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Veteran Managers and Adaptation in Team Leadership

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Master of Science Degree in Business Administration

Supervisor:
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Abstract

Adaptation is of paramount importance in an ever-changing world. Work teams need to able to collect overcome the hurdles of changing environments and stressful situations if they want to succeed. Arguably no place is this truer than in war, and as such, it's in the best interests of military organisations to train their leaders into being adaptable and resilient in the face of unpredictable life-and-death situations. This study follows the IMOI model of Marks, Mathieu and Zaccaro (2001) and aims to compare work teams led by military Veterans and non-military Veterans, to assert if those led by the former are better at keeping a high level of team work engagement, developing better problem solving competencies, and adapting to stressful situations and, as a result, be more effective. The data was collected through an online survey questionnaire with a sample of 49 teams (49 leaders and 169 subordinates), six of which were led by Veterans, mostly of a consulting context. None of the proposed hypotheses were postulated, and no statistical significance was found in the mediation, moderation and moderated mediation models used to test the relationships between the variables.

Key Words: Leadership; Veteran Managers; Problem-solving; Team Work Engagement; Adaptation.

JEL Classification System

M10 General

M12 Personnel Management

Resumo

A Adaptação é de extrema importância num mundo em mudança contante. As equipas de trabalho necessitam de estar aptas a ultrapassar as barreiras colocadas por ambientes em constante mudança e situações stress se quiserem suceder. Não há mais nenhum lugar em que talvez isto seja mais verdade do que na guerra e, como tal, está no interesse nas organizações militares treinar os seus para serem adaptáveis e resilientes perante situações imprevisíveis de vida ou de morte. Este estude segue o modelo IMOI de Marks, Mathieu e Zaccaro (2001) e procura comparar equipas de trabalho lideradas por Gestores ex-militares e Gestores sem esta experiência para auferir se os primeiros conseguem manter níveis mais elevados de Team Work Engagement, desenvolver melhores competências de resolução de problemas, adaptar-se a situações e de stress e, como consequências, serem mais eficientes. Os dados foram recolhidos através de um inquérito por questionário online de 49 equipas (49 líderes e 169 subordinados), seis das quais eram lideradas por ex-Militares, a maioria das quais em contexto de consultadoria. Nenhuma das hipóteses propostas foram verificadas e não foi encontrada significância estatística nos modelos de mediação, moderação de mediação moderada usados para testar a relação entre as variáveis.

Palavras-chave: Liderança; Gestores ex-militares; *Problem-solving*; *Team Work Engagement*; Adaptação.

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Chapter 1: Introduction

Having an increasingly complex environment makes it hard for people in the business world to plan ahead (Schrager, 2018), with the risk of those same plans being thwarted. As an old Prussian military saying goes, “no plan survives contact with the enemy”. Indeed, for a manager to deal with an ever-changing world, they need to be ready to adapt and overcome any adversities. Nevertheless, the business world is not alone when dealing with a world that is ever more unpredictable. It seems no one can escape this reality, a case in point being the Military. It appears that, for the most part, the old days of conventional warfare appear to be long gone, at least for western armed forces. As a result, these military organisations find themselves in situations where the doctrines of conventional warfare no longer apply when dealing with insurgencies and other evermore prevalent forms of irregular and asymmetric warfare (Barno, 2009).

Open conventional with tanks, artillery, and aeroplanes fighting their opposite numbers, replaced by means of battle such as ambushes, roadside explosives, kidnappings, assassinations, and suicide attacks, all carried out intentionally “on camera” for maximum informational effect (Barno, 2009: 32). Professional armies backed by states and international organisations with a seemingly endless pool of manpower and resources taking hits from people with little in the way of means but who make use of the few resources at hand in order to bring down the giants they face.

In the face of these adversities, armed forces throughout the world have been forced to adapt to irregular warfare, to expect the unexpected in order to tackle these predicaments effectively with as few civilian casualties as possible, given that the enemy hides and mixes among the local population, using them as a shield and, sometimes, a bargaining chip (Rodrigues, 2013).

The training veterans receive whilst in the Military to deal with uncertain situations - to adapt and overcome them - could become helpful when dealing with uncertain, stressful and complex situations if they find themselves managing and leading a team in a civilian context. Consequences might not be life and death, and the outcome of actions and mistakes might not have immediate results, but the stress on the team is still present, and so is the need to succeed in the face of hardship.

Studies as those conducted by Gagliardo (2020) and Castañeda (2019) seem to suggest that Veterans can outperform non-Veterans in leadership position under the right

circumstances, such as when their adaptation into civilian life has been successful. However, the literature on this topic is lacking. Furthermore, most studies use a qualitative method and focus on the American. A context which is very distinct of many Western Armed Forces, not only because of its size, being the most well-funded and one of the largest militaries in the world (International Institute for Strategic Studies, 2021), but also because of its active engagement and contributions to the War on Terror, such as the Iraq War (2003-2011) and War in Afghanistan (2001-2021). Hence, it is reasonable to assume that militaries such as the Portuguese Military, which are not as actively engaged as the United States', might not necessarily produce Veterans with the same experience regarding adaptation to complex situations.

It is also important to analyse just how this process of adaptation occurs, with study approaching two emergent states, Problem Solving and Team Work Engagement, in order to assess how managers lead their teams into adapting to complex situations and get a good performance. Problem Solving is often seen as an integral part of adaptation (Basadur 2014) and Team Work Engagement can be important, as to keep people motivated when facing stressful situations. Hence, the following chapters will go deeper on the art of the art of the concepts of adaptation, problem solving, adaptability, leadership and team performance, as well as providing more insight into research done on the performance of Veteran managers and on the training of Portuguese military leaders.

Chapter 2: Literature Review

Chapter 2.1: Portuguese Military Context

a. The importance of Leadership and adaptability in the military

"War never changes", a short quote from a 1914 book called The World's Work: Second War Manual: The Conduct of the War. It is unclear if this is the earliest mention of that phrase; regardless, it may seem odd to those unfamiliar with the nature of warfare, given there appears to be little in common with the means of aggression used by Roman soldiers and modern Military organisations. Indeed, the equipment used by both has little in common, given the millennia of technological advancements separating the two. Notwithstanding, looking only at the tools arguably neglects the most important part of combat: its nature. When two parts engage in war, both have the same simple objective, winning.

Unpredictability and deception have been common strategies throughout human history to gain the upper hand and achieve victory. Hence, soldiers and their leaders need to expect the unexpected. Adaptation can mean life or death in a combat situation. This concept is nothing new in warfare. Sun Tzu's the Art of War was written almost three millennia ago and is still used to this day as a base for teaching military strategy, particularly the use of deception.

> "18. All warfare is based on deception.
> 19. Hence, when able to attack, we must seem unable; when using our forces, we must seem inactive; when we are near, we must make the enemy believe we are far away; when far away, we must make him believe we are near" (Sun, 2008: 34).

Some notable historical examples of such tactics occurred in World War II, like Operation Fortitude South. This plan sought to deceive the Nazis into thinking the Allies would invade France by landing in Pas-de-Calais, the closest point between France and the isle of Great Britain, by placing an "army" of fake tanks and landing craft in Kent. Falling for the rouse, Nazi Germany concentrated its defences in this region. In reality, the allies were going o invade a now much less defended Normandy, almost 300 km away from Pas-de-Calais (Levine, 2011). As a result, many a nation have integrated deception into their doctrines, with the United States (Department of the Army, 2019 and JSOC, 2012) and the now-defunct Soviet Union (Hamilton, 1986) being only two, yet greatly influential examples.

However, it is not just important to use such strategies but also to prepare for them and to have contingencies in place. If both sides are aware of the advantages of unpredictability and deception, both need to be prepared to counter any surprises which might come their way if they fail to detect them beforehand. To adapt to something one is not expecting, overcoming one's predicament, and turning the odds in one's favour, despite the unexpected crisis at hand.

