakes to intervene when performance by followers is not matched according to expectations to avoid potential problems (Govender et al., 2013).

Management by Exception Passive

In contrast, management by exception passive only prescribes the leader to intervene once problems have already arisen or noncompliance of standards have occurred (Antonakis et al., 2003; Northouse, 2019) thus characterizing the passive approach to transactional leadership (Bass and Avolio, 1995).

3.2.3 Passive Avoidant Leadership

The Passive Avoidant leadership style of the Full Range Leadership Model represents an even more passive leadership style than characterized by management by exception passive explained earlier (Northouse, 2019). Under this leadership form, the non-transactional factor Laissez-faire, reflects the absence of leadership guidance and decisions (Antonakis et al., 2003).

Laissez-Faire

The Laissez-faire leader avoids making decisions, abdicates responsibility and does not give any feedback nor rewards to followers (Xirasagar, 2008; Northouse, 2019). The leader makes no effort to motivate or satisfy followers' individual needs. Instead, this leadership style assumes that followers are supposed to independently achieve their tasks (Govender et al., 2013). Although the Laissez-faire leadership style historically has been criticized, Yang (2015) proposes that this leadership behavior may be considered a strategic choice, rather than reflecting the absence of leadership, made by the leader to empower followers to lead and thereby decrease follower dependency, acknowledge their capabilities and increase their autonomy.

3.3 Theory Discussion

The crisis framework has been chosen based on the fact that it provides an in-depth understanding of each unique phase of a crisis and is well-studied in CM (Bhaduri, 2019). The model also paves the way for interesting findings in regards to job satisfaction, since it has only, to the author's knowledge, been applied to organizational success as an outcome in previous research (Hutchins and Jia Wang, 2008). However, the distinct sectioning and order of phases has been questioned by multiple scholars (Seeger, Sellnow and Ulmer 1998; Robert and Lajtha, 2002; Jaques, 2007) who claims that both crisis phases and the paired managerial action are interlinked rather than stand-alone disciplines and that they might not always occur in the given sequence. Moreover, Wang (2008) claims that learning should be incorporated in each phase, since it is an ongoing process throughout the crisis. Lastly, the model has mostly been associated with business contexts (Pearson and Mitroff, 1993; Fink, 2002; James and Wooten, 2005, Wooten and James 2008; Bhaduri 2019), which might imply that it is not applicable in a healthcare setting. The Full Range Leadership Development theory has been widely used in leadership research, but there is a paucity in the literature on its application to healthcare settings, in terms of relating nurse leaders' leadership styles to nurse staff job satisfaction, which might impose difficulties when applying it to the given research context. Lastly, this study aims to investigate job satisfaction as an outcome of leadership, and not as a mediating factor to other outcomes, which is why components to job satisfaction were not further investigated through a specific theoretical framework.

4. METHOD

4.1. Method of Choice

4.1.1 Constructivist and Interpretivist Study

This thesis adopts a constructivist ontological observation. According to social constructionism, social actors create partially shared realities when they engage in social interactions, and social phenomena are fluid as the social interactions between actors are an ongoing process (Saunders, Lewis and Thornhill, 2019). The authors chose this approach as the study examines the interactions between leaders and followers, where leadership and followership can be viewed as social phenomenons created by humans. Furthermore, the study follows the epistemological approach of interpretivism, and was considered appropriate to understand the why and how of human behavior in this study (Bell, Bryman and Harley, 2019), which investigates the subjective experience and perceptions of leadership.

4.1.2 Abductive and Qualitative Approach

This study has been developed in an abductive process, where theory and empirical data have been collected in parallel and formed accordingly. As there is a wide range of theories on leadership that could have been applied to cover different topics, the empirical data was used to narrow the study to relevant areas in line with theoretical frameworks and research questions. As the perception of leadership and its effect on job satisfaction is a subjective matter, collecting data through in-depth interviews was considered appropriate for participants to share and elaborate on their unique perceptions. Semi-structured interviews were conducted to give the respondents the opportunity to express themselves freely and the authors the possibility to gain deepend insights by asking follow-up questions (Bell et al., 2019), which might capture unique aspects to the view of leadership. This advantage was considered to outweigh the disadvantage of potential comparability issues between interview subjects of semi-structured interviews (ibid).

4.1.3 A Cross Sectional Research Design

A cross-sectional research design was applied, where multiple cases have been observed during one point in time. Contextual and individual factors among the respondents have been considered, as encouraged in qualitative studies (Saunders et al., 2019). The authors were interested in providing an answer to the research question that is applicable to more than one case and thereby shed light on differences between leadership styles and its effect on job satisfaction.

4.2. Data Collection

4.2.1 Sample

The population of interest were ICU nurses at hospitals in Stockholm, who worked during the COVID-19-crisis. A purposive sampling method was used, where relevant organizations and respondents were sought out and contacted. The final sample consisted of 13 nurses who have worked at ICU-departments for at least most part of the pandemic at hospitals. The nurse managers of each and every ICU-department at hospitals in Region Stockholm were contacted through email and asked to forward the participation request among their nurse staff. Furthermore, nurse representatives from personal networks were also contacted via email. Some of the contacted respondents provided contact information to present or former ICU-colleagues, who were also contacted. In total, 6 nurse managers of different ICU-departments were contacted, of which 2 responded, and 4 nurses who had worked within the ICU-care during the COVID-19-crisis were contacted independently, which all subsequently led to 13 interviews. For a more detailed overview of the sample, see appendix 3.

