

THE RELATIONSHIP BETWEEN LEADER-MEMBER EXCHANGE,
PERCEIVED ORGANIZATIONAL SUPPORT, AND TURNOVER
INTENTION: A STUDY OF THE PORTUGUESE NAVY

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**Abstract** 

The purpose of the present study is to investigate the level of turnover intention in the

employees (both military and civilian staff), of the Portuguese Navy in times of austerity

measures such as salary reductions or loss of the holiday allowances which were imposed by

Portuguese Government, the International Monetary Fund, European Commission, and the

European Central Bank. Furthermore, we also wanted to test the relationship among turnover

intention, leader-member exchange, and perceived organizational support. Data was

collected through an online self-report questionnaire (N=122), targeting groups of employees

in the Portuguese Navy such as in the different naval bases.

The findings indicate that there is a relevant high level of turnover intention in the employees

working for the Portuguese Navy. The results also confirm that leader-member exchange

mediates the relationship between perceived organizational support and turnover intention.

Lastly, management implications of the findings, limitations, and suggestions for future

research are also discussed.

Keywords: Turnover intention, leader-member exchange, perceived organizational support,

Portuguese Navy

JEL Classification: J53; O15; M10

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Resumo

O objetivo do presente estudo é investigar o nível de intenção de turnover nos colaboradores

(ambos militares e civis) da Marinha Portuguesa em tempos de austeridades como redução

salarial, corte nos subsídios de férias que foram impostos pelo Governo Português, Fundo

Monetário Internacional, Comissão Europeia e Banco Central Europeu. Além disso,

queríamos testar a relação entre intenção de turnover, leader-member exchange e suporte

organizacional percebido. Os dados foram recolhidos através de um questionário online

(N=122). O público alvo do mesmo são os colaboradores que trabalham na Marinha

Portuguesa, por exemplo nas bases navais.

Os resultados evidenciam uma alta intenção de turnover nos colaboradores da Marinha

Portuguesa. Os mesmos também confirmam que leader-member exchange medeia a relação

entre suporte organizacional percebido e a intenção de turnover. Finalmente, as implicações

de gestão, limitações e sugestões para futuras investigações são discutidas também.

Palavras-chave: Intenção de turnover, Leader-Member Exchange, Suporte Organizacional

Percebido, Marinha Portuguesa

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#### Introduction

# **Background**

In the current business environment, the human resources management assumes an unprecedented and crucial role in the organizational success. In order to be successful, organizations must be able to reinvent themselves, so they can adapt and thrive in an extremely competitive and dynamic business environment. Many academics and businessman have been writing and arguing that, we should do away with Human Resources Department (HRD). But the truth is, human resources plays a vital role in the everyday life of an organization. One of the main roles the HRD takes within an organization is to represent the concerns and issues conveyed by the employees (Ulrich,1998).

Like private organizations, military institutions are now dependent on the labor market, which is very competitive. Since the end of the mandatory military service in Portugal, in the 90's, military institutions are now required to fulfill their labor needs in the job labor market. Also, with the entrance in 2009 of the International Monetary Fund, European Commission, and the European Central Bank, which dictated draconic austerity measures, such as lowering wages, longer working shifts, and the temporary loss of the holiday allowance, to all public servants, including military personnel, military institutions are now having problems with retaining its employees.

This study is focused on the Portuguese Navy, aiming to understand the organizational factors influencing the retention challenges in this public organization. With more than 700 years, the navy was created as independent branch, of the Portuguese armed forces. Its mission is to cooperate in the military defense of the Portuguese Republic: fighting piracy, controlling the proliferation of weapons of mass destruction, or participating in the rescue of national citizens overseas. It also cooperates regularly in international missions, mandated

the North Atlantic Treaty Organization<sup>1</sup> (NATO) or with the United Nations<sup>2</sup> (UN) for instance.

In recent years, the militaries and civilians in the Portuguese Navy have been losing some benefits that have diminished the perceived organizational support (POS), for example the government has increased the time of permanence in each rank, delaying the promotion time, and it has applied temporary cuts in pensions to all employees including militaries and civilians. Furthermore, it is now more difficult to retire, the condition now suggest that one needs to work for 36 years and being 55 years old, when previously only one of the requirements was mandatory (LUSA, 2016; Freire, 2018).

In this context, a strong leadership could factor the employee turnover prevention. It has been argued that a powerful and supportive leadership, such as the leader-member exchange (LMX), can diminish the turnover intention (TI) and increase the POS (NATO, 2007).

In order for employees to perform beyond an average level, POS has been referred as a critical factor. This concept was formulated by Eisenberger *et al* (1986) which argued that the perception of an employee to which the organization worries about their needs and wellbeing is called POS. According to Settoon (1996), there are four basic forms of perceived beneficial treatment an organization should have to its employees to rise POS: fairness, organizational rewards, job conditions, and supervisor support.

Turnover intention usually refers to a deliberate and willfulness to leave the organization. The kind of turnover we intend to study is voluntary turnover. It is considered voluntary turnover when the decision to quit the organization, resides only in the employee, meaning it excludes opposite scenarios, for instance when the leaving of an employee is triggered by the company (Tett, *et al*, 1993). Since civilian organizations have been facing this problem for a very long time, the concept of turnover has been vastly studied by the academy.

<sup>&</sup>lt;sup>1</sup> NATO – It is a military alliance that was created on November 4<sup>th</sup> of 1949 by 12 countries, including Portugal. Its members agreed to a mutual defense in response to an attack performed by any external entity to the organization. Nowadays, it counts 29 member-States (NATO; <a href="https://www.nato.int">www.nato.int</a>).

 $<sup>^2</sup>$  UN – The UN was founded right after the end of the WWII, on October 24<sup>th</sup> of 1945. It is an intergovernmental organization set up to promote international cooperation and order. It started with 51 member-States, but it currently has 193 member-States.

Throughout time, leadership and its different styles have been broadly studied. The relevance and the benefits of high-quality exchange relationship, between workers and subordinates, have been empirically studied (Gerstner, *et al*, 1997). These kinds of relationships are characterized by honesty, loyalty, and trust (Graen, *et al*, 1987). LMX was based on the social exchange theory from sociologist Peter Blau (1964). It has been studied that LMX has a variety of positive effects on organizational outcomes, therefore organizations should try to implement it. This could mean trust and respect (Graen and Uhl-Bien, 1995), higher level of job satisfaction, desirable work-outcome, and decrease in turnover intention (Kim, *et al*, 2014).

# **Research Question**

The purpose of this study is to better understand the reasons why civilian and military employees of the Portuguese Navy have chosen to abandon their work in this institution. In doing so, we expect not only to identify ways to improve the welfare of its employees, the quality of leader-member exchange, to boost the perceived organizational support, but most importantly to support in lowering the high turnover rate in the Portuguese Navy, which has major costs to the institution. Thus, this study will attempt to answer the following questions:

- 1) What is the level of leader-member exchange, perceived organizational support and turnover intention in the employees of the Portuguese Navy?
- 2) What is the relationship between the three variables: LMX, POS, and TI?
- 3) Could leader-member exchange mediate the relationship between perceived organizational support and turnover intention?

# **Structure**

Following this chapter, I will first review the previous literature regarding, perceived organizational support, turnover intention, and leader-member exchange, in order to develop the theoretical framework of the present study. In the following chapter, I will describe the methodology followed throughout the research. In more details, I will explain sampling, procedure, and the analysis strategy. The last chapter will focus on the results of the research. I will discuss implications, some limitations found during the study, and a few suggestions for future researches.

#### **Literature Review**

This chapter reviews the theoretical framework of concepts which are relevant for this thesis. I will discuss the antecedents and development of the perceived organizational support, leader-member exchange, and turnover intention.