Nowadays, theatres of operations have changed to situations in which uncertainty and unpredictability are constant. Instead of worrying about fighting nation-states on clearly defined ground, battles are currently being fought against shadowy figures, adversaries hiding in plain sight using crude and yet effective methods to achieve their goals, such as bombings, assassinations, and ambushes (Barno, 2009).

In Modern Military Operations, "leaders must be prepared to face the effects of stress, fear in combat, external influences from the media, the geopolitical climate, and changing technology" (Department of the Army, 2012b: 9-1). Furthermore, Shuffler, Pavlas and Salas (2012) proposed Adaptation as one of the key competencies to be developed by military teams. Based on a meta-analysis done by a previous study, these authors go so far as to state that team performance "improved as measured by both subjective and objective ratings, with team coordination and adaptation training, and team guided self-correction having the largest effects on performance" (300).

b. Leadership Organisation in the Portuguesa Armed Forces

The Portuguese Military divides the ranks of its Servicemembers into the same categories as most modern military forces. As per Article 28 of Decree-law number 90/2015, which establishes the statute of Armed Forces personnel, Servicemembers hold a rank that falls into one of three categories: Officers, Sergeants and Enlisted grades (known as *Praças* in Portuguese). The same decree-law also defines the five functions performed by Servicemembers: *command, management/leadership, staff, technical Leadership,* and *execution*.

Command refers to managing, coordinating, and controlling commands, forces, units, and establishments, or, simply put, teams. In contrast, *Management/Leadership* functions pertain to the same tasks but only encompassing either establishments or Bodies of the Military.

Staff functions pertain to advising and supporting military leaders, commanders, and directors. Staff personnel are responsible for transmitting their unit's commander(s) decisions

down the chain of command and overseeing their execution. Only units larger than a Company (see table 10) have a Staff (Gabinete de Tática de Cavalaria, s.d.).

Skilled personnel can perform *Technical Leadership* roles because of their technical qualifications, giving them the authority to lead, oversee, and control tasks of a technical nature related to their area of expertise.

Finally, *Execution* functions relate to the performance of actions carried out by military personal in the exercise of their duties in their military units. These actions include combat and all task that precede it (p.e. preparation, planning), training, teaching, research, and any other missions attributed to the Armed Forces.

Enlisted grades comprise the lowest ranks of the armed forces. These are the soldiers most commonly associated with front line troops, and as per article 130, they are responsible for performing, under supervision, executive functions and technical or administrative activities. However, high ranking enlisted Servicemembers can have leadership roles. For example, higher ranking Corporals can lead a Fireteam (See table 10), the smallest of military units, comprised of 4 to 5 soldiers (including the leader) or even a Section, which comprises two Fireteams (8 to 10 soldiers) (Casinha, 2021).

According to article 129, Sergeants perform *command* functions and executive, technical, administrative, logistical, or formative *Leadership* functions. In combat units, low ranking Sergeants can lead Sections (Casinha, 2021). Sergeants also play an important role in assisting Commanding Officers of Platoons, Companies, Batteries and Squadrons, similarly to Staffs in larger units (Casinha, 2021). Furthermore, the highest-ranking sergeant of a unit serves as the Assistant to the Commanding Officer (Gabinete de Tática de Cavalaria, s.d.).

As per article 128, Officers perform *command*, *management/leadership*, *staff*, and *execution* functions. These roles require either technical knowledge or high levels of technical or scientific knowledge. Officers command units larger than Sections, the smallest of which being platoons (units comprised of three sections), the command of which falls under subordinate officers (the lowest ranking officers) (Casinha, 2021). Because of the size of larger units, Officers can be a part of a command structure without being the Commanding Officer, performing roles such as (but not limited to) Executive Officer (the 2nd in command) and Liaison Officer. Larger units also have a Staff, also led by Officers, as per the Statute of Military Servicemembers of the Armed Forces.

The Portuguese Armed Forces have three interconnected levels of Leadership (Table 11): direct Leadership, operational Leadership and Strategic Leadership (Braz, 2008). Direct Leadership, also known as Individual Leadership (Borges, 2011), is the one performed at the

front-line level, in "unit size" terms, that means every unit up to, and including, Battalion/Batter/Squadron (Department of the Army, 2015), although in the case of the Portuguese it is only up to Company sized units (Rouco, 2012). Direct Leadership is characterised by a "face-to-face" and do-as-do approach where people are being led, influencing them directly and promoting their individual development (Rouco, 2012). This type of Leadership is the less complex out of the three.

Organisational Leadership operates at the Operational level of conflict and is performed by Superior Officers. These leaders are in charge of hundreds, and sometimes thousands, of individuals in military organisations. Although they exert direct influence, it is usually through hierarchical levels. Organisational leaders require the same competencies as direct leaders but in contexts of higher complexity (Rouco, 2012).

Lastly, strategic Leadership applies to institutions, not people, with its influence being excreted indirectly over thousands of individuals. Strategic leaders operate at high uncertainty and complexity levels, putting into practice not just the competencies of direct and operational leaders but also others. In the armed forces, decisions taken by strategic leaders can sometimes even impact life outside the Military, and these decisions take into account political guidance, the armed forces' budget, acquisition of new weapon systems, civilian programmes, among other (Rouco, 2012).

c. Leadership and adaptation training in the Portuguese Armed Forces

Since Sergeants and Officers perform the vast majority of leadership roles in the Portuguese Armed Forces, the current section of this chapter will focus on the leadership training of those two categories. Although some specialities in the Military require complementary training in other places, the institutions mentioned below are responsible for administering the common parts of the Sergeant Training Courses (CFS), Officer Training Courses (CFO), and Superior Education Programmes of each branch of the armed forces, all of which include leadership training (Fernandes, 2015 and Braz, 2008).

In the Portuguese Navy, Sergeants take their training programmes at the Escola de Tecnologias Navais (School of Naval Technologies), the Escola de Fuzileiros (Marine School) or the Escola de Mergulhadores (Diver School), depending on what speciality they are training for (Fernandes, 2015). Naval Officers train at the Naval School, and at the Marine School, in some cases (Braz, 2008).

At the Naval School, the two semester-long Organisational Behaviour course includes leadership training. This course focuses on studying behaviours and organisations, focusing on their human development objectives (Braz, 2008). The Naval School takes a functional approach to Leadership, operationalised through the designated Practical Leadership Tasks (TPL), which require a "high degree of interaction and interdependence of team members and consist on the execution of non-structured team tasks" (Barreto, 2017: 24). The team leader must ensure that these tasks have a properly phased execution by using their role to set strategy, clear objectives, etcetera (Barreto, 2017). Cadets take Field leadership training as part of a Leadership internship during the 5th year, lasting two weeks and taking place at the Marine School. This training consists of "practical exercises (…), based on theoretical models administered throughout the programme" (Braz, 2008: 23).

The Portuguese Army trains its Sergeants at the Sergeant School (Fernandes, 2015). People who wish to enlist as permanent officers take their training at the Military Academy in the form of higher education programme (Braz, 2008). In contrast, for those wishing to enlist through the volunteer or contract regimes, the initial training occurs at the Escola da Armas (Combined Arms School) (Recrutamento Militar, 2021). Leadership training at the military academy focuses on developing 27 competencies of Rouco's Model (2012) with the objective of training cadets to lead successfully in situations of high uncertainty (Barreto, 2017). The competencies consist of four domains: the "domain of oneself" (personal/cognitive competencies); the "domain of relations with other" (social competencies); the "domain of work, activities and tasks" (functional competencies); and "domain of management" (organisational competencies) (Figure 2).