***Table 3**: Overview of Respondents Characteristics*

INTERVIEW NO.	GENDER	HOSPITAL[1]
1	Male	KS-Huddinge
2	Female	SÖS
3	Male	KS-Huddinge
4	Female	KS-Solna
5	Female	SÖS
6	Female	KS-Huddinge
7	Female	SÖS, KS-Huddinge
8	Female	St. Capio, KS-Huddinge
9	Female	SÖS
10	Female	SÖS
11	Male	KS-Huddinge
12	Female	KS Huddinge
13	Female	SÖS

[1] (Socialstyrelsen, 2022)
Pre-wave: January-March 2020
Wave 1: March-June 2020
Wave 2: October (2020)-January (2021)
Wave 3: February-June 2021
Wave 4: November (2021)-April 2022)

4.2.2 Interview Process

The authors prepared one interview guide with questions and one illustration of Pearson and Mitroff's (1993) crisis model depicting five stages modified by the authors to apply to the COVID-19 crisis (see appendix 2), to help nurses recall the course of events and timeline of the pandemic. The modified model was developed based on information about the COVID-19 crisis from Socialstyrelsen. In designing the interview guide, potentially leading or personally exposing questions that could lead participants to share sensitive data such as information about their health, were excluded. Throughout the interviews, probing questions were used to critically examine some of the answers but also to dig deeper into specific topics. Before the interview, a pilot study was conducted to test the relevance of the formulated questions of the interview guide, which resulted in small adjustments. In designing the illustration, a clinical doctor from personal networks, who had worked at one of the hospitals in Region Stockholm during the pandemic, gave feedback on its accuracy to give insight on how the model was understood. This led to slight changes to clarify the illustration for interviewers. Out of 13 interviews, 11 were held online through Microsoft Teams according to respondents' preferences. All interviews were conducted with both authors present, one posing the questions and the other taking notes. The interviews were on average 63 minutes in duration each.

4.3 Data Analysis

A thematic analysis was applied to analyze the empirical data. In line with Saunders et al. (2019), themes were identified by recognizing patterns in the empirics. Further, the authors first analyzed the empirical material individually before compiling the findings. Emerging themes were categorized using subsequent coding and a theoretical lens was used to develop the concepts into second-order themes, which thereby resulted in aggregated dimensions. An overview of the empirical material collected is presented in Table 4.

***Table 4**: Empirical Overview*

THEMES	SECOND-ORDER THEMES
Managing Uncertainty	Facilitating Sensemaking Providing Transparent Information
Managing Human Capital	Allocating Resources and Competencies Promoting Competence Development
Noticing Followers	Being Present Meeting Individual Needs Showing Appreciation
Enforce Decentralization	Facilitate Follower Influence and Learnings Counteract Hierarchical Roles

4.4. Ethical Considerations and Implications

Certain ethical issues have been considered mainly during the collection and analysis of empirics. To ensure privacy of those taking part, the study applied the voluntary nature of participation and respondent' right to withdraw, informed consent of those taking part, ensured confidentiality of data and maintenance of anonymity of those taking part as well as compliance in the management of data. At the first point of contact, respondents were informed of the aim of the study and purpose of their interviews. Before participating, respondents had to confirm their approval of participation by signing a consent form. The respondents were also told that the interviews would be anonymous and that they had the right to at any time withdraw their consent to participate in the study, including the right to not answer certain interview questions. (Saunders et al., 2019).

4.5. Method Criticism

Several aspects to the study can be applied under method criticism. When taking on an interpretivist, subjective focus on a specific context, the results are harder to transfer and replicate, thus reducing the study's transferability (Saunders et al., 2019). Even though the respondents have signaled a willingness to participate in the study, they were perhaps not able to proclaim critique about their leader, or share information about their personal job satisfaction due to organizational or personal reasons. The respondents may therefore only provide a partial picture (Bell et al., 2019), indicating that a response bias may take place in this study.

Reliability and dependability may also suffer, due to the semi-structured, in-depth interview approach that lacks standardization (Bell et al., 2019). To support the internal reliability, individual analyses and unrestricted discussions between the authors were alternated, while continuously revisiting the material during the process (Saunders et al., 2019). Since the research has been modified along the process, the authors have also recorded drafts, interview notes and research material which constantly were reviewed by a supervisor group, thus increasing the dependability of the study (ibid). Furthermore, the fact that the study only contained 13 respondents and that some of them were suggested by nurse managers to the authors, could imply that managers chose nurses who would provide beneficial information regarding the displayed leadership during the pandemic, which could result in a less diverse sample that would damage the confirmability. Moreover, the interpretivist and qualitative nature of this study will consider contextual factors which can reduce the transferability. To improve transferability and confirmability, circumstantial descriptions and records of the process were included in the study that enables future researchers to identify alternative research areas (Saunders et al., 2019). Detailed descriptions of the research design has also been included in the study, in order to facilitate replication processes. However, qualitative research is not necessarily meant to be replicated, due to the fact that it showcases socially constructed interpretations by the respondents, in a particular context.

5. EMPIRICS

ICU nurses have recognized the important role of nurse leaders in supporting and maintaining job satisfaction during the COVID-19 pandemic. The empirics aim to display themes of leadership attributes that nurses have identified as important for job satisfaction in each phase of the crisis model.

5.1. Managing Uncertainty

Managing uncertainty has been identified as a critical aspect for nurse leaders to consider in supporting ICU nurses' job satisfaction during the crisis, through engaging in sensemaking and concretizing the situation, as well as providing transparent information.