# **Perceived Organizational Support**

Perceived Organizational Support (POS) is a concept that has been defined as the "employee's general belief that their work organization values their contribution and cares about their well-being" (Rhoades et al, 2002; 698; Shore et al, 1995). This concepted was first used by Eisenberg et al (1986) which argued that: "high levels of POS will create feelings of obligation, whereby employees not only feel that they ought to be committed to their employers, but also feel an obligation to return the employer's commitment by engaging in behaviors that support organizational goals." (Wayne et al, 1997; 83). POS tends to improve work attitudes and effectiveness in workers for two main reasons. The positive effects are the outcome of the social exchange process. People analyze discretionary actions and if they believe they are being supported by the organization, they tend to have a more favorable and productive attitude. Furthermore, POS has also a positive relation between evaluative, objective measures of performance, and task performance (Jin et al, 2014). In addition, POS will also help employees to handle with the negative and undesirable experiences inside the organization. In general, the supervisor, the organizational policies, the norms and culture of the organization will dictate the amount of POS given by the organization to its employees (Aselage *et al*, 2003).

The organizational treatment can either take one of two forms:

• Favorable treatment, which is usually well perceived by the employees if it is given freely rather than imposed by an outside third party, such as governmental policies and regulations. For example, some organization's treatment that could have a positive clout in its employees are: opportunity to participate and to propose opinions

in organizational decision-making (Casens *et al*, 2016), ethical working climate, an open communication environment and open team meetings, or the opportunity to participate in training and development programs (Allen *et al*, 2003);

or

• Unfavorable treatment, which leads to undesirable results from the employees, for example by not being committed and engaged in the goals of the company in the end (Aselage *et al*, 2003).

It is important to mention that these organizational factors could have a different POS impact from organization to organization. For instance, a study led by Eisenberg *et al* (1986), involving more than 300 employees from different kinds of fields found out that the levels of POS would change from an organization to another. The reason pointed out by the authors was that each organization has its own kind of leadership, and that different leadership behaviors would result in different levels of influence on POS.

Levinson (1965) also claimed that based on a process of "personification", employees are inclined to attribute traits and qualities to the organizations they work for and, additionally developing their perceived organizational support. In order to boost POS, an employee has to see the actions of the organization regarding to him or her as reflecting positive evaluations. So, from numerous human resources practices and choices, we predict that the history of an employee's rewards will enhance the POS of employees (Wayne *et al*, 1997).

The expectations regarding the decisions of human resources has brought questions as to what extend it leads employees to think and interpret these decisions as indicative of POS. According to Sheridan (1992), there are some positive gestures from the human resources policies, that might lead to the enhancement of POS, which include early and different job assignments, promotions, and other organizational experiences. These decisions suggest that the organization believes in the full potential of its employees (Wayne *et al*, 1997).

Shore *et al* (1995), argued that there are two distinct types of human resources decisions that could raise the levels of POS, which are: discretionary practices and organizational recognition. Discretionary practices are related and imply some initial investment from the

organization in an employee, such as formal/informal training and development. Second, organizational recognition of employee's commitment could be seen as a positive indicator for themselves by the organization. "Employees seek a balance in their exchange relationship with organizations by having attitudes and behaviors commensurate with the degree of employer commitment to them as individuals." (Wayne et al, 1997, 83). In this category, a paradigmatic example is a salary increase. There are some benefits which are not associated with the performance of the workers such as retirement benefits. These types of advantages would not be associated with POS (Wayne et al, 1997). There are studies that prove being valued and respected by the company will improve the trust and commitment of employees towards the organization, leading to more desired attitude and behaviors from them (Rhoades et al, 2002).

Overall, based on the review of literature, it can be argued that a strong POS leads to positive behavior from the employees. Furthermore, enhancing their beliefs and trust in the organization will also generate feelings of responsibility. POS has become a crucial and vital factor for the success of a company.

### **Turnover Intention**

The extra pressure that turnover puts in the budget of a company plus the high costs and time consuming in the human resources departments: such as advertising the vacancy, recruiting new employees, interviews with the new candidates, some initial training with supervision, and adjusting the newcomer to the news tasks and duties, makes turnover a widely studied subject. Moreover, is a matter that organizations must pay attention too (Vnouckova *et al*, 2013).

Employee turnover is described by Price (1977) as "the ratio of the number of organizational members who have left during the period being considered divided by the average number of people in that organization during the period." (Prince quoted in Ongori, 2007: 49).

There are two types of turnover: involuntarily and voluntarily turnover. The first is seen as under control by the leaders of the organizations, such as firing someone for misbehaving

and breaking the rules of the company or not having achieved the goals previously agreed, therefore the patronage purposes to end the contract earlier than expected (Yang, 2016). On the other hand, voluntary turnover is considered to be a decision to leave the organization after he or she has explored all the reasons to abandon it, which it can harm seriously the company (Ongori, 2007).

Every time, a worker decides to leave the company, the social environment inside of it could be negatively affected as well. The relationship between teams and supervisors could be disrupted. The company also loses knowledge, know-how, valuable skills, and competences every time an employee chooses to leave the company. It can be of great advantage for the organization's rival the skills imported as a consequence on employee turnover. Furthermore, it also sends a poor image to the external stakeholders, such as clients or suppliers and inclusively, in fact, when an employee leaves the company their productivity can also be affected negatively (Satyawadi *et al*,2013).

Organizations have recognized the high costs that voluntary turnover provokes, therefore they have been studying ways to reduce employee turnover. They also understand that a stable workforce is vital for the company to be successful nowadays (Satyawadi *et al*, 2013). Therefore, academics that have studied the turnover have come up with several theoretical models to better understand the phenomenon of turnover among organizations. The three model this literature review covers are as followed: Intermediary Chain Model, Psychological Reason Model, and the model of Price-Mueller (Mobley, 1979, Steers *et al* 1981, Price, 2001).

The first model, Intermediary Chain Model, was first introduced by Mobley in 1979. Mobley believed that turnover intention is the most influential aspect that leads to turnover action. This model involves subordinate's dynamic psychological, cognitive process, disappointment about work, and turnover itself. If one is not pleased with his or her job, the employee is most likely to miss or being absent from work and later take in account turnover. Nevertheless, before the resignation and finding a new job position, he or she has to take in consideration the predictable benefits and the cost of turnover (Mobley, 1979). Later, Mobley builds up a more completed version of his model. This later model stresses the importance

of four facts, when one decides to leave an organization, which are: "job satisfaction, expected return of new job, expected return of original job, non-work values and occasional factors." (Mobley, 1979).

In 1981, Steers and Mowday came up with a second model to analyze turnover called Psychological Reason Model, which also depends on the roots of Price and Mobley models (Yang, 2016). This model includes the relationship between different variables of employee resignation and focal antecedents. The variables of employee's attitude analyzed in this model are job satisfaction, organizational commitment, and finally engagement (Steers *et al*, 1981). According to Steers and Mowday (1981), there are some aspects and factors influencing the employee's expectation and attitude, such as job opportunities and vacancies available in the job market, organizational and individual characteristics, and work effectiveness. Both authors take also in consideration non-working factors, such as workfamily balance. Lastly, the idea of resignation leads to a detachment behavior from the organization (Steers *et al*, 1981).

The third model developed by Price-Mueller (2000) is made of a number of expectations. In this model, there are four main variables influencing turnover, which consist of:

- Environmental variables, meaning exterior environment circumstances;
- Structured variables for example, predictable working situation, or pressure at work;
- Individual variables, that consist of pessimistic or optimistic emotions, training, employee's skills, or influence in the decision making-process;
- Intermediate variables, such as organizational commitment or turnover intention (Price, 2001).

All the three models of turnover described above are focused on a civilian/organization context. Literature regarding a model of military turnover is very limited. One of the first attempts to come up with a model for military turnover were performed by Knapp, McCloy, and DiFazio (1993). Nevertheless, this model was very basic because it only explores the linkage between actual turnover, intension of turnover, job performance, and job satisfaction (Knapp *et al*, 1993).