In the Air Force, both Sergeants and Officers train at the CFMTFA (Air Force Military and Technical Training Centre) (Fernandes, 2015 and Lopes et al., 2018). However, people wishing to become permanent Officers take their training at the Air Force Academy (Braz, 2008). Similar to the Military Academy, the Air Force Academy and the CFMTFA seeks to develop a set of competencies that the Air Force considers essential for its leaders (Barreto, 2017). This development occurs during the Command and Leadership course, and at Air Force Academy, there are specialisation actions to complement this training (Lopes et al., 2018). The leadership competencies developed at the Air Force are communication; planning; decision making; management and control; and delegation and motivation (Barreto, 2017). Although as of 2019, the developed competencies have changed slightly, with the removal of planning and management and control, and the addition of Stress Management, Teamwork, Training of Subordinates and Conflict Management were added (Academia da Força Aérea, 2019).

Overall, articulation between Military Superior Education Institutions is lacking in their respective referrals of leadership competencies when Leadership is transversal to all (Barreto, 2017). However, it is expectable since each organisation operates in different areas with different needs, even though the importance of Combined Arms – the complementary employment of different arms, and in some cases, branches, in combat (Department of the Army, 2012a) – could require at least some common ground between these organisations when it comes to Leadership.

However, some commonly expected aspects of leaders in the Portuguese Armed Forces fall under what is often referred to as the "military condition". This condition requires moral behaviours and a distinct sense of responsibility in maintaining ethical standards since the military commander is responsible for leading in circumstances requiring life sacrifices (Costa, 2015). Hence, military leaders in the Portuguese Armed Forces are expected to be transformational leaders to motivate and inspire their followers. They need to be agents of change, of high moral and ethical standing, who must lead by example with a loyal posture, inciting and transforming their subordinates' attitudes, beliefs, and motivations (Costa, 2015).

d. Leadership and adaptability performance of Portuguese Troops

Given the importance attributed to Adaptation in the Portuguese Armed Forces, it is safe to assume that it is in the interest of all three branches to ensure Portuguese Troops are ready and able to deal adapt to unpredictable and high-risk scenarios and that military commanders can lead successfully in those circumstances. However, given the low involvement of Portuguese Troops in active combat, it is hard to know how sharp their adaptation skills are in those scenarios.

Nonetheless, training plays an integral part in maintaining their skills at the ready and reminding them how important they are. Major Rodrigues (2015) validated that the adaptability requirements a leader must possess were those identified by Pulakos, et al. (2000), those being Handling Emergencies; Handling Work Stress; Solving Problems Creatively; Dealing with Changing Situations; Learning; Interpersonal Adaptability; Cultural Adaptability; and Physically Oriented Adaptability.

In this study, Major Rodrigues (2015) explored the importance Servicemembers attributed to each dimension and how often they deal with them. He found that, despite the low frequency at which Portuguese Military and National Republican Guard (GNR) Servicemembers deal with these eight dimensions, the most crucial dimension of adaptability

to them is handling emergencies, even though it was not the one Servicemembers dealt with more frequently. However, the more a servicemember went on missions, and the longer these lasted, the number of times they had to deal with emergencies increased, as did the need to adapt culturally and physically. The study also showed that the more critical dimensions (the most important and less frequent) in the face of Modern Military Operations were: Cultural Adaptability; Dealing with Changing Situations; Solving Problems Creatively; and Handling Work Stress. Army Servicemembers considered all eight dimensions essential since they dealt with them regularly and considered them all very important. This mindset might exist amongst Army Servicemembers because it is the often deployed branch (Rodrigues, 2015).

According to Jordan & Troth (2004) and Kelly & Barsade (2001), "team level affect has been identified as critical to performance outcomes" (apud. Rosen et al., 2011: 199), hence the need for an adequate adaptation metric to capture these affective states (Rosen et al., 2011). Jordan & Troth (2004) found that a good trait for managing negative emotions in teams was emotional intelligence. Emotional intelligence can be defined as:

> "the ability of an individual to monitor one's own and others' emotions, to discriminate among the positive and negative effects of emotion, and to use emotional information to guide one's thinking and actions" (Salovey and Mayer, 1990 apud. Jordan & Troth, 2004: 197).

Dias and Gil (2016) attempted to measure the impact of emotional intelligence in Motivation in Military Organizations. In this study, the sample consisted of 355 Servicemembers from the Portuguese Air Force. Measurements showed that, on a scale of 1 to 7 that measured 14 items, the participants had an average emotional intelligence of 5,23 with a standard deviation of 0,56, suggesting quite a high level of emotional intelligence, and it showed a strong positive correlation with motivation (Pearson = 0.298, p = 0.01). Motivation measurements consisted of 15 items, and it also presented a high average of 6,33 (same scale was emotional intelligence) with a standard deviation of 0,4.

Stress is yet another factor that is always present in warfare, especially for its participants. It is difficult to imagine a place where is stronger or more omnipresent than on a battlefield. Therefore, soldiers need to know how to deal with stress; otherwise, their perception of control of the situations they find themselves in can lower and consequently lead to panic and subsequently death or injury (Ferreira, 2015). Stress is an invisible enemy just as dangerous as the actual enemy. One that soldiers must fight as well.

Handling stress is where Psychological Hardiness comes in, a concept first presented by Kobasa in 1979 to explain resistance and coping in situations of stress, a concept strongly

connected with resilience and that has been strongly associated with resistance to stress, something with Armed Forces around the world have taken note of (Ferreira, 2015). In a study conducted by Ferreira (2015), 101 Servicemembers of all three branches of the Portuguese Armed Forces and all three categories, most of which had served in Afghanistan, attempted to find the role played by leadership efficacy and psychological hardiness in mitigating stress in a Modern Military Operations Environment. The study found that military leaders with a greater level of Psychological Hardiness reduced their subordinates' stress levels and lowered the effect of different types of stressors, namely ambiguity, impotence, and boredom. Lastly, each branch showed different results. The correlation between Leadership and stress reduction was virtually non-existent in Air Force Servicemembers, whilst Army Servicemembers showed the complete opposite.

Chapter 2.2: Veterans in the job market

When it comes to the performance of Veteran managers, one cannot find many studies on the topic. Most research on Military Veterans transitioning into civilian lives appears to focus on the adaptation process itself, something many Veterans fail to accomplish. In the United States, despite many initiatives to aid veterans to build a new life after leaving the Military, be it studying or working, such as those brought on by the Post-9/11 GI Bill the MGIB-AD, nearly half of all veterans found the transition into civilian life difficult (Castañeda, 2019).

However, there are studies on the performance of veteran managers, such as Gagliardo (2020). A study that also addresses the previously mentioned adaptation process. The author concluded that adapting is difficult mainly because the culture of military organisations is predictable and straightforward. Everyone has a role, the objectives are clear, one knows who to answers to them, whom one answer to, and everyone is committed to their tasks. In contrast with the Military, the culture of civilian organisations is not always as clear, making the path of assimilation into the civilian world more difficult. Castañeda (2019) corroborates this somewhat ironic phenomenon in a similar study. The author concluded that, although military leaders must adjust to difficult situations in combat scenarios, it seems that once the backbone of certainty in military organisations vanishes, where a more transactional type of Leadership occurs, Veterans find themselves somewhat lost.

Gagliardo (2020) states that getting a mentor to helps veterans transition into civilian roles is a way for them to circumvent this issue. Furthermore, the author found that when a company's values are clear and align with those of veterans, not only does their adaptation occur much smoother, but their performance is also better compared to their non-veteran counterparts. Veteran managers attempt to motivate their subordinates to do more and have a "we" mentality instead of "I", leading them with a mindset that the leader should serve the team, not the other way around. Castañeda (2019) complements this by saying that even though Leadership in the Military is more Transactional, transformational Leadership tends to motivate veteran managers in their civilian jobs, helping them achieve better results.

However, a study conducted by Dexter (2020) reached different conclusions than the two studies mentioned above. The author made a quantitative comparison of veteran and non-veteran leadership effectiveness in a civilian context. He concluded that "none of the proposed four proposed null-hypothesis were supported" (Dexter, 2020: 13). The study suggests that, when comparing veteran managers/leaders with non-veteran managers/leaders, the supposed

better leadership performance of the former were not substantiated when measured by accountability, authenticity, communication, empowerment, and perceived overall leader effectiveness and comparing with the latter (Dexter, 2020).