5.1.1 Facilitating Sensemaking

At the early phases of the crisis, ICU nurses seem to value leaders who can help them make sense of the crisis situation and reduce uncertainty by providing context of the organizational circumstances. This provides security and meaningfulness to nurses.

> *"At this point, it definitely fulfills a purpose to know how many patients we will receive, to get a prognosis of the next upcoming days. Being given a context where you get information about what will happen in the future would provide security and a context for oneself. One's own work feels more meaningful if it's put into context."*- 1

Continuing to contextualize the crisis and its future consequences by providing reassurance and information as a nurse leader is further considered important in the Recovery phase.

> *"You need to continue to speak about the crisis, talk about the consequences, and inform us that the situation is under control as you are sending out information."* - 2

5.1.2. Providing Transparent Information

ICU nurses also expressed the importance of their leaders being transparent, objective and honest with the information they provide, especially during the first three phases of the crisis life cycle model, thus hindering speculations and unifying nurses with the leaders' knowledge of where the situation is heading.

> *"There are many rumor mills /…/ I believe it's important to have clear communication with the staff and provide objective information. Bring down and control rumors /…/.*

You cannot withhold information from the personnel. That becomes problematic. Be straightforward and clear." - 6

"They were honest and didn't make anything up. I'd rather have honest answers that might not be an answer, but honest in the sense that the leader tells us that they don't know what's going to happen. That made us feel unified." - 1

5.2. Managing Human Capital

This part investigates nurse leaders' role in managing human capital to maintain nurse job satisfaction. Nurses have recognized their leaders' need to effectively allocate resources and competencies amongst them and enable them to engage in competence development.

5.2.1. Allocating Resources and Competencies

During the first three phases of the crisis, nurses considered leaders' ability to allocate nurses to tasks based on their competencies and enable knowledge sharing as an important success factor in managing the crisis.

"Having knowledge of what competencies are close by is important, so that you know who to reallocate in order to make the best of the situation."- 5

"I wished I was able to go alongside another nurse and that the leaders would have checked a person's knowledge level. Pair us together, let us follow each other. Maybe use smaller leaders, informal leaders /…/ You can tail each other and back each other up" - 8

One case even revealed that support and knowledge-sharing among co-nurses might even eliminate the leader's purpose to fulfill job satisfaction for some individuals, throughout the whole crisis.

"The leader's absence was nothing that affected my job satisfaction. I had my colleagues around me that I could ask for support." - 4

5.2.2. Promoting Competence Development

Empirics show that many nurses valued the opportunity for professional development, especially during the Recovery phase. This was associated with more stimulating work, thus higher job satisfaction.

"During the pandemic, it has been monotonous, it's been heavy, it's the same treatments, the same medications. We are used to more varied work, but now it was the same for all of us. I personally believe that the personnel has been feeling bad over the repetitive healthcare of patients and it hasn't been very stimulating."- 2

"The opportunity to develop is also part of the well-being at the care unit, especially if you are new and you get to sit in a group, go on in-service-training days with lectures etc. That type of education."- 13

Apart from group training and common group development, respondents expressed the desire to develop on an individual level as well.

"You should increase the possibility for individual personnel to expand their individual competence." - 5

5.3. Noticing Followers

This theme represents leaders' role in noticing nurses to support their job satisfaction during the crisis. Nurses identified their leaders' ability to gain understanding of their situation as frontline workers during the pandemic, meet individuals' needs and show appreciation, as important ways to achieve this.

5.3.1. Being Present

Respondents stated the importance of leaders' physical presence, especially during the third phase of the crisis, in picking up on the frontline situation. By being present and empathic and understanding the nurses feelings, leaders provided comfort.

"You can observe so much by just being physically present and you can snap up information. During the pandemic waves, it was extremely important to be on sight and pick up on what's happening now." - 5

"You can provide some sort of security and stability by being present, be there on the floor and talk to people." - 7

5.3.2. Meeting Individual Needs

During the third and fourth phase of the crisis, nurses expressed a wish for leaders to tend to their individual needs and to motivate them on the basis of recognizing each nurse as a different individual.

"Engaged leadership, committed leadership and empathic leaders is important. You should try to motivate your working teams, see people as individuals with different needs. /…/ - some need more vacation, some need more breaks, some need more encouragement etc." - 5

Some nurses, exemplified by the citation below, considered this leadership ability, in the Recovery phase, as crucial in retaining nurse staff for the long-term. However, the understanding that leaders might not always be able to satisfy everyone's individual needs was also highlighted, and in those cases it became important for leaders to motivate their reasoning behind a certain decision.

"It's important to take individual needs into consideration, in order to keep nurses motivated to keep working at the ICU in the long run./…/ But you cannot please everyone with your decision. /…/Sometimes, people have different opinions, but as long as you can motivate your decisions, people can still accept it." - 1

However, some of the more experienced nurses stated that they did not have much need for leaders' support during the third and fourth phase of the crisis, because they were confident in their professions and in managing on their own.

"I've worked as an ICU nurse for a long time, so I'm not in that much need of my boss. I feel quite confident in myself and my profession." - 6

5.3.3. Showing Appreciation

According to the respondent below, individual appreciation in the form of personal recognition from the leader, was considered another way of noticing nurses and making them feel seen and acknowledged during the third phase of the crisis.

"I wanted the leaders to be more personal and present on the ward. They could ask me personally how I am. It's an easy way to make me feel seen and confirmed. It's the little everyday things that make a difference." - 8

In addition, nurses considered appreciation through rewards and support functions both during the Containment/Damage Limitation phase as well as the Recovery phase as means for strengthening job satisfaction. Although rewards partly took form as gifts from society as a whole and support from external parties such as temporary psychologists, the leaders seemed to play an important role in providing and enabling access to such reinforcement.