In order to fill the gap in the literature, NATO came up with a more sophisticated model to better understand turnover. The model starts by differentiating three kinds of categories for variables (NATO, 2007). The first variable is distal factors, where we include job and organizational characteristics, compensation, workload, and career alternatives (Fonseca, 2010). The second variable is embedded with mediating factors. The author included aspects such as, the capacity of someone to fit in the environment of the organization or the aptitude for the job, which refers to enjoying the military lifestyle and affection for the military values (NATO, 2007). We can also find incorporated in this variable, work attitudes, job commitment and satisfaction (well-being). The next variable regards to proximal factors. This variable englobes the turnover intention, the performance of the macro-economy, the unemployment rate, and unexpected events, which also have a major impact, for instances a recent job offer or family constraints (NATO, 2007).

Previous studies have indicated that POS could bring some benefits when it comes to turnover intention, tardiness, and absenteeism (Wayne *et al*, 1997). When employees perceive they are getting more support from their supervisors and from the organization, it is expected to face with lower levels of turnover intention and actual turnover. Employees feel more committed to help those who have helped them, therefore leading to a lower turnover and seeking alternative employment opportunities. (Allen *et al*, 2003).

In the study developed by Rhoades *et al* (2002) found that POS had a negative correlation with turnover intention and desire to leave the institution. The average weighted correlation was -.45, meaning the POS had a 45% negative effect in the turnover intention.

Another study developed by Ertürk (2014) in public servants from Turkish public organizations also found that POS had a negative impact in the turnover intention. 197 questionnaires constituted the sample for the study. Among the respondents 82% were between 25 and 40 years old and the majority (80%) were male. 68% of the respondents were married and 73,6% had been working for the same company for more than 2 years. Finally, more than 80% of them possessed a bachelor's degree. In the end, Ertürk found out that POS was negatively related with turnover intention by a  $\beta$ = -.37.

Based on the articles analyzed, we can now formulate the first hypothesis of the thesis:

*Hypothesis 1: Perceived organizational support is negatively related with turnover intention.* 

# **Leader-Member Exchange**

Throughout history, there has been the attempt to formulate principles, some guidelines and diverse theories about leadership. It is a subject that has been changing throughout time. In leadership, the attitude and behavior of leaders to its subordinates have been analyzed (Bass, 1981).

Academics who have been studying leadership all have concluded and agreed that supervision plays a major role in the attitudes of the employees of an organization (Morrow *et al*, 2015). There have been many empirical studies that show the importance of a dyadic relationship between supervisor and subordinate and the positive results for the organizations. The Leader-Member Exchange (LMX) is one of the most complete theories of leadership and it incorporates all the leadership domains, ranging from leader, subordinate, and the interaction between leader and subordinate. (Dansereau *et al*, 1975).

LMX calls for a high-quality relationship among employees and supervisor, which is the most substantial interaction a subordinate could have within an organization (Manzoni *et al*, 2002). According to this theory, leaders and supervisors have different relationships with their subordinates, leading to a unique and personalized relationship between leader and subordinate (Harris *et al*, 2007).

LMX gives the idea that social and work interaction should happen among leaders and subordinates, and out of these exchanges, the supervisors and subordinates can create relationships of quality. For employees who succeed better, in managing a better relationship with supervisor, can earn more easily some extra promotions, for example better roles, increased communication, and higher levels of emotional support (Harris *et al*, 2007). Usually, leaders have a tendency to develop and establish relationships with the subordinates that have a background and characteristics in common like, hobbies, values, or professionalism, and interest in the job (Daft, 2008).

LMX theory first emerged from the previous Vertical Dyad Linkage (VDL) approach. This approach has its roots on the degree of latitude that supervisors have with their subordinates, when it comes to negotiate work roles, which are different with every subordinate. To sum up, VDL called for an individualized relationship from leaders to subordinates (Uhl-Bien *et al*, 1995).

The development of the VDL approach to the LMX theory has four stages. The first stage is the discovery of differentiated dyads between leader and follower. The second stage is focused on the attributes of LMX relationships and the impact that it has to the organization (Uhl-Bien *et al*, 1995). The third stage is the description of dyadic partnership building. At this stage, we should pay more attention to a more effective leadership relation, called leadership making approach. This new developed approach calls for managers to work with each employee on a one-on-one basis, in order to create a partnership. The fourth stage is the expansion of dyadic partnership to group and network levels (Uhl-Bien *et al*, 1995).

In the final stage, LMX should be seen as systems of interdependent dyadic relationships or network assemblies, which are the leadership structure inside an organization. At this point, it implements a system-level perspective and purposes to create a larger system of network assemblies, by questioning the different dyadic relationships inside an organization (Uhl-Bien *et al*, 1995).

In the literature, it is possible to identify two different theoretical conceptualizations regarding the LMX theory: the VDL approach and the social exchange theory. What was once VDL, is now commonly referred as the LMX theory. The VDL approach, as explained above, was based on the degree of latitude that supervisors settled with their subordinates in negotiating work roles (Uhl-Bien *et al*, 1995). According to VDL, in order for subordinates to negotiate a work role they would like to perform, subordinates must first show and demonstrate their leaders the competences they possess, through role-making episodes proposed by leaders, to successfully play the work role (Bernerth *et al*, 2007). Meanwhile the social exchange theory does not impose any restrictions or boundaries like the VDL approach. This means subordinates do not have to show they possess the correct aptitudes or trustworthiness before engaging in exchanges with leaders. The social exchange theory only

requires that one behaves and acts in a way that will benefit others. In the light of the social exchange theory, the competences and trustworthiness are seen only as part of the exchange cycle. The second difference between the VDL approach and the social member exchange, pointed by Blau are the unspecified returns. He assumes that: "social exchanges are based on... a general expectation of some return, its exact nature is definitely not stipulated in advance" (Blau, 1964; 93). We can assume that the social exchange is a more behaviorally oriented theory, which means is more observable and concrete than just feelings (Bernerth et al, 2007).

In previous studies led in public Turkish organizations found out that overall employees answered to care, support, and social exchanges of their supervisors by "showing loyalty, deference, and compliance to him or her as well as a higher degree of commitment to their organizations" (Ertürk, 2014; 150). In the same study, Ertürk found a negative relationship between LMX and turnover intention with a  $\beta$ = -0.28.

There have been many empirical studies demonstrating the strong correlation between LMX and the organizational results. For example, an empirical study led by Day and Gerstner (1997) found a very strong correlation between the LMX theory and satisfaction with supervision 88%, overall satisfaction 81%, organizational commitment 87%, among other.

LMX theory is also very applicable in the military context, since the militaries work closely and in small teams. In this military context, leaders and subordinates do not only engage in a professional lifestyle, they must live and dwell with each other, meaning they share a daily routine. We are talking about small activities, such as eating, do laundry, spend time together, and doing physical exercise (Morris, 2013).

Regarding the military context, there have been some studies, where the LMX theory was used. A study performed by Son (2015) among the Korean military, in a sample of 198 participants, also found a positive correlation between the LMX leadership and affective commitment to the organization with a  $\beta$ = .52.

As mentioned previously, the LMX theory explores the quality of the dyadic relationship between supervisors and employees, suggesting that they both develop unique relationships, those with high quality might originate in a career growth.

Recently, in a study developed by Gheesling (2010), it suggested the benefits of schooling LMX at all levels in the US Air-Force. An LMX leadership could develop more robust supervisors, a better mentoring culture, a stronger leader-subordinate relationship, and a higher level of proactiveness by subordinates, leading possibly to a smaller intension of turnover.