Since the results from the two qualitative studies contradict the only quantitative one, it will be interesting to see if this contradiction in conclusions comes from the sample sizes and the methodology. However, despite the different methodologies, these contradictory conclusions might be a misalignment of what these studies consider predictors of success.

Nevertheless, it is possible that on a macroscopic scale, veterans are not necessarily more inclined to make better leaders in the civilian context. After all, as mentioned in the previous chapter, different categories receive different military training, not just different curriculums but sometimes at different places within the same branch. Moreover, each branch also has a different idea of what makes a good military leader, and these branches operate in different contexts, some more stressful and dangerous than others, depending on the profession within the branch. Furthermore, each of these details changes based on what Military Organisation we are studying and when. Hence, it is difficult to conclude with certainty that veteran managers make better leaders than their non-veteran counterparts.

Chapter 2.3: Adaptation

Adaptation is an intuitive concept to grasp. However, like Leadership or any other concept, its definition can differ depending on the perspective. Furthermore, the consequence of how one perceives the definition of Adaptation is how one measures it. Burke et al. (2006), when conceptualising a model for team adaptation, crossed definitions from several authors by integrating several conceptualisations at the individual, team and organisational level. Thus, team adaptation can be defined as "a change in team performance, in response to a salient cue or cue stream, that leads to a functional outcome for the entire team" (Burke et al., 2006: 1190).

Burke et al. (2006) also developed a model characterising the adaptive cycle and that "details the processes by which a team alters its internal performance processes and resulting emergent states in response to salient cues" (Rosen et al., 2011: 110). This cycle comprises four core constructs: situation assessment, plan formulation, plan execution via adaptive interaction processes, and team learning.

Situation assessment refers to gathering information to detect cues and potential that might affect the mission. Consequently, team members will generate responses to said cues or problems, the successfulness of which will be affected by a team's success at Adaptation (Rosen et al., 2011). Within the Situation assessment Phase, there are two crucial sub-processes: cue recognition and meaning ascription. The former relates to the ability of the team to detect the presence of cues and cue patterns that might negatively impact the work at hand, whilst the latter refers to the translation of said cues into helpful information. Essentially, meaning ascription creates a way for the team to interpret and use the acquired information to formulate and execute the plan to adapt to the hurdle at hand (Rosen et al., 2011).

Plan Formulation is where the previously mentioned information that was gathered, systematised, and categorised turns into a sequence of actions capable of transforming to current/expected state of affair/environment into the desired one (Burke et al., 2006), something that involves planning and problem-solving simultaneously (Rosen et al., 2011).

Planning consists of several processes, starting with mission analysis, where the team gathers and analyses information on its mission, communicates it to the rest of the team, and changes it based on team members' inputs. Following this analysis, the team identifies, articulates and prioritises its goals in the context of the mission. Then, assuming the team does not have access to an adequate plan to deal with the situation at hand already, they proceed with deliberate planning by setting the appropriate course of action. Teams will also engage in

contingency planning by creating alternative plans to help them adapt to any changes that might interfere with the adopted course of action. During the planning process, role differentiation occurs by assigning responsibility and tasks to specific team members best suited to deal with particular situations in the mission. Pre-emptive conflict management, the last process in Plan Formulation, materialises by giving team members clear information and guidelines to have a shared understanding of the mission goals and prevent conflict during the mission (Rosen et al., 2011).

The third construct of adaption, Plan Execution, can be defined as "an assortment of concomitant individual- and team level processes that are enacted dynamically, simultaneously, and recursively" (Burke et al., 2006: 1195). Coordination is a central part of a plan's execution since it ensures the careful and correct orchestration of all processes that might affect it (Rosen et al., 2011). Team execution is a team level phenomenon, which involves the sequencing and timing of the team's action (Marks et al., 2011). In plan execution, Burke et al. (2006) proposed four individual-level actions that positively correlated with coordinated actions during this phase. Those being mutual performance monitoring, backup behaviour, Leadership, and communication.

The final phase, Team Learning, is how the team retains the knowledge and experience attained from the whole process. In this regard, team learning "facilitates the development of knowledge and contributes to the ability of members to improve their collective understanding of a given situation" (Burke et al., 2006: 1198). This deeper understanding allows a team to perform better at the previous phases of Adaptation once the process begins anew when dealing with other situations, especially similar ones. To learn the most, team members need to be open about their experiences, viewpoints, etcetera, and exchange them with colleagues, generating discussions that will lead them to reach a higher understanding constructively. This process not only gives the team a greater readiness and level of understanding for future situations, but it also creates an environment where team members feel safe in being open about their insight on the situation, training them to do so more openly and efficiently (Burke et al., 2006).

Chapter 2.4: Problem Solving

For a team to adapt and overcome stressful and crises, they need to take a course of action. This course of action starts as a reaction to the situation, which triggers a response to identify the predicament clearly and its implications and how to deal with it. This process is where Problem Solving enters the picture. Problem Solving focuses not just on the solution to a particular problem but on the process of solving said problem.

When solving a problem, one divides the main problems into subproblems to "divide and conquer". Consequently, the solution to these subproblems may (and should) contribute to the solution of the main problem. In this process, one tries to solve a problem based on previously known solutions to similar problems, similar to the last phase of the Adaptation Process. This analysis based on similarities and differences to similar past problems creates the subproblems. The subproblems get progressively solved through trial and error, adjusting one's course of action as the trail gets colder or warmer until one reaches a solution (Harper, 1960).

Hence, Harper (1960) proposes three stages (goals) to the Problem Solving Process. For example, if we want to change *a* into *b*, then the first goal is to identify the problem, in this case, the difference (*d*) between *a* and *b*. By identifying *d*, one consequently establishes the goal of solving the difference, and therefore, the problem. The second stage comprises the three categories of "generation, review and evaluation of alternatives" (Aladwani, 2002: 198) and has the goal of finding an "operator that is relevant for removing differences of the kind in question" (Harper, 1960: 28). Essentially, creating solutions to the problem and potential subproblems and then reviewing the proposed solutions to implement the best one. Lastly, the third stage is the choice and implementation of the appropriate solution(s) in the best way possible, something governed by "existing social and technological structures within the project" (Aladwani, 2002: 198).

During this Problem Solving Process, a certain level of abstraction and imagery may be used to deconstruct the problem, the current situation and the desired outcome, discarding irrelevant details and focusing on the essential aspects (Harper, 1960). This type of knowledge apprehension takes advantage of both the "experiencing way" and the "thinking way", the former, more physical, nonrational and experiential, and the latter more detached and abstract thinking (Basadur et al., 2014). The solving of this process leaves a "series of trail markers to guide the solution of the original unabstracted problem" (Harper, 1960: 29).

Basadur et al. (2014) expanded upon this observation by seeing the Problem Solving Process as circular. The authors believe there is a stage that precedes the ones proposed by Harper, one where a team proactively seeks to conceptualise new problems that might appear in the future rather than solving them as they happen. Basadur et al. view Problem Solving this way because "the implementation of the new solution sparks new opportunities to be discovered and also permits further development of the implemented solution" (2014: 85). In other words, the dynamic and continuous process that is Problem Solving generates solutions to a problem. Consequently, the tea attains new perspectives and knowledge on what to expect from related problems in the future. A team with such conduct would proactively think of new solutions to those future hypothetical problems.

Hence, although this thesis will not do a retroactive/longitudinal study of Problem Solving experience in work teams, one cannot simply ignore that this may contribute to developing their Problem Solving Competency. Especially with similar problems in the future.