> *"They had psychologists dedicated to the staff that you could talk to. We also received lunches and the fridges were always stuffed with food so that we didn't have to bring our own food. These kinds of things increase job satisfaction. You could also get massages once a month. It was a consolation and it contributed to the recovery."* - 7

5.4. Enforce Decentralization

Finally, enforcing decentralization through allowing for follower influence and softening hierarchical roles was another facet to leadership that nurses considered important for job satisfaction.

5.4.1. Facilitate Follower Influence and Learnings

During periods of Recovery, ICU nurses also desired the ability to influence and improve the organization, thus contributing to learnings gained from the crisis. They appreciated leaders who would value their input, moreover take them seriously by pleading their cause to higher instances.

> *"You need to take people's viewpoint seriously. Cherish ideas, pieces of information and apprehensions from the staff, and make sure that it's being processed in some way. A leader should manage that sort of input and try to make something out of it."* 5

Nurses also considered their feedback and input to leadership as an important means for leaders to continuously absorb learnings in each phase of the pandemic. Empirics emphasized that the recovery was rather a dynamic process and that they continuously gained learnings throughout the whole crisis cycle.

> *"Leaders could promote and facilitate feedback through evaluation forms and dialogues with the nurses. Listen to what people have to say. Everything is so dynamic. /…/ Learning happens all the time and recovery comes in circles. It's not linear."* - 7

At the same time, entering the third phase of the crisis, nurses also expressed the wish to receive feedback from the leader regarding whether they were performing their tasks correctly, in order to soothe their anxiety and insecurity.

> *"The leaders clarified my tasks and I also received feedback /…/ It felt so important in this particular situation, when I was unsure if I did the right thing and if I was useful at all."* - 8

On the other hand, during the Containment/Damage Limitation phase, one respondent also acknowledged that there was no time, space or circumstances that allowed for much influence on

leadership during this period. This implied an acceptance toward following given instructions by the leader.

> *"We have never been close to something similar, in terms of workload and the amount of patients. In this situation, things haven't functioned the same way, and that is just something you have to accept. You need to follow the instructions you're given. You cannot have discussions. Decisions need to be taken quickly."* - 1

At the same time, the citation below implies that one nurse did not prefer their leaders to explicitly communicate and emphasize their powerlessness and inferiority as a nurse, although this practically seemed to be the case during the third phase of the crisis.

> "*In the first phase you felt like a bondservant. If you enter the crisis agreement, the leaders are the ones deciding. You don't have a say in anything. This was something that our leaders highlighted, but I didn't appreciate that to be honest. You need to attend to all individual's needs and it has to be fair."* - 6

5.4.2. Counteract Hierarchical Roles

Loose hierarchies diminishing the distance between the role of nurses and their leaders, was considered a contributing factor to job satisfaction amongst nurses, especially in the third phase of the crisis.

> *"I would appreciate it if they entered the ward and gave a helping hand - cover for me so that I can take a break or ask if and how they can help."*- 11

> *"What I like most about my work is that our bosses are just like everyone else. That's the most important thing. They don't sit on high horses. Then of course, you need to make a difference between a boss and a colleague, but we don't have hard-drawn lines between us. I think this makes the workplace more pleasant.."* - 10

6. ANALYSIS

This section will present the requested leadership requirements that empirics claim are suitable for facilitating job satisfaction among ICU nurses, in various phases of a prolonged crisis.

6.1. Sensemaking

During the ambiguous circumstances of Phase 1 and 2, empirics highlight the importance for leaders to facilitate sensemaking to provide context, vision and meaningfulness to nurse staff, thus helping them reduce uncertainty, and increase job satisfaction. This leadership requirement is associated with transformational leadership behaviors, such as providing followers with an inspiring vision of the future (Landrum et al., 2000; Goldman and Casey, 2010; Carter and Greer, 2013), as part of the Inspirational motivation category (Antonakis et al., 2003; Nawaz and Bodla, 2010; Purit, 2016). Interestingly, respondents also recognized sensemaking to be recurrently important in the Recovery phase. At this stage, it involves talking about the consequences of the crisis once it is over. In the literature, sensemaking as a leadership requirement has mostly been considered essential in the early phases of a crisis (Hutchins and Wang, 2008; Wooten and James, 2008), whereas the findings in this study, however, suggests that leaders should continue to consider to contextualize the crisis during its aftermath.

Subconclusion: Leadership requirement Sensemaking, represented by Transformational leadership, is important in phase 1, 2 and 4.

6.2 Honest Communication

Empirics imply that nurses valued transparency and direct information through honest communication from their leaders, during the first three phases of the crisis. This helped reduce uncertainty, bring clarity and create trust in leaders. In terms of leadership style, this relates to relational transparency and open information-sharing characterizing authentic leadership (Malila, et al., 2018). Even in times when leaders did not have the answers needed to clarify the situation, the respondents still wanted their leaders to openly communicate this, as knowing as little about the uncertain situation as the followers themselves, made the nurse feel unified with the leader.

Subconclusion: Leadership requirement Honest Communication, represented by Authentic leadership, is important in phase 1, 2 and 3.