Saeed, Waseem, and Sikander (2014) conducted an empirical study with a sample of 200 participants. In this study, the participants were both female and male, from a wide range of ages, below 20 and above 40, different incomes, and from both public and private sector. They tested different independent variables, such as job satisfaction, job performance, LMX, emotional intelligence, and organizational commitment in relation to the intention of turnover. The results show us that LMX had a negative relationship with the turnover intention, by  $\beta$ = -.206. Regarding the other variables, job satisfaction and job performance had also a negative impact in the intention of turnover. Only emotional intelligence and organizational commitment were not supported in the end (Saeed *et al*, 2014).

Despite many studies, many employers believe that the only important factor to keep the employees satisfied is compensation, leaving behind other important aspect, such as the relationship of quality between supervisor and subordinate (Epstein, 1999). Based on the articles analyzed, we could formulate the following hypothesis:

*Hypothesis 2: Leader-member exchange is negatively related with turnover intention.* 

Wayne *et al* (2002) argued that even though POS and LMX are two distinct concepts, they are reciprocally related. Eisenberger found out that LMX is a good predictor of POS since discretionary rewards related with job performance, are likely to affect POS. Leaders are usually the ones responsible for deciding who gets such reward and that empirical studies have demonstrated that POS is linked with leader support (Tetrick *et al*, 1994). LMX may back POS. A study developed by Sheridan *et al*, (1992), suggested: "*employees with certain types of early career expectations are more likely than others to be sponsored by senior* 

manager and in return receive more likely than others promotions, transfers, and larger raises." (Sheridan et al quoted in Wayne et at, 1997; 89).

Nevertheless, it can also be said that POS contributes to LMX. Since employees who feel supported by their organization are more likely to develop high-quality exchange relationships with their supervisors. A study led by Eden *et al*, based on the Pygmalion effect found that: "leader's expectations contribute to differential treatment of employees. Leaders' more positive expectations of successful employees...would lead to higher levels of LMX" (Eden *et al quoted in* Wayne *et al*, 1997; 89).

In a study developed by Asgari *et al* (2008), with a sample of 162 participants who worked in the public service department in Malaysia, found out that there was a positive correlation between LMX and POS.

A more recent study led by AlHashmi *et al* (2019) among the police personnel of the United Arab Emirates (UAE) also found a positive relationship between POS and LMX. In this research, there were 800 participants in which >52% were male and >47% were female. Regarding age, the biggest group that answered the questionnaire were within the age of 30-39 years old (>35%). In addition, >47% of the participants reported to have children and were married.

Based on the literature review, we can now predict the following hypothesis:

Hypothesis 3: Perceived organizational support is positively related with leader-member exchange.

# Mediation Effect of Leader-Member Exchange on Perceived Organizational Support and Turnover Intention

There are many reasons why LMX could have an impact on the relationship between POS and turnover intention. Leaders play a vital role understanding the experiences of his/her employees live in the organization. Erdogan *et al* (2007) affirmed that a leader in high-quality relationship with his subordinates could provide to his employee's tangible benefits, such as resources, and intangible benefits like favors. Meanwhile, employees in a high-quality relationship with leaders are more likely to feel a sense of belonging and commitment to the organization, for example they have more opportunities for career advancement. On the other hand, employees who engage in a low-quality relationship do not feel so attached to the organization, leading to a possible turnover. In a study developed by Jayasundera *et al* (2016) found that LMX has a moderation effect on POS and TI relationship with a coefficient of  $\beta$  = .320.

It can be said that even though an employee feels that he does not get enough support from the organization, if the employee has a strong high-quality relationship with the leader, this relationship might diminish the intention to leave the organization. The supervisors have the capacity to influence the experiences of an employee inside the organization (Jayasundera *et al*, 2016) so the next hypothesis will be the following:

Hypothesis 4: Leader-member exchange will mediate the relationship between perceived organizational support and the turnover intention.

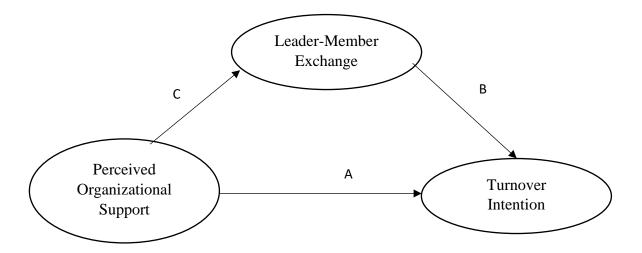


Figure 1: Proposed Mediation Model

Figure 1. Graphical representation of the three pathways. (A) Direct effect of POS on TI (Hypothesis 1). (B) Direct effect of LMX on TI (Hypothesis 2). (C) Direct effect of POS on LMX (Hypothesis 3). LMX mediates the POS and TI relationship (Hypothesis 4).

#### **Research Method**

# **Sampling and Procedure**

In this study, our universe was all the staff/employees, including civilians, of the Portuguese Navy. Right now, this institution has 8,898 employees that are working across multiple fields such as crew ships, headquarters, military hospital, and the Defense Ministry.

The online questionnaire was developed by using *Google Docs Survey*, so the link for the questionnaire could be shared with our participants via email, social media, or the navy's public affairs office.

In order to reach our audience, an official email was sent to the navy's public affairs office that kindly distributed the questionnaire internally. However, that was not enough to get a fair number of answers, therefore we have also published the questionnaire in Facebook groups such as the "Armada no Coração" or "Marinha para sempre" where we can find many navy employees. LinkedIn was also found to be a useful platform to distribute the questionnaire to the employees. By using social media platforms, we could reach a bigger sample of our target audience, the waiting period for responses decreased, the number of responses increased, and there were no costs associated with it.

Unfortunately, some of the answers had to be excluded since not all items had been properly answered by the participants, such as not filling all the demographic variables. In the end, we got 122 valid answers for the research project.

#### Measures

Throughout the questionnaire, with closed questions, participants had the chance to answer to scales measuring leader-member exchange, turnover intention, perceived organizational support, and demographic characteristics. For further details, please find attached the questionnaire in English. However, the one used with the participants was written in Portuguese.

#### Leader Member Exchange

Leader member exchange was measured by using the LMX 7 scale items developed by Graen *et al* (1995). The respondents were asked items that included: "Do you know where you stand with your leader...do you usually know how satisfied your leader is with what you do?", "How well does your leader understand your job problems and needs?", "How well does your leader recognize your potential?", "Regardless of the amount of formal authority your leader has, what are the chances that he/she would "bail you out", at his/her expense?". Each item is scored from 1 to 5 points Likert scale. Higher points would represent a high-quality exchange relationship.

#### **Turnover Intention**

The turnover intention scale was developed by Rosin *et al* (1991) This scale contains 4 items. Respondents had to score, from 1 (strongly agree) to 5 (strongly disagree), statements such as: "At this time in my career, I want to quit this job if it were possible" or "I am actually planning to leave my job within the next six months".

#### **Perceived Organizational Support**

The perceived organizational support scale was developed by Eisenberger *et al* (1986). This scale has 36 items, however, for this study, I have only used the first 9 items. Respondents had to score, from 1 (strongly agree) to 5 (strongly disagree), statements such as: "The organization values my contribution to its well-being.", "If the organization could hire someone to replace me at a lower salary it would do so.", or "the organization fails to appreciate any extra effort from me".

# **Data Analysis**

Once we collected all the information from the questionnaires, we used the Statistical Package for the Social Sciences (SPSS) version 22, supporting us to perform all the necessary tests. First, we did a descriptive analysis based in gender, age, education, tenure in the organization, among other variables. Then, we analyzed the internal consistency of the variables by measuring the Cronbach´s alpha coefficient and the factorial analysis by using the varimax rotation.

Furthermore, we used the LSD (Least Significance Difference) test, in order the understand the differences of the key variables, for instances job position or organizational tenure. Finally, in order to test the hypothesis presented in the literature review, we used linear regressions.