Yuzhu et al. (2011) tested Aladwani's (2002) proposals in an Information System development context and reached similar a conclusion. The researchers found that a team's Problem Solving Competency reduced the negative impact of requirements uncertainty, contributed positively to the quality of the product, and heightened when the team had anticipation mechanisms in place (Yuzhu et al., 2011). These findings further cement the importance of having safeguards and plans to solve potential problems in the future, instead of just the ability to solve problems as they occur.

Chapter 2.5: Team Work Engagement

To properly understand how teams can perform better in stressful situations, one must look at their motivation and willingness to face these challenges and work. It is crucial to verify if the team enjoys their work, if they feel invested, or are instead running on "auto-pilot" or actively dislike or feel burned out by their work. In other words, measure their engagement.

Schaufeli et al. define engagement as a "positive, fulfilling, work-related state of mind" (2002: 74), a state of mind characterised by vigour, dedication and absorption and as the opposite of Burnout. Burnout is an erosion of engagement with the job, a three-dimensional syndrome of emotional exhaustion, cynicism (depersonalisation and indifference towards work) and professional efficacy (lack of personal accomplishment encompassing both social and non-social aspects of occupational accomplishments) (Schaufeli et al., 2002).

Vigour stands as the diametric opposite of exhaustion on a dimension labelled as activation, whilst dedication has cynicism as its complete opposite on the work-related well-being dimension known as identification. Burnout results from low values on both dimensions, whilst Engagement is the opposite (Schaufeli et al., 2002). However, it is essential to note that absorption and lack of professional efficacy are conceptually distinct aspects and are not opposites on the same spectrum, as with vigour-exhaustion and dedication-cynicism. Both absorption and lack of professional efficacy are relevant aspects of work engagement and burnout respectively, but are not their defining elements (Schaufeli et al., 2002).

When it comes to each characteristic of engagement, Vigour is associated with things like the energy one invests in their work and the willingness to invest that energy, resilience and persistence over adversities. Dedication is associated with emotional aspects like "sense of significance, enthusiasm, inspiration, pride, and challenge" (2002: 74). Lastly, absorption refers to how attached one is to their work, in a way that their work comes as second nature with effortless focus, with one almost "losing" oneself into one's work, and being able to engage in that work without the need of self-consciousness (Schaufeli et al., 2002).

Therefore, Team Work engagement (TWE) is proposed as a multidimensional construct, not at the individual level but the team level. TWE is seen as an emergent state, a property of the team that is dynamic and varies as a function of team context, inputs, processes, and outcomes (Costa, Passos and Bakker, 2014a: 6). Moreover, TWE, despite being an emergent state that originates in individual characteristics (such as cognition, affect, behaviour, etcetera), can be amplified or diminished based on the specific configuration of inputs and team

processes during interactions between team members. A team experiencing low levels of TWE may have those levels increase if an element responsible for those low levels (a bad leader, low performance, etcetera) changes for the better (Costa, Passos and Bakker, 2014a and 2014b).

Chapter 2.6: Team Effectiveness

According to Kozlowski and Ilgen, the modern job market, with its increasing competition, consolidation, and innovation, changed the paradigm and how organisations design work, going from "individual jobs in functionalised structures to teams embedded in more complex workflow systems" (2006: 78). This change happened because teams enable characters that can thrive in these conditions, such as skill diversity, high levels of expertise, rapid response, and adaptability (Kozlowski & Ilgen, 2006).

Hence, it is important to understand just what makes these teams effective. The first studies tried to understand what variable led to effectiveness and what made some teams more effective than others, focusing on the mediating process that explains how certain independent variables (input) achieve effectiveness (output) (Ilgen et al., 2005).

Hackman (1983, 1987) developed three criteria to assess team effectiveness, treating it as a three-dimensional construct. The first dimension, performance, pertains to the output itself in the sense that it should at least meet the expectations and the standards of those who receive and/or review the output. The second dimension is Viability, meaning that "the social processes used in carrying out the work should maintain or enhance the capability of members to work together on subsequent team tasks" (Hackman, 1987: 323). The third and final dimension, satisfaction, should find pleasure and satisfaction in performing their tasks and achieving effectiveness, rather than frustration.

Hackman used an I-P-O (Input-Process-Output) framework to design his model of team effectiveness. This Framework posits that features of the group, its task, its work context, and other input factors affect group-interaction processes, like the interpersonal transactions among members, which consequently affect the group's output (Hackman, 1987).

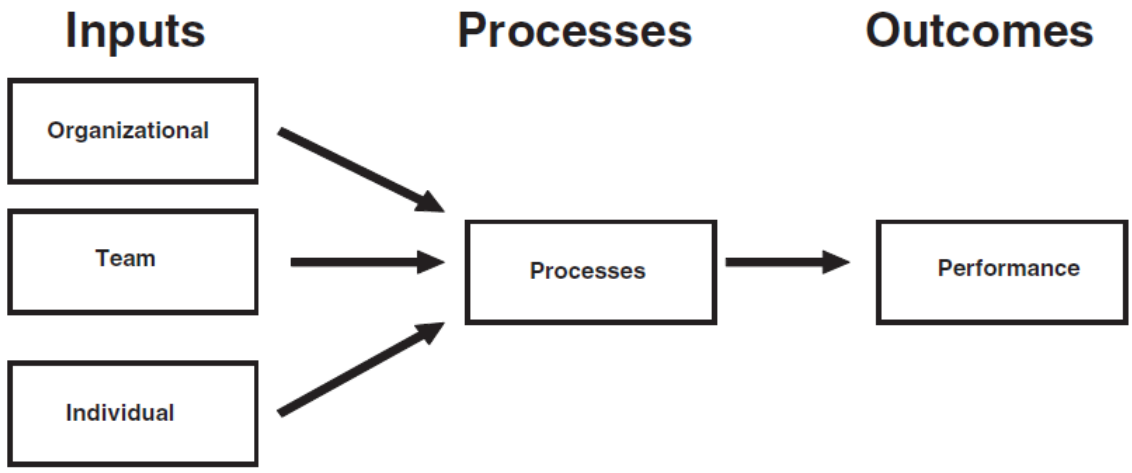
Hackman's normative model rests on the key proposition that team effectiveness is a reflexion of the articulation of three mediating team processes. That is the joint function of collective effort put by team members in performing their tasks, the amount of knowledge and skill they bring to table when doing so, and the appropriateness of the group's performance strategies to the tasks they perform (Hackman, 1983).

a. The I-P-O Framework

The I-P-O Framework used by Hackman to develop his Team effectiveness model was devised by McGrath (1964) to ascertain what processes are at the basis of team effectiveness, assuming that performance (the final output) is the consequence of the transformation of certain inputs through interaction processes mediating that relationship (Hackman & Morris, 1975).

Figure 2.1 illustrates this Framework and its three different components: Input, Processes and Outcomes (or Output). Inputs describe antecedent factor, such as individual team member characteristics, team-level factors and organisational and contextual factors, that enable and constrain members' interactions (Mathieu et al., 2008). Combined, these factors drive team processes, which describe "members' interactions directed toward task accomplishment", which in turn "will describe how team inputs are transformed into outcomes" (Mathieu et al., 2008: 413). Finally, Outcomes, or Outputs, are the result and by-product of the team's activity, such as performance, but also things like the affective relationships between team members that come from working together (Mathieu et al., 2008).

Figure 2.1 – Input-Process-Outcome (IPO) Team Effectiveness Framework



Source: Mathieu et al. (2008: 413).

However, models using the I-PO framework present some limitations and have garnered some criticisms, such as their insufficiency to characterise and conceptualise teams as dynamic and complex systems that need to adapt to the demand of their context (Ilgen et al., 2005; Mathieu et al., 2008). For example, Mathieu et al. (2008) note that sometimes the mediating factors between the transformation of inputs and outputs are not processes, Cohen and Bailey

(1997), for example, “differentiated internal processes from group psychological traits” (Mathieu et al., 2008: 414) and Marks et al. (2001) that processes pertained to members’ actions, whilst cognitive models such as cognitive, motivational, or affective states conceive better mediating mechanisms (Mathieu et al., 2008). Mathieu et al. (2008) also mention that this model also fails to take into account “feedback loops”, where this course of action is seen as only linear, when in reality, outputs can be considered as inputs in relation to other processes and future emergent states.