6.3 Team Development

Empirical findings demonstrate that nurse staff found support and collaboration among colleagues to be important in fulfilling job satisfaction, especially in the first three phases of the crisis. Nurses

valued leaders who could allocate human capital competencies by pairing people together, based on experience and knowledge, to enable staff to learn from and support each other. The above indicates a leadership requirement of enabling team development which relates to the inspirational motivation category that encourages team spirit (Northouse, 2019). Further association to transformational leaders is found in human resource management literature, suggesting that transformational leaders are knowledgeable about employees' compatibility (Purit, 2016). In addition, one respondent suggested that leaders should allow informal leaders to emerge in the aforementioned phases of the crisis. The authors interpret this as with the purpose to enhance group effectiveness, which would confirm what Jung and Sosik (2002) suggest in their study: that leaders empower group effectiveness by enabling followers to perform their job independently from the leaders.

Another factor of team development that emerged from the empirics was the case where group support among nurses replaced the leader's role in fulfilling job satisfaction. One nurse specifically mentioned that the leader's absence did not influence her job satisfaction due to presence and support from colleagues. The absence of leadership is associated with Laissez-faire leadership style, connected to Passive avoidant leadership. Although previous literature according to Madlock (2008) claims that Laissez-faire leadership leads to low job satisfaction, empirics might suggest that followers show acceptance toward Laissez-faire leadership in cases where group support among nurses is strong enough. Nevertheless, empirics confirm Misener et al. (1996) and Hanaysha's (2016) claims that strong relationships with coworkers and teamwork are important factors for influencing job satisfaction, besides from leadership. This, together with the empirics, might suggest that it could be even more important during crises when nurse leaders are under additional pressure in terms of workload and responsibilities, perhaps making it more difficult to always be present and supportive to ensure employee job satisfaction.

Subconclusion: Leadership requirement Team Development, represented by Transformational leadership, is important in phase 1, 2 and 3.

6.4 Decentralized Support

During the third phase, empirics convey that nurses wanted leaders to prevent and reduce rigidity in the hierarchical role difference between nurses and nurse leaders by being present on the ward and not putting oneself on a pedestal. Standing together with the nurse in the frontline and giving them a helping hand if needed indicates the leadership requirement of providing decentralized support at this phase of the crisis, which relates to the concept of leaders identifying with their followers, in accordance with idealized influence (Flynn, 2009; Yukl, 2010). Additionally, this leadership behavior also displays dedication and willingness to self-sacrifice in the interest of benefiting followers, which

is another element of the idealized influence category (ibid). Hence, decentralized support as presented above reflects the literature on transformational leadership.

Subconclusion: Leadership requirement Decentralized Support, represented by Transformational leadership, is important in phase 3.

6.5 Decisiveness

Although nurses preferred having influence in managerial processes, they also recognized decisiveness as an important leadership requirement, especially during the third phase, which relates to the literature on transactional leadership (O'Kane and Cunningham, 2012; Schoenberg et al., 2013). One nurse acknowledged that decisions needed to be taken quickly during phase 3, thus indicating the acceptance and understanding of following given instructions by the leader. The empirical material also concludes that nurses wanted role clarification and feedback during the third phase, when they were uncertain about their task performance etc. This is further interpreted as an element to decisiveness which resonates with the Management by Exception Active factor of transactional leadership, where leaders supervises and interferes to take corrective actions in order to ensure that followers are performing according to standard expectations (Bass and Avolio, 1995; Antonakis et al., 2003).

Subconclusion: Leadership requirement Decisiveness, represented by Transactional and Transformational leadership, is important in phase 3.

6.6 Recognition

During phase 3 and 4, nurses also appreciated leaders who could provide recognition. This partly involved personal recognition, in which the leader would acknowledge staff members by personally asking how they were doing. Noticing nurses on an individual basis made nurses feel seen by their leader, and this leadership requirement relates to the individual consideration factor of transformational leadership (Purit, 2016; (Northouse, 2019). The second part of recognition was constituted by providing material gifts such as free meals or massages. This increased nurses job satisfaction, provided consolation and contributed to their endurance and recovery. Providing such forms of appreciation to staff once the crisis is over can be seen to resonate with the literature on transactional leadership, according to the facet of contingent rewards, in which the leader provides rewards and payoffs contingent on performance expectations on their followers (Antonakis et al., 2003).

Subconclusion: Leadership requirement Recognition, represented by Transactional and Transformational leadership, is important in phase 3 and 4.

6.7 Emotional Intelligence

Empirics further demonstrates that nurses emphasized the leadership requirement of emotional intelligence as important, especially during phase 3 and 4. Nurses desired empathetic leaders who would recognize them and their individual needs, which is associated with the concept of emotional intelligence, that plays an important role in individual consideration, as part of the transformational leadership style (Gardner and Stough, 2002). Hence, the empirics suggest that transformational leadership style, enabled by emotional intelligence, is appropriate during phase 3 and 4. Interestingly, one respondent specifically mentioned that she was not in much need of her leader due to her confidence in the role as ICU nurse, stemming from her long work experience. This underlines the significance of individualized consideration by recognizing different skills, experiences and expectations among followers and adapting accordingly, as a leader. However, this empirical case may also suggest that nurses could accept or be indifferent toward Laissez-faire leaders, if they are more experienced and more confident in their profession. Hence, experience could be interpreted as a demographic factor influencing the followers' needs of their leaders.

Subconclusion: Leadership requirement Emotional Intelligence, represented by Transformational leadership, is important in phase 3 and 4.