#### **Results**

# **Participants**

The target audience of this research were the employees of the Portuguese Navy. The questionnaire included multiple questions concerning the demographic information such as gender, age, job position, education level, tenure at the navy, or marital status, etc., which can be found in Table 1. The big majority of the participants were male (67,8%), while the women represented only (32,2%). Regarding the age distribution, the participants who answered most were within the age of 30–40 years old (37,7%), followed by 18–29 years old (25,4%), and at the bottom were >50 years old (12,3%). The employees who had a bachelor's degree or above were (58,2%), followed by the ones who had 10°-12° grade (39,3%), and finally the ones who only had the 9° grade completed. The sample consisted predominantly of officers (42,6%), followed by sergeants (27%), other such as civilians (21,3%), and corporal (9%). The tenure is as follows: on the top were the participants who had between 7-20 years of navy (37,7%), followed by the staff within the range of 0–6 years (32%), and on the bottom those who had more than 20 years (30,3%).

Furthermore, we also asked the marital status of the participants and the results were: married (69,7%), singled (23,8%), and other (6,6%), which could include divorced or widowed. The participants were also asked if they lived with their children. These were the results: 0 children (45,9%), 1 child (24,6%), 2 children (27%), and more than 3 (2,5%). The last question was: "How many elders are you responsible for?", and the results were as follow: about (74,6%) of the participants were not responsible for any elders and on the bottom only (1,6%) of the participants were responsible for more than 3 elders.

Table 1. Demographic characteristics of participants

Measure	N=122*	%
Gender		
Male	82	67,2%
Female	39	32%
Age		
18-29 years old	31	25,4%
30-40 years old	46	37,7%
41-50 years old	29	23,8%
>50 years old	15	12,3%
Job Position		
Officer	52	42,6%
Sergeant	33	27%
Corporal	11	9%
Other (Civilians, etc.)	26	21,3%
Other (Crymans, etc.)		21,570
Education Level		
9° grade	2	1,6%
10° - 12° grade	48	39,3%
Bachelor's degree or above	71	58,6%
		<b>,</b>
Tenure at the navy		
0-6 years	39	32%
7-20 years	46	37,7%
>20 years	37	30,3%
Marital Status		
Single	29	23,8%
Married	85	69,7%
Other (e.g. divorced, widowed)	8	6,6%
Other (e.g. divorced, widowed)		0,070
How many of your children currently live with you?		
0	56	45,9%
1	30	24,6%
2	33	27%
>3	3	2,5%
How many elders are you responsible for?		<b>_</b> ,
0	91	74.6%
	18	14,8%
2	10	8,2%
>3	2	1,6%

<sup>\*</sup>Some of the variables only have 121 answers because the participant did not answer, however we still consider this participant because the key variables were properly filled in.

# **Factor Analysis**

#### **Leader-Member Exchange**

First, we ran an exploratory factor analysis with the 7 items for LMX. This initial analysis gives us a clear one-factor solution which is valid in both (KMO= ,894 and Bartlett's Test= 477,517, p<,001). These results show us that we have a meaningful scale. The Cronbach's alpha was ,900.

Table 2. Leader-Member Exchange – Total Variance Explained

**Total Variance Explained** 

		Initial Eigenvalu	es	Extraction	on Sums of Square	d Loadings
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4,433	63,325	63,325	4,433	63,325	63,325
2	,683	9,763	73,087			
3	,581	8,304	81,391			
4	,471	6,722	88,113			
5	,315	4,502	92,616			
6	,274	3,914	96,530			
7	,243	3,470	100,000			

Extraction Method: Principal Component Analysis.

#### **Turnover Intention**

When it comes to TI, we also ran a factor analysis with the 4 items for TI. This initial exploration analysis gives us a clear one-factor solution which is valid for (KMO=,768 and Bartlett's Test=325,504 p<,001). The Cronbach's alpha was ,898.

Table 3. Turnover Intention – Total Variance Explained

**Total Variance Explained** 

		Initial Eigenvalu	es	Extraction	on Sums of Square	ed Loadings
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,082	77,048	77,048	3,082	77,048	77,048
2	,468	11,705	88,753			
3	,301	7,530	96,282			
4	,149	3,718	100,000		_	

Extraction Method: Principal Component Analysis.

#### **Perceived Organizational Support**

In order to test our last variable POS, once again, we ran a factor analysis with all 9 items. However, the first results were not convincing, therefore we deleted the items with poorest results, including: POS\_2, POS\_3, POS\_6, and POS\_7. We ran the test again with more credible results (KMO=,685 and Bartlett's test= 212,774). The Cronbach's alpha was ,800.

Table 4. Perceived Organizational Support - Total Variance Explained

**Total Variance Explained** 

		Initial Eigenvalu	es	Extraction	on Sums of Square	ed Loadings
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,791	55,821	55,821	2,791	55,821	55,821
2	,878,	17,566	73,387			
3	,658	13,160	86,546			
4	,437	8,745	95,292			
5	,235	4,708	100,000			

Extraction Method: Principal Component Analysis.

**Table 5. Summary of the Factor Analysis of the Three Scales** 

Scale	Items	Cronbach	s Alpha
	Do you know where you stand with your leader do you usually know	w how	
	satisfied your leader is with what you do? (Does your member usually	know)	
	How well does your leader understand your job problems and needs	? (How	
	well do you understand)		
	How well does your leader recognize your potential? (How well	do you	
ag ag	recognize)		
Leader-Member Exchange	Regardless of how much formal authority he/she has built into	his/her	
Exc	position, what are the chances that your leader would use his/ her po	ower to	
nber	help you solve problems in your work? (What are the changes the	at you	
-Mer	would)		
ader-	Again, regardless of the amount of formal authority your leader has	s, what	
Lea	are the chances that he/ she would "bail you out," at his/her expense?	(What	
	are the chances that you would)		
	I have enough confidence in my leader that I would defend and just	ify his/	
	her decision if he/she were not present to do so? (Your member wou	ld)	
	How would you characterize your working relationship with your	leader?	,900
	(Your member)		
ır n	At this time in my career, I want to quit this job if it were possible.		
rnover	I am actually planning to leave my job within the next six months.		000
Turi	I am actively searching for another job right now.		,898
	I have had thoughts of leaving my job.		
	The organization values my contribution to its well-being.		
Perceived Organizational Support	The organization strongly considers my goals and values.		
Perceived rganization Support	The organization would understand a long absence due to my illness		
Per )rgar Su	Help is available from the organization when I have a problem.	•	
	The organization really cares about my well-being.		,800
	The organization really cares about my wen-being.		,000

# **Correlation Analysis between the Variables**

The following table shows the correlation between the variables used for this study research. The findings below are a primary support for the model presented in the literature review.

**Table 6. Correlations between the Variables** 

	Mean	Standard Deviation	Gender	Age	Position	Education	Organization Tenure	Marital Status	Number of kids	Number of elders	POS5	LMX7
Gender												
Age			-,293**									
Position			,108	-,251**								
Education			,126	,049	-,299**							
Organization Tenure			-,351**	,777**	-,444**	,014						
Marital Status			143	,388**	-,095	-,210*	,370**					
Number of kids			-,186*	,245**	-,387**	-,092	,401**	,298**				
Number of elders			-,062	,354**	-,050	-,299**	,366**	,126	,199*			
POS5	3,34	,708	,123	,081	-,102	,193*	,004	-,016	,076	,034		
LMX7	3,19	,757	,151	,290**	-,314**	,182*	,188*	,085	,200*	,095	,681**	
TI4	2,14	1,11	-,137	,105	,090	,029	,155	,000	-,200*	,077	-,362**	-,313**

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

POS = Perceived Organizational Support; LMX = Leader-member Exchange; TI = Turnover Intention

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

# **Analysis of Variance Test**

The tables below show the summary of the significant difference on the level of the studied variables by groups which includes age, position, education, organizational tenure, number of kids and elders. In order to test the analysis of variance, we used the LSD (Least Significance Difference) test.