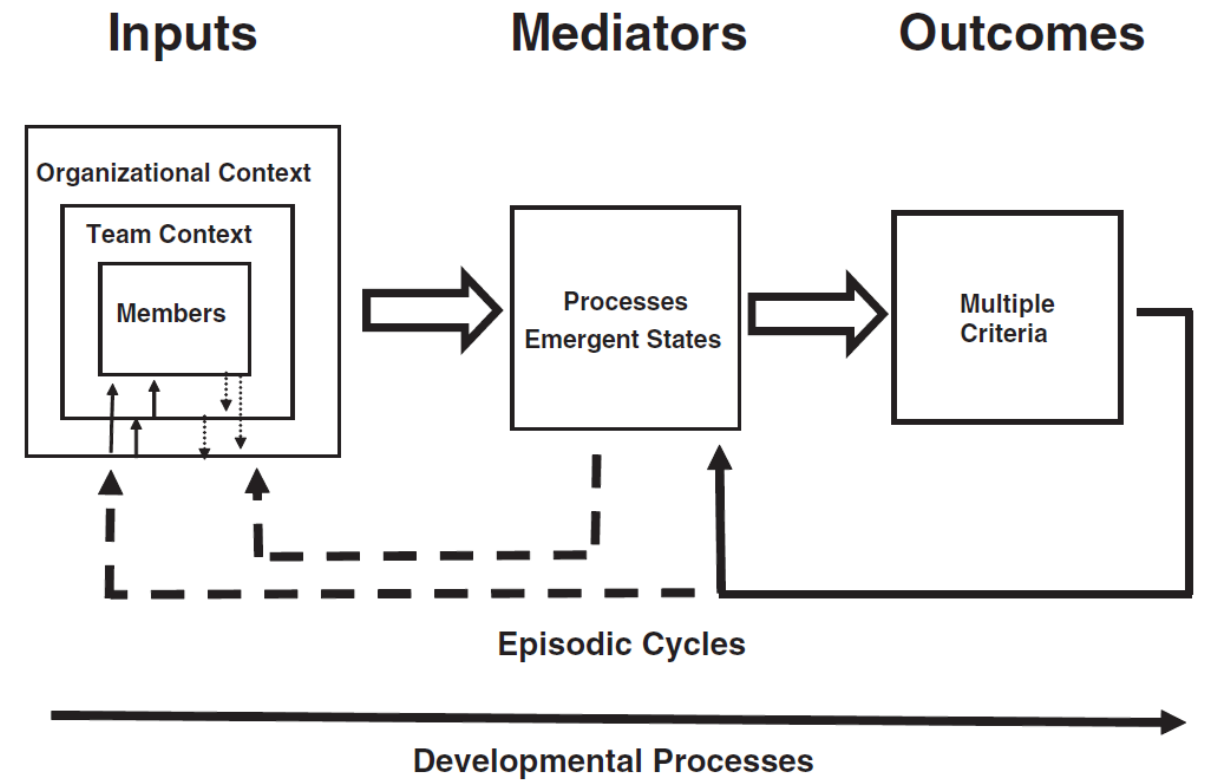
b. The IMOI Framework

In an attempt to counter the limitations and criticisms levelled against the I-P-O Framework, Ilgen et al. (2005) proposed an alternative model to measure team efficacy, the I-M-O-I Framework (Input-Mediator-Output-Input), sometimes shortened to just I-M-O Framework.

The first notable change is the switch from the “P” for Process to an “M” for Mediator, since, as mentioned above by Mathieu et al. (2008), not all mediators are processes, and this allows the IMO framework to encompass a greater number of mediating variables. The additional “I” symbolises the cyclical nature from the feedback loop of this system (Ilgen et al., 2005), which occurs in a transition from an episode to another, eliminating the dashes in the acronym and consequently shattering the assumption of linearity between relationships, as these can be non-linear or conditional (Mathieu et al. 2008). Figure 2.2 illustrates this new framework’s feedback loops that give it its cyclical system, with it processes happening over time and as teams grow (Mathieu et al. 2008).

Marks et al. (2001) developed a temporal model for team processes using the IMOI framework to demonstrate how time affects them. Furthermore, the authors also took into account the fact that teams are part of complex and dynamic environments of interdependent tasks, where they are usually chasing different goals and objectives simultaneously.

Figure 2.2 – Input-Mediator-Outcome-Input (IMOI) Team Effectiveness Framework

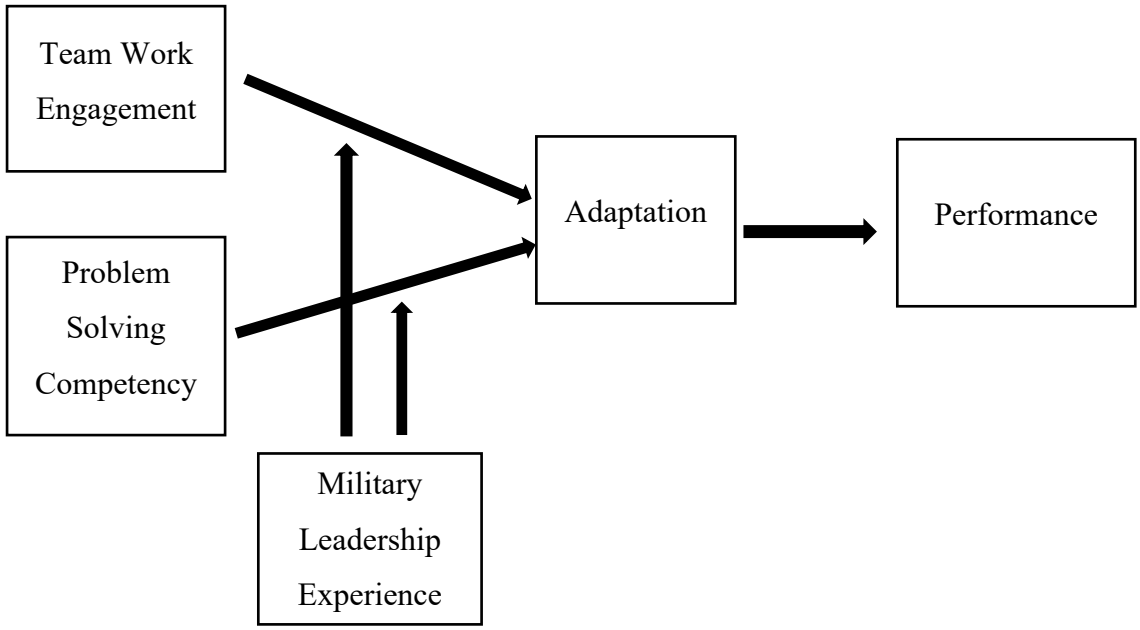


Source: Mathieu et al. (2008: 413).

Their model asserts that teams perform several sequences of transition-action episodes over time, turning inputs into outputs, the latter being the final stage of these episodes and serving as possible inputs for later episodes (Marks et al., 2001). Teams can be more focus on activities of a transaction phase or on those of an action phase at any given time (Marks et al., 2001). Transaction phases "are periods of time when teams focus primarily on evaluation and/or planning activities to guide their accomplishment of a team goal or objective" (Marks et al., 2001: 360), whereas action phases refer to a period of time when the team is performing acts, such as tasks, that contribute to the directly to the completion of their goals and objectives (Marks et al., 2001). By grouping already exiting research in a new temporal categorisation system, Marks et al. managed to defend that team processes can be defined as "interdependent acts that convert inputs to outcomes through cognitive, verbal, and behavioural activities directed toward organizing taskwork to achieve collective goals" (2001: 357).