6.8 Individual Professional Development

Enabling individual, professional development for staff was another leadership requirement deemed important for job satisfaction, during periods of Recovery, such as educational lectures and in-service training, especially since their work became more repetitive than usual during the pandemic. This relates to the transformational leadership category intellectual stimulation, in which leaders provide training to increase follower stimulation (Mester et al., 2003; Nawaz and Bodla, 2010; Northouse, 2019). This leadership requirement also relates to individualized consideration, where followers' requirements, skills and aspirations are considered, as well as stimulating learning experiences by providing coaching and mentoring to help followers realize their individual potential (Lowe et al., 1996; Purit, 2016). Additionally, providing personal opportunities for professional development on an individual basis, would require the leader to recognize individual differences between followers in terms of skills, experiences and expectations, which Govender et al. (2013) have recognized as crucial for effective leaders.

Subconclusion: Leadership requirement Individual Professional Development, represented by Transformational leadership, is important in phase 4.

6.9 Promote Follower Participation

During periods of Recovery, nurses also wanted to participate in the organizational management and desired leaders who would cherish their ideas and take their viewpoints seriously. Thus, promoting follower participation as a leadership requirement relates to individual stimulation represented by transformational leadership (Mester et al., 2003; Antonakis et al., 2003; Nawaz and Bodla, 2010; Northouse, 2019), in which leaders ask for followers' input (Bass, 1985). Moreover, carefully listening to what followers have to say can also be referred to the transformational Individual consideration, which centers around leadership behavior that respects each follower as an individual (Purit, 2016). In terms of follower influence, empirics also implies that demographic factors such as organizational differences between the hospitals of ICU nurses could affect nurse leaders' ability to promote follower participation. One respondent indicated that whether nurses entered the crisis agreement or not impacted their degree of influence on leadership management. This suggests that organizational differences in contractual terms such as the crisis agreement may have influenced the leadership requirement of promoting follower participation.

Subconclusion: Leadership requirement Promote Follower Participation, represented by Transformational leadership, is important in phase 4.

6.10 Learning Orientation

Empirics show that being learning oriented was another important leadership requirement throughout all phases in order to gain valuable learnings from frontline nurses that could ultimately improve CM and improve job satisfaction. Respondents underline that leaders should recognise the importance of constantly promoting follower influence and participation, as previously mentioned under transformational leadership, to absorb learnings from nurses in a crisis. Furthermore, nurses considered that the Learning phase was a continuous process during the pandemic due to the dynamic events and nature of the crisis, which is in line with research by Jia Wang (2008) and Wooten and James (2008) who claim that leaders' orientation toward learning becomes crucial in a crisis.

Subconclusion: Leadership requirement Learning Orientation, represented by Transformational leadership, is important in all phases.

7. DISCUSSION

7.1 Answering the Thesis Question

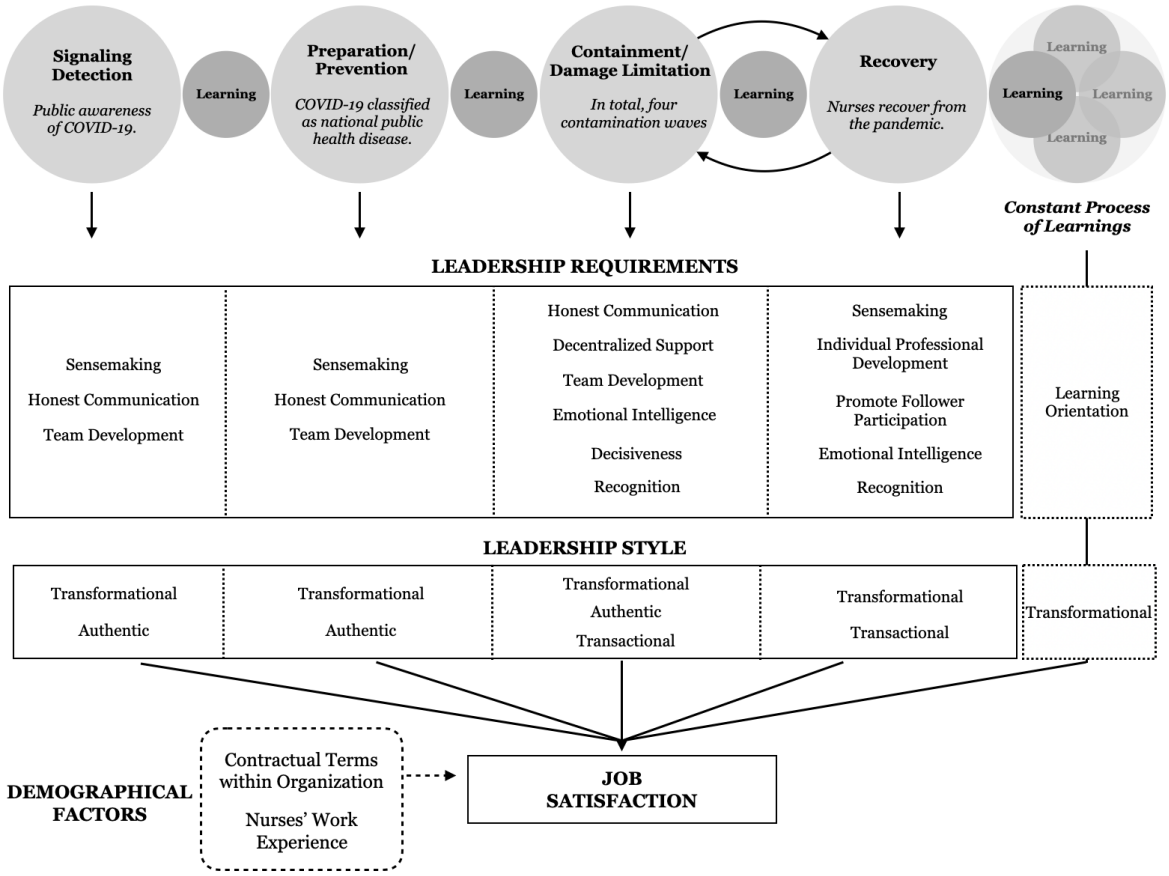
This study has examined the leadership requirements of ICU nurse leaders' role in supporting job satisfaction among nurses, throughout the different phases of the prolonged COVID-19 crisis. Through qualitative interviews with nurses, this paper has aimed to answer the research question:

How can leaders support nurses' job satisfaction in different phases of a prolonged crisis?