Table 7. LSD results of Studied Variables by Age

Dependent Variable	(I) Age	(J) Age	Mean Difference (I-J)
LMX7	18-29 years old	41-50 years old >50 years old	-,650* (,188) -,542* (,229)
	30-40 years old	41-50 years old	-,352* (,173)
	41-50 years old	18-29 years old 30-40 years old	,650* (,188) ,352* (,173)
	>50 years old	18-29 years old	,542* (,229)
TI4	30-40 years old	>50 years old	-,690* (,325)
	41-50 years old	>50 years old	-,852* (,348)
	>50 years old	30-40 years old 41-50 years old	,690* (,325) ,852* (,348)

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

Mean values are reported with standard deviations in parentheses.

Table 7 shows the levels of significant difference between the different groups ages and the variables LMX7 and TI. As it can be seen, LMX was higher in the age group of 41-50 years old than in the age group 18-29 years old (M=,650 and SD=,188) and 30-40 years old (M=,352 and SD=,173). Also, we can see a significantly higher level of LMX in the age group >50 years old compared with the age group 18-29 years old (M=,542 and SD=,229).

When it comes to TI, it was higher within the age group >50 years old when compared with the age group of 30-40 years old (M=,690 and SD=,325) and 41-50 years old (M=,852 and SD=,348).

Table 8. LSD results of Studied Variables by Job Position

Dependent Variable	(I) Position	(J) Position	Mean Difference (I-J)
LMX7	Officer	Sergeant	,360* (,157)
		Corporal	,953* (,234)
		Other	,508* (,169)
	Sergeant	Officer	-,360* (,157)
		Corporal	,593* (,245)
	Corporal	Officer	-,953* (,234)
		Sergeant	-,593* (,245)
	Other	Officer	-,508* (,169)
POS5	Officer	Sergeant	,373* (,154)
		Corporal	,501* (,229)
	Sergeant	Officer	-,373* (,154)
	Corporal	Officer	-,501* (,229)

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

Mean values are reported with standard deviations in parentheses.

The table above shows that LMX was higher in officers when compared to sergeants (M=,360 and SD=,257), corporals (M=,953 SD=,234), and other (M=,508 and SD=,169). In addition, sergeants had a higher significant level, when compared with corporals (M=,593 and SD=,245). In addition, it can be observed that officers had a higher level on POS than sergeants (M=,373 and SD=,154) and corporals (M=,501 and SD=,229).

Table 9. LSD results of Studied Variables by Education Level

Dependent Variable	(I) Education Level	(J) Education Level	Mean Difference (I-J)
LMX7	10° grade - 12° grade	Undergraduate or above	-,324* (,140)
	Undergraduate or above	10° grade - 12° grade	,324* (,140)
ТІ4	9°grade	10° grade - 12° grade Undergraduate or above	2,3* (,774) 2,03* (,769)
	10° grade - 12° grade	9°grade	-2,33* (,774)
	Undergraduate or above	9°grade	-2,03* (,769)
POS5	10° grade - 12° grade	Undergraduate or above	-,299* (,130)
	Undergraduate or above	10° grade - 12° grade	,299* (,130)

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

Mean values are reported with standard deviations in parentheses.

When it comes to education level, LMX was at a significant lower level in  $10^{\circ}$  to  $12^{\circ}$  grade, if compared with undergraduate or above (M=-,324 and SD=,140). Regarding TI,  $9^{\circ}$  grade has a higher level than in  $10^{\circ}$  to  $12^{\circ}$  grade (M=2,3 and SD=,774) and undergraduate or above (M=2,03 and SD=,769).

Finally, POS was at a significant higher level within the group of undergraduate or above when compared with 10° to 12° grade (M=,299 and SD=,130).

Table 10. LSD results of Studied Variables by Organizational Tenure

Dependent Variable	(I) Org. Tenure	(J) Org. Tenure	Mean Difference (I-J)
LMX7	0-6 years	>20 years	-,359* (,172)
	>20 years	0-6 years	,359* (,172)
TI4	7-20 years	>20 years	-,535* (,242)
	>20 years	7-20 years	,535* (,242)

<sup>\*</sup> The mean difference is significant at the 0.05 level.

Mean values are reported with standard deviations in parentheses.

For the variable organizational tenure, LMX was at a lower level in 0-6 years when compared with >20 years (M= -,359 and SD=,172). Furthermore, >20 years group has a significant higher level on TI when compared with 7-20 years (M=,535 and SD=,242).

Table 11. LSD results of Studied Variables by Number of Kids

Dependent Variable	(I) # of Kids	(J) # of Kids	Mean Difference (I-J)
LMX7	0	2	-,389* (,164)
	2	0	,389* (,164)
TI4	0	2	,536* (,238)
	1	2	,714* (,274)
	2	0	-,536* (,238)
		1	-,714* (,274)

<sup>\*</sup> The mean difference is significant at the 0.05 level.

Mean values are reported with standard deviations in parentheses.

As it can be seen in the table above, LMX was at a higher level in the group who has 2 children than in the group with 0 kids (M=,389 and SD=,164). Additionally, TI was at a

significant higher level in the group with 0 kids, when compared with the group who has 2 kids (M=,714 and SD=,274). Furthermore, there is a higher level on TI for the group with 1 kid when compared with the group who has 2 kids (M=,714 and SD=,274).

Table 12. LSD results of Studied Variables by Number of Elders

Dependent Variable	(I) # of Elders	(J) # of Elders	Mean Difference (I-J)
TI4	0	>3	-1,77* (,778)
	2	>3	-2,17* (,843)
	>3	0	1,77* (,778)
		2	2,17* (,843)
POS5	0	>3	-1,15* (,501)
	1	>3	-1,17* (,522)
	2	>3	-1,38* (,542)
	>3	0	1,15* (,501)
		1	1,17* (,522)
		2	1,38* (,542)

<sup>\*</sup> The mean difference is significant at the 0.05 level.

Mean values are reported with standard deviations in parentheses.

The last variable analyzed was the number of elders that one is responsible for and, as it can be seen in the table 12, TI was significant higher when one has >3 elders, when compared with 0 (M=1,77 and SD=,778) and 2 elders (M=2,17 and SD=,843).

Finally, for the group of >3 elders responsible for, POS was higher when compared with 0 elders (M=1,15 and SD=,501). In addition, for 1 elder, POS was at a significant lower level than for >3 elders (M=-1,17 and SD=,522) and also for 2 elders, when compared with >3 (M=-1,38 and SD=,542).

# **Hypothesis Testing**

For hypothesis 1, a simple linear regression was conducted, in order, to understand the relationship between both variables: "Perceived organizational support is negatively related with turnover intention".

Table 13. Regression Analysis - Hypothesis1 - POS and TI

#### **Coefficients**<sup>a</sup>

				Standardized		
	i	Unstandardize	d Coefficients	Coefficients	•	
Mod	el	В	Std. Error	Beta	t	Sig.
1	(Constant)	4,050	,458		8,846	,000
	POS5	-,570	,134	-,362	-4,256	,000

a. Dependent Variable: TI4

As it can be seen, and expected, in Table 13, there is a negative relationship between perceived organizational support and turnover intention. The adjusted explained variance is 12,4% ( $\beta$ = -,362, p<,001). Thus, hypothesis 1 is fully supported by the results.

For hypothesis 2 "Leader-member exchange is negatively related with turnover intention", a simple linear regression was conducted to understand the relationship between both variables.