Chapter 3: Conceptual Model and Hypothesis

Figure 3.1 – Conceptual Model



Source: Self-made.

So far, the literature reviewed in this study suggests that Team Work Engagement, Problem Solving and Adaptation are positively correlated with performance. Furthermore, there appears to be a strong enough basis for hypothesising that Veterans might have a stronger tendency to adopt behaviours strongly associated with Team Work Engagement, Problem Solving and Adaptation, which would mean Veteran managers outperform their non-Veteran counterparts.

Hence, to test the validity of these assertions, one has to divide the proposed model and test each part to draw conclusions. This validation will be carried out by testing two simple mediation models, two simple moderation models, and two moderated mediation models, each with its own hypothesis.

Problem Solving and Team Work Engagement are the Independent Variables of this study, and performance is the dependent variable. Based on prior research, there is enough evidence to suggest that these independent variables have strong positive correlations with performance.

Out of the two independent variables, Problem Solving is the one that has the least amount of prior research supporting this claim. Giampaoli et al. (2017) conducted a study in a sample comprising managers and other employees from 112 leading Italian companies that

showed a statistically significant positive correlation (β = .44) between Creative Problem Solving and a firm's Organisational Performance, corroborating a previous study conducted by Lee et al. (2012). Furthermore, as previously mentioned, Yuzhu et al. (2011) found that teams with Problem Solving skills contributed positively to the quality of the product in an Information System development context.

However, despite the research mentioned above, one can see that the amount of studies done on the impact of Problem Solving Competency is lacking, something even Giampaoli et al. (2017) mentioned (although on the Creative Problem Solving angle), especially on the team level. Giampaoli et al. (2017) and Lee et al. (2012) focused on an Organisational, "whole Firm" level, both in terms of sample and performance. Whereas Yuzhu et al. (2011) focused on the Team, they measured performance as the quality of a particular product developed by the teams, something arguably more objectively measurable than how performance was measured in this study: two Likert scale questions where the leader evaluates the performance of their team. Hence, it is paramount to acknowledge that despite the intuitiveness of assuming those capable of solving problems are more effective than those who do not, more research is needed on this topic.

Conversely, Team Work Engagement's effect on Performance has more research to support a positive correlation. Torrente et al. (2012) tested this relation as part of a mediation model, with Team Work Engagement as the mediating variable and not the independent variable like in this research, finding that TWE played a mediation role between social resources and performance. Costa et al. (2015) and Mäkikangas et al. (2016) actually tested the direct impact of Team Work Engagement on Performance, with both studies finding a statistically significant positive correlation between the two. However, these last two studies were conducted with teams from the Education/Academic sector.

Lopes (2018), Pereira (2019), and Devesa (2020) would replicate the testing of this correlation with teams from an Auditing and Consulting texting, very much identical to this the one in this study. However, like this study, all of their research was carried out as part of their Dissertations, which are not held to the same degree o scientific scrutiny as a paper. Nevertheless, their results should not be ignored, even if they should be considered with greater care. All three researchers tested this correlation as part of a mediation model. Lopes (2018) did so where TWE was the mediator between prosocial lying and performance, with his tests showing a statistically significant positive correlation between TWE and performance (r = .51), and Pereira (2019) found that TWE measured the relationship between action leadership and

performance. However, Devesa (2020) found no statistically significant correlation between TWE and performance.

Team adaptation is another concept that seems essential to effectiveness. As Zaccaro et al. put it, "truly effective teams are those that are able to maintain high levels of collective performance, even as team and environmental circumstances become decidedly adverse" (2001: 457). Marks et al. (2001) agree with Zaccaro et al., as the authors found that, facing environmental changes, an organisation needs to adapt and change its policies accordingly to succeed.

Given all of the research into the relationship between Problem Solving, Team Work Engagement, Adaptability and Performance, it is therefore hypothesised (H1) and adaptability mediates the relationship between Problem Solving and Performance (H1a) and between Team Work Engagement and Performance (H1b).

H1: Adaptation mediates the relationship between Problem Solving and Performance and between Team Work Engagement and Performance.

> *H1a: Adaptation mediates the relationship between Problem Solving and Performance in the sense that teams with more Problem Solving skills show greater adaptability, consequently increasing performance.*
>
> *H1b: Adaptation mediates the relationship between Team Work Engagement and Performance in the sense that teams with greater Team Work Engagement show greater adaptability, consequently increasing performance.*

However, it is also important to understand the relationship between Problem Solving and Adaptability and Team Work Engagement and Adaptability, as well if the nature of this relationship changes from veterans to non-veterans.

The relationship and Problem Solving can be seen as very symbiotic. Pulakos et al. (2000), when operationalising adaptability, saw Problem Solving as one of its factors. Indeed, it seems intuitive to postulate that adapting to stressful situations would logically involve solving the causing problem to overcome the situation. Burke et al. (2006) saw leadership as one of the key behaviours of Phase 3 out of 4 of the Adaptation process, and one of the crucial contributes of leadership to a team's ability to adapt was the facilitation of "team problem

solving through cognitive processes, coordination processes, and the team's collective affective status" (Salas, Burke, & Stagl, 2004, apud. Burke et al., 2006: 1196).

Furthermore, Basadur et al. (2014), who developed a four-stage creative problem-solving process, did so as a model of organisational adaptability. Hence, as a matter of concept, one can see Problem Solving as a predictor of adaptability. However, it is essential to note that there is a lack of research treating them as separate concepts in the same study and with Problem Solving as the predictor and adaptation or adaptability as the outcome variable.

When it comes to Team Work Engagement, although it can be negatively affected by environmental changes such as crises or other high-stress circumstances (Costa, Passos and Bakker, 2014a), Demerouti et al. (2001) concluded that high work engagement contributes to workers being healthy (less exhaustion and health complaints) in stressful work environments. Furthermore, Team Work Engagement has been shown to affect Team Adaptive Performance positively (Tavares, 2015) and Carvalho (2016) also found a statistically significant positive effect of Team Work Engagement on Adaptation, as part of moderation of Team Work Engagement on the relationship between Team Learning and Team Adaptation. However, these last two pieces of research are master theses and not scientific articles, so further research is needed to assert this correlation properly.

Nevertheless, some studies are showing that Individual Work Engagement has a positive effect on adaptability/adaptation. Barnes and Collier (2013) conducted a study using data collected from Front-Line Employees across high and low customer contact service contexts and found that Employee's work engagement impacts career adaptability. Vakola et al. (2020) reached a similar conclusion when studying how mixed feelings serve adaptive functions in organizational change and found that work engagement is a successful condition that increases ambivalent employees' chances to display adaptation.

Given the importance of Adaptation in military operations, the importance given to this act in this context has not gone unnoticed (Barno, 2009 and Shuffler et al., 2011). Indeed, even when drawing the list of competencies essential for cadets to develop during their training, Rouco (2012) put forward Adaptation as one of them. The Portuguese Military places great importance on teaching its Servicemembers how to adapt to high-stress and complex situations (Ferreira, 2015; Rodrigues, 2015 and Dias and Gil, 2016). Furthermore, in some circumstances, military leaders who manage to adapt to civilian life become effective leaders (Castañeda, 2019 and Gagliardo, 2020). Therefore, it is expected that Veterans will tend to be more adaptable (H2) because it is also expected that their teams will tend to show greater Problem Solving behaviours (H2a) and Team Work Engagement (H2b). As a result, it is also expected that teams

led by Veterans will tend to perform better (H3) when they show problem solving behaviours (H3a) and great Team Work Engagement (H3b).

H2: Military Experience moderates the relationship between Problem Solving and Adaptation and between Team Work Engagement and Adaptation.

> *H2a: The positive influence of a Team's Problem Solving skills on its Adaptability is greater in Teams led by Veterans.*
>
> *H2b: The positive influence of a Team's Team Work Engagement on its Adaptability is greater in Teams led by Veterans.*

H3: Military Experience moderates the strength of the mediated relationships between Problem Solving and Performance and between Team Work Engagement and Performance.