From the analysis, several leadership requirements have been identified as crucial to support nurse staff job satisfaction through the crisis phases, which serves to answer the research question. This is summarized in Figure 3.

In terms of supporting job satisfaction, transformational leadership proved to be an appropriate leadership style throughout the whole crisis. In phase 1, 2 and 4, this incorporated the leadership requirement of facilitating Sensemaking, which helped reduce uncertainty by providing context and meaningfulness to their work. Throughout the first 3 phases, Honest Communication and Team Development were other important leadership requirements. Honest Communication, represented through authentic leadership, helped manage uncertainty in nurses, and bring clarity and trust to them. Team Development supported by transformational leadership enhanced group collaboration and support among colleagues, which thus created job satisfaction. In phase 3 transformational leadership was moreover represented by Decentralized Support and Decisiveness. The first-mentioned meant giving frontline workers a helping hand by being present on the ward. The latter included making quick decisions, giving feedback and role clarification to nurses, which also indicates a transactional leadership style desired in this phase. Leadership requirements Recognition and Emotional intelligence were further considered important in both phase 3 and 4. Recognition involved personal acknowledgement of nurses represented by a transformational leadership style, as well as in the form appreciation through material rewards according to a transactional leadership style. Emotional intelligence described empathetic leaders who would understand and attend to followers' individual needs to support their job satisfaction. During the recovery phase, other desired leadership requirements in accordance with a transformational leadership style were Promoting individual personal development and follower participation. Both considered as a means of enhancing job satisfaction, supported individual needs of stimulation at work and provided the opportunity for nurses to influence management. Finally, Learning orientation was found to be an important leadership requirement throughout the whole crisis as the learning phase was considered a constant process, in which the leaders could gain continuous learnings from the crisis by promoting follower influence and participation according to the transformational leadership style.

Figure 3: *Revised Crisis Model (Cao and Östergaard, 2022)*



7.2 Discussion and Practical Implications

The COVID-19 pandemic has struck hard on our healthcare system, and ICU nurses in particular. Their wellbeing and job satisfaction suffered immensely, which weakened the clinical backbone of our healthcare system, and the need to strengthen managerial processes to prevent a situation like this from repeating itself is urgent. Even though previous research has studied crisis management and the leader's effect on job satisfaction, little has been researched on the leaders' ability to adapt leadership styles to certain crisis phases in order to facilitate job satisfaction among nurses, and neither has the important ICU department been studied. The perceived leadership from nurses point of view is also lacking in todays' discourse, thus creating a gap this study consequently fills. As the analysis above indicates, various contexts, cultures and individual requirements demand different leadership approaches that vary over time, in order to facilitate nurses job satisfaction and evidently patient safety within healthcare. The authors hope that these findings will help make leadership development a top priority for hospital management and enable the design of crisis leadership trainings that focus on dynamic, tailored leadership for each phase of the crisis as displayed in the model above. Furthermore, training programs would enrich the currently

insufficient management expertise within healthcare (Pihlainen et al., 2016) and add on nurse professionals' management skills. In addition, programs could also highlight the importance for nurse leaders to comprehend how their practiced leadership is perceived by nurses on the floor, which contributes to a decreased dissonance between leaders and followers, as well as the importance of facilitating learnings throughout the whole process. Acquiring knowledge can thus mitigate the potential negative outcomes of a future crisis.

7.3 Limitations with the Study

Certain limitations with the study should be addressed. Firstly, the interpretivist and constructivist approach of the study implies that the author's perceptions and beliefs may shape the research and an interviewer bias may taint the presentation of empirics. Secondly, the selected respondents' original profession might have affected the results, as not all of them were ordinary ICU nurses, as displayed in appendix 3. Thirdly, this study only examined leadership at one stage, whereas the hierarchical structure of a hospital consists of several stages of leadership, thus indicating that important leadership actions remained unexamined. Lastly, job satisfaction as a concept is multifaceted, complex and humans could be limited to apprehend or influence everything in its spectrum.

7.4 Suggestions for Further Research

Further research should focus on a wider category of nurses, to counteract respondent biases from the relatively small presented sample, which would make the representation of the general healthcare profession more adequate. They could also be conducted at several geographical locations in order to enhance variance and disclose additional factors, making it more nuanced. Furthermore, further research could investigate multiple leadership levels and crisis situations to identify if other hierarchical levels or types of crisis could impact job satisfaction with other means or in other ways. Lastly, it would be interesting if future research could compare various hospitals in Sweden, and explore job satisfaction in relation to leadership styles, thus clarifying how different organizations, cultures or other contextual factors might affect leaders' ability to facilitate job satisfaction among nurses.