Table 14. Regression Analysis - Hypothesis2 – LMX and TI

### Coefficients<sup>a</sup>

				Standardized		
		Unstandardize	d Coefficients	Coefficients	1	
Mod	el	В	Std. Error	Beta	t	Sig.
1	(Constant)	3,614	,419		8,631	,000
	LMX7	-,460	,128	-,313	-3,608	,000

a. Dependent Variable: TI4

Table 14 shows that there is a negative relationship between leader-member exchange and turnover intention. The adjusted explained variance is 9,7% ( $\beta$ = -,313, p<,001). Thus, hypothesis 2 is fully supported by the results.

In order to test hypothesis 3 "Perceived organizational support is positively related with leader-member exchange", a simple linear regression was conducted to understand the relationship between both variables.

Table 15. Regression Analysis – Hypothesis 3 – POS and LMX

#### Coefficients<sup>a</sup>

		Unstandardize	d Coofficients	Standardized Coefficients		
Mode	el	B	Std. Error	Beta	t	Sig.
1	(Constant)	,757	,245		3,098	,002
	POS5	,728	,072	,681	10,185	,000

a. Dependent Variable: LMX7

The results displayed in table 15 are evident, that there is a positive relationship between perceived organizational support and leader-member exchange. The adjusted explained variance is 45.9% ( $\beta$ =,681, p<,001). Thus, hypothesis 3 is fully supported by the results.

In order to test hypothesis 4 "Leader-Member Exchange mediates the relationship between Perceived Organizational Support and Turnover Intention", TI was regressed on POS and LMX. The table below shows the results.

Table 16. Regression Analysis – Hypothesis 4 – LMX mediates POS and TI

#### Coefficients<sup>a</sup>

				Standardized		
		Unstandardize	d Coefficients	Coefficients		
Mod	lel	В	Std. Error	Beta	t	Sig.
1	(Constant)	4,188	,476		8,806	,000
	POS5	-,438	,183	-,278	-2,394	,018
	LMX7	-,182	,171	-,124	-1,064	,290

a. Dependent Variable: TI4

As indicated in table 16, the model which includes LMX, POS and TI had an explained variance of 12,5% of all the total variance in TI. Out of the two variables, POS makes the largest ( $\beta$ = -,278; p>,001) and LMX ( $\beta$ = -,124; p>,001). However, the influence of POS has slightly decreased from -,362 (p<,001) to -,278 (p<,05). In addition, we conducted the Sobeltest which also indicated that LMX was a significant mediator of the relationship between POS and TI (z=2,74; p<0,01). Overall, taking the results above, we can conclude that LMX mediates the relationship between POS and TI among the participants surveyed in this research. Therefore, we can say that our last hypothesis *Leader-Member Exchange mediates the relationship between Perceived Organizational Support and Turnover Intention*" is fully supported.

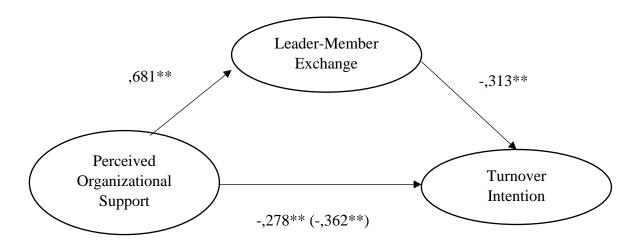


Figure 2. Perceived Organizational Support and Turnover Intention with

Leader-Member Exchange as a Mediator

*Note:* All numbers represent standardized beta coefficients (numbers in brackets are direct effects without including the mediator); \*\* p < .001

## **Discussion**

The main goal of this research was to study and understand the level of turnover intention, leader-member exchange, and perceived organizational support among employees both civilians and military of the Portuguese Navy in times of austerity measures which included lowering wages, reduction of holiday allowances, or longer working shifts, and a competitive labor market (LUSA, 2016; Freire, 2018). Furthermore, we also wanted to understand if leader-member exchange mediated the relationship between perceived organizational support and turnover intention. The results and findings could advance the discussion and theory building about the matters discussed in this thesis.

This study reveals that employees at the Portuguese Navy suffer from high turnover intention (M=2,14) when compared with the Canadian Forces military recruits (M=1,73 with a scale of 5) (Godlewski *et al* 2012). On the other hand, if we compare the employees from the Portuguese Navy with Turkish public servants the difference between both groups has diminished (M=2,51 with a scale of 5) (Ertürk, 2014). This high level of turnover intention in the navy can be associated with the opportunities in enticing and challenging professional opportunities in the private sector and better and attractive salaries with better benefits.

It is also interesting to point out some significant differences between the multiple demographic variables of the participants analyzed throughout this study. For example, LMX has a higher significant variance for 41-50 years old than for both 18-29 and 30-40 years old. Possibly this situation could be associated with that 41-50 years old are possibly in higher hierarchical and leadership positions, which could influence positively their LMX. On the other hand, >50 years old group scored higher on TI than 30-40 and 41-50 years old, this could be associated already with some tiredness and accumulated fatigue and all the years spent in the navy due to long periods abroad or long shifts. Another noteworthy point is the fact that officers when compared with sergeants and corporals have a higher score for LMX and POS. This could be associated with the higher hierarchical positions and status this specific group has within the organization. In addition, it is not surprising to see that the participants who answered that have been working for more than 20 years for the navy scored higher on TI than the group working between 7-20 years. Once again this could be related

with fatigue and possibly the keenness to look for a new professional challenge outside of the organization. Finally, regarding the number of kids one is responsible, the group that scored the higher values for TI were the ones with more than 3 kids comparing with 0, 1, and 2 kids. This could be related with the demands and expectations to keep up both jobs at home and at work, leading one to find a new job, where it is easier to keep both roles.

Is perceived organizational support negatively related with turnover intention?

In this study, we could prove that there is a significant and consistent relationship between perceived organizational support and turnover intention, suggesting that a higher level of perceived organizational support leads to a decrease in the intention of an individual to leave the organization. These findings also support and confirm the results from Rhoades *et al* (2002) that POS has a negative influence over the intention to leave the organization or the academic research with public servants in Turkey that also found a negative relationship between the mentioned variables (Ertürk, 2014). Furthermore, as stated earlier in the literature review, when employees feel supported by their supervisors and organization, the expected behavior from the employees would be not only a lower turnover intention but also actual turnover (Allen *et al*, 2003). Once again, the results of the research are supported by the above-mentioned authors mentioned during the literature review.

*Is leader-member exchange positively related with turnover intention?* 

The second hypothesis tested also supports that leader-member exchange has a negative relationship with turnover intention, meaning that, a good relationship with the supervisor or leader decreases the intention of leaving the organization. Despite of the few studies that exits between these two variables, our findings corroborate with the conclusions from the empirical studies led by multiple authors, mentioned in the literature review, that leader-member exchange has a negative relationship with turnover intention. Leaders have the capability to influence individual's decision within the organization (Saeed *et al*, 2014; Gerstner *et al*, 1997). Therefore, a powerful relationship between leader and subordinates has a positive impact for the organization, leading to a lower turnover.

*Is perceived organizational support positively related with leader-member exchange?* 

When it comes to the third variable tested in this research, we found out that perceived organizational support is positively correlated with leader-member exchange. This finding goes in agreement with the literature review that these variables are linked with each other: perceived organizational support can be a good predictor of leader-member exchange and vice-versa (Tetrick *et al*, 1994; Wayne *et al*, 1997). In a research led in Malaysia for employees who worked in the public service, Asgari *et al* (2008) also proved that there was a positive relationship between both variables.

Does leader-member exchange mediate the relationship between perceived organizational support and the turnover intention?

The results obtained during this research also prove that LMX can mediate the relationship between POS and TI among the employees of the Portuguese Navy. Furthermore, the results found and lead to a pathway by which POS is via LMX, with a significant mediation effect seen for TI. Some of the perceived support from the organization comes from the person, one is reporting to and that could be a manager, a supervisor, or someone from a higher hierarchical level. Based on the decisions taken by supervisors, this could have a significant positive or negative impact of the POS on the employees (Jayasundera, 2016). Thus, LMX must be seen in the workplace as tool or a way via POS to diminish the intention of turnover in the Portuguese Navy.