7.5 Conclusion

The recent prolonged crisis of the COVID-19 pandemic has resulted in one of the greatest psychological impacts on nurses ever experienced during a pandemic or natural disaster. To improve the well-being of staff in crisis, organizational leadership has been considered especially important. Hence, in preparing for a potential future crisis similar to the pandemic, this study wanted to investigate the leadership requirements necessary to support nurses' job satisfaction, which in turn

could influence the quality of patient care and safety. Applying theories on leadership together with a crisis life cycle model, the prolonged pandemic has been viewed as a crisis consisting of different phases, each of which has been linked to distinct leadership requirements and styles to support the job satisfaction of ICU nurses. The study found that nurses especially desired transformational and transactional leadership styles in their nurse leaders throughout the phases of the crisis. Through this study, the authors hope to contribute with important insights into how nurse leaders and other health care professionals can support the job satisfaction of their staff members in future crises that demand distinct leadership requirements depending on the life cycle phase of the crisis. The study encourages future studies to apply a similar interest of study to different crisis and organizational contexts.

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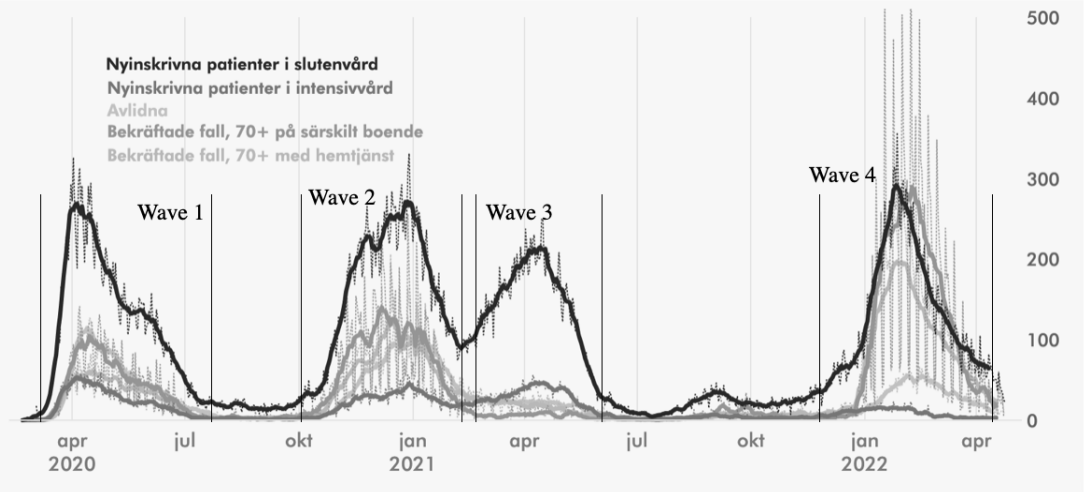
APPENDICES

Appendix 1. An illustration of the pandemic waves (Socialstyrelse, 2022)



Appendix 2. Crisis Model connected to the COVID-19 pandemic waves, shown to the respondents during the interviewees

MODELL KOPPLAT TILL COVID19

Faserna kopplade till Covid19-pandemin

Signaling Detection **Januari 2020**	**Preparation/ Prevention** **Januari - mars 2020**	**Containment/ Damage Limitation** **Mars 2020 - Januari 2022**	**Recovery** **Februari 2022**	**Learnings** **2022 - nu**
Pandemin upptäcks och information sprids till allmänheten.	Sjukdomen klassas som en hälsofara och man förstår både allvar och världsomspänning av sjukdomen.	Sverige upplever och genomlider fyra smittvågor av Covid19	Vi börjar sakta återhämta oss från Pandemin. Vi närmar oss gruppimmunitet och tar bort restriktioner.	Vi börjar lära oss från pandemin och våra upplevelser.

Appendix 3. Detailed table of respondent characteristics and interview facts

INTERVIEW NO.	GENDER	HOSPITAL	WORK EXPERIENCE	JOB PRESENCE DURING COVID-19[2]	DURATION	CONDUCT
1	Male	KS Huddinge	Ordinary	Pre-wave - now	60 min	Digitally
2	Female	Södersjukhuset	Ordinary	Pre-wave - now	59 min	Digitally
3	Male	KS Huddinge	Understudy	Wave 1, 2, 3	67 min	Digitally
4	Female	KS Solna	Understudy	Wave 1, 2, 3	66 min	Digitally
5	Female	Södersjukhuset	Ordinary	Pre-wave - now	61 min	Digitally
6	Female	KS Huddinge	Ordinary	Pre-wave - now	65 min	Digitally
7	Female	Södersjukhuset, KS Huddinge	Student	Wave 2,3,4	55 min	Digitally
8	Female	St. Capio, KS Huddinge	Understudy	Wave 1, 3	75 min	Physically
9	Female	Södersjukhuset	Ordinary	Pre-wave - now	71 min	Digitally
10	Female	Södersjukhuset	Newly graduated	Wave 1, 2, 3, 4 - now	65 min	Digitally
11	Male	KS Huddinge	Ordinary	Pre-wave - now	61 min	Digitally
12	Female	KS Huddinge	Ordinary	Pre-wave - now	60 min	Digitally
13	Female	Södersjukhuset	Advanced	Pre-wave - now	58 min	Physically

Minimum duration: 55 min
Maximum duration: 75 min
Mean duration: 63 min

[2] (Socialstyrelsen 2022)
Pre-wave: January-March 2020
Wave 1: March-June 2020
Wave 2: October (2020)-January (2021)
Wave 3: February-June 2021
Wave 4: November (2021)-April 2022)