# **Implications**

Overall, the findings presented in this study could be considered an advancement in the prevention of turnover intention in the military environments, since there are not that many studies focused in military organizations, particularly in Portugal.

The results presented throughout the study could be of valuable relevance not only to the Portuguese Navy, but to all military branches and security services such as, army or air-force, in order to prevent turnover intention, and the importance of the roles of perceived organizational support, and leader-member exchange many times disregarded within an organization. Also, this study introduces LMX variable as a mediator between POS and TI. Furthermore, this research confirms the significance of the clout of the above variables, when it comes to turnover intention. Often, organizations will only take in consideration the salary variables (Epstein, 1999). Besides the influence the leader or supervisor has on his employees, perceived support from the organization such as an open communication environment or the opportunity to participate in training and development programs are of major importance to retain employees within an organization. As it was proved in this study, LMX could be used within the organization to better improve the relationship between POS and TI too and increase the POS within an organization.

Since this study focus on a current issues and a major interest of the literature review, the research could be of relevance to social study researchers and personnel who works in the human resources department of organizations that seek to reduce the turnover.

## **Limitations and Future Directions**

It should be acknowledged that the present study has some limitations, as it happens in most studies performed, such as data gathering, sample size, low variance explained, and the kind of questionnaire which was used.

Firstly, the collected data at certain point in time, unfortunately, we were not able to infer causal relationships or reject the possibility of reverse causality. Second, considering the sample size, we were only able to collect 122 questionnaires from associates working at the Portuguese Navy, in order to have a fairer and more equitable sample than to the one used in this study. More participants were needed. Furthermore, we do not know the origin of the responses such as it came from the military hospital, headquarters or which naval bases or ships, as there are multiple different locations (Lisbon and Almada). Therefore, we were not able to conclude if a particular group of participants from a specific location did affect negatively or positively the overall results presented in this study. In a future research, there should be a sub-group in the questionnaire, regarding the location of the participant.

Another issue that is relevant to mention is the low variance explain in one of the models (9%). It is not common to have models with such low variance explanation, nevertheless this could be the trigger to search for new models with different variables that could support adding the explained variance.

Finally, despite the advantages of using an online questionnaire via email or social media such as LinkedIn, such methods can reduce the number of responses. Even though, it was mentioned in the questionnaire that the participants would not be identified, respondents still have some concerns regarding privacy issues. Therefore, in future researches, a different way to collect the information from the respondents should be used, containing a bigger and fairer sample size.

This study is one of few studies about turnover intention that have been performed in Portugal especially in a military institution which focuses on its relationship with leader-member exchange and perceived organizational support. Another area of future research would be to examine this relationship in a different military institution such as the air-force or army.

Later, it would be interesting to analyze if those institutions face the same issue with turnover intention.

## **Conclusion**

To sum up, the purpose of this research was to investigate the levels of turnover intention and the influence of leader-member exchange and perceived organizational support in the employees of the Portuguese Navy in context of austerity measures, such a reduction of salaries, longer shift hours, or the cut of the holiday allowances. The findings show a relatively high level of turnover intention among the employees of Portuguese Navy and we could also demonstrate that leader-member exchange mediates the relationship between perceived organizational support and turnover intention. This work can increase the understanding of the clout of the above variables have in the turnover intention inside the organizations. Furthermore, due to the number of practical and theoretical reflections and analysis performed throughout the research, this study could trigger future researches about the same subject and issue.

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# **Appendix: Questionnaire**

My name is Miguel Temporão, a student at ISCTE – University Institute of Lisbon. I am conducting an academic research for my thesis, as a requirement to get my master's degree. On the following pages, you will find several different kinds of questions. Specific instructions will be given at the beginning of each section. Please keep in mind, there are no right or wrong answers and all data will be kept confidential. This questionnaire will not take more than 10 minutes to answer thoroughly. I would like to thank you in advance for taking the time to answer the questionnaire.

This survey consists of four sections. Please answer each item as honestly and frankly as possible.

#### A. Leader-member Exchange 1. Do you know where you stand with your leader... do you usually know how satisfied your leader is with what you do? (Does your member usually know) Very Often Rarely Occasionally Sometimes Fairly Often 2 4 5 1 3 2. How well does your leader understand your job problems and needs? (How well do you understand) Not a Bit A Little A Fair Amount Quite a Bit A Great Deal 2 3 4 5 1 3. How well does your leader recognize your potential? (How well do you recognize) Not at All A Little Moderately **Fully** Mostly 1 2 3 4 5 4. Regardless of how much formal authority he/she has built into his/ her position, what are the chances that your leader would use his/ her power to help you solve problems in your work? (What are the changes that you would) None Small Moderate High Very High 1 2 3

5. Again, regardless of the amount of formal authority your leader has, what are the chances that he/ she would "bail you out," at his/ her expense? (What are the chances that you would)

None	Small	Moderate	High	Very High
1	2	3	4	5

6.	I have enough confidence in my leader that I would defend and justify his/her decision
	if he/she were not present to do so? (Your member would)

Strongly	Disagree	Neutral 3	Agree	Strongly
Disagree	2		4	Agree
1	2	3	4	5

7. How would you characterize your working relationship with your leader? (Your member)

Extremely	Worse Then	Avaraga	Better Than the	Extremely
Ineffective	Average	Average	Average	Effective
1	2	3	4	5

B. Turnover Intention					
	Strongly Agree 1	2	Neutral 3	4	Strongly Disagree 5
1. At this time in my career, I want to quit this job if it were possible	0	0	0	0	0
2. I am actually planning to leave your job within the next six months.	0	0	0	0	0
3. I am actively searching for another job right now.	0	0	0	0	0
4. I have had thoughts of leaving my job.	0	0	0	0	0

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C. Perceived Organizational Support						
		Strongly Agree 1	2	Neutral 3	4	Strongly Disagree 5
1.	The organization values my contribution to its well-being.	0	0	0	0	0
2.	If the organization could hire someone to replace me at a lower salary would it would do so.	0	0	0	0	0
3.	The organization fails to appreciate any extra effort from me.	0	0	0	0	0
4.	The organization strongly considers my goals and values.	0	0	0	0	0
5.	The organization would understand a long absence due to my illness.	0	0	0	0	0
6.	The organization would ignore any complaints from me.	0	0	0	0	0
7.	The organization disregards my best interests when it makes decisions that affect me.	0	0	0	0	0
8.	Help is available from the organization when I have a problem.	0	0	0	0	0
9.	The organization really cares about my wellbeing.	0	0	0	0	0

# Participant's Information

1.	Gender:	<ul><li>A) Male</li><li>B) Female</li></ul>
2.	Age:	<ul><li>A) 18-29 years old</li><li>B) 30-40 years old</li><li>C) 41-50 years old</li><li>D) &gt;50 years old</li></ul>
3.	Job Position:	<ul><li>A) Officer</li><li>B) Sergeant</li><li>C) Corporal</li><li>D) Other (e.g. Civilians)</li></ul>
4.	Education level:	<ul> <li>A) 9° grade</li> <li>B) 10°-12° grade</li> <li>C) Bachelor´s degree or above</li> </ul>
5.	Tenure at the Air Force:	<ul><li>A) 0-6 years</li><li>B) 7-20 years</li><li>C) &gt;20 years</li></ul>
6.	Marital Status:	<ul><li>A) Single</li><li>B) Married</li><li>C) Other (e.g. Divorced, Widowed)</li></ul>
7.	How many of your children currently live with you?	A) 0 B) 1 C) 2 D) >3
8.	How many elders are you responsible for?	A) 0 B) 1 C) 2 D) >3

=====Thank you=====