> *H3a: Teams led by Veterans show a stronger mediated relationship between Problem Solving and Performance.*
>
> *H3b: Teams led by Veterans show a stronger mediated relationship between Team Work Engagement and Performance.*

Chapter 4: Methodology

Chapter 4.1: Universe and Sample

The universe under study in this research is work teams led by people with leadership experience in the Military. In order to have a point of comparison, this study will also include Work Teams led by people without a military background to verify if the ones led by veterans have an advantage or not when adapting to crises.

When it comes to sampling, there are two methods: probability and nonprobability. Probability sampling allows for the extraction of a "random sample" from a large list comprising the entire population under analysis. Using probability sampling has the benefit of generating samples that can have their results extrapolated to their universe since they are representative (Babbie, 2012). However, probability sampling is not always possible or even desired depending on the study, as is the case in this study since there is no publicly available list of this study's target universe. Such a list may exist, as the Portuguese Armed Forces keep records of Servicemembers who leave the Military (Santos, 2015). However, it is out of reach in this study, unfortunately.

Hence, this study made use of nonprobability sampling, namely, purposive sampling and snowball sampling. In essence, nonprobability sampling includes approaches such as surveying random people on the street, surveying people from the population as they are found, etcetera. The type of nonprobability sampling used in this study, purposive sampling, consists in sampling based on the knowledge of the population. Five out of the six Veteran Lead Teams that participated in this study were reached through purposive sampling. Snowball sampling, which was used to reach one out of the sex Veteran Lead Team, is when participants suggest their acquaintances from the target population to participate in the study (Babbie, 2012).

Lastly, it is important to note that this sample is not representative of this research's universe, meaning all results found pertain only to the sample and cannot be extrapolated to the population because the sampling methods might exclude large groups within it. For example, this study mainly used LinkedIn to reach Veterans in leadership positions, excluding Veterans without access to the internet from this study and severely decreasing the probability of including veterans who do not use LinkedIn in the sample. Although one team was reached via e-mail, it was only because their leader was a friend of a potential participant found on LinkedIn. Furthermore, snowball sampling relies on the contacts and relationships of

participants, even though a former infantry officer, when recommending somebody to be surveyed, is most likely to suggest a Veteran of the same speciality, category and branch, potentially excluding many others. Be that as it may, only one was sampled using the snowball method out of the six teams surveyed. This team participated after contacting its leader via e-mail. The address was provided by a Veteran who was not eligible to participate in this study because she was not in a leadership position at her current job.

Hence, since the sample size and its sampling method are very susceptible to leaving out many different groups from the population, it cannot be considered representative of the whole universe (Babbie, 2012).

The sample consists of 49 teams, each with one leader, with a total of 169 subordinates. Out of the 49 teams, six are led by Veterans, with one team being led by Navy Veteran (a former Sergeant), four being led by an Army Veteran (three former Officers and one former Enlisted Servicemember) and one being led by an Air Force Veteran (former Officer).

Regarding the distribution of sex, out of the 49 team leaders, 42,86 % are female (21), and 57,14 % are male (28) (Figure 4.1). Team members showed greater parity in this regard, with 49,11% male (83) and 50,89% female (86) (Figure 4.2). Broadly speaking, although males are more prevalent in both groups, females are not too far off. However, Veteran Team leaders show a significant disparity, with only one out of the six being female, the former Air Force Officer.

Figure 4.1 – Sex distribution of the team leaders

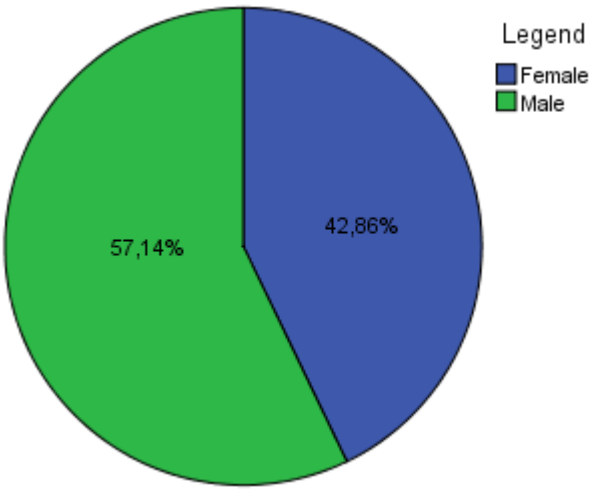
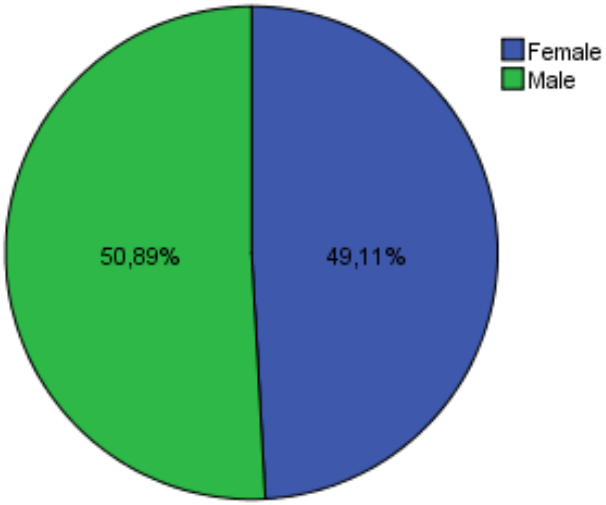


Figure 4.2 – Sex distribution of the team members



Both leaders and subordinates show similarities in their age distributions. The mean age for leaders is approximately 36 years of age, and with a Standard Deviation of 8,19, one can see that the mean is a good measurement since there is not much dispersion around it (CV≈11,31%). The youngest leader is 19, and the oldest is 53, with 50% of leaders between 30 and 40 years of age. The mean age of subordinates is approximately 31 years old, and as the mean age of leaders, this one also does not show much dispersion around it, meaning it is an accurate measure ($\sigma = 8,32$, CV≈26,96%). The youngest subordinate is 19, and the oldest is 58, with 50% of leaders between 25 and 35 years of age. The results above show that subordinates are overall younger than their leaders, with the most common age amongst leaders being 40 and subordinates 26 (Table 4.1 and 4.2).

Table 4.1 – Age distribution of leaders

age	Mean	36,22
	Standard Deviation	8,19
	Variance	67,01
	Median	37
	Q1	30
	Q3	40
	Minimum	19
	Maximum	53
	Mode	40

Table 4.2 – Age distribution of team members

age	Mean	30,86
	Standard Deviation	8,32
	Variance	69,18
	Median	29
	Q1	35
	Q3	25
	Minimum	19
	Maximum	58
	Mode	26

Chapter 4.2: Method and Technique

This study collected data using the extensive method, through the technique of online questionnaire surveys. The tool used was Quatrics XM surveys. The extensive method allows quantification of a "wide assortment of data and, consequently, numerous correlation analyses" (Quivy and Campenhoudt, 1995: 189). This method stands opposed to intensive (or qualitative) research since the former allows for statistical analysis, which can be used to extrapolate results of a sample to the universe, although, as seen before, this would require adequate sampling (Babbie, 2012).

The online questionnaire is a type of self-administered survey questionnaire. Since participants fill out the survey in the absence of the researcher, there needs to be special care taken into the survey's structure to avoid mistakes, interruptions, and misinterpretations. These considerations include phrasing, logical flow, avoidance of repetitiveness and double negatives, among others (Gideon, 2012).

Chapter 4.3: Variable Measurement

This study will measure four variables: Adaptation, Team Work Engagement, Problem Solving, and Efficacy Performance. All variables will use a Likert-type scale ranging from 1 to 7 on agreeability, where one equates to "Totally disagree" and seven equates to "Totally agree".

Adaptation will be measured using the adaptive team performance measurement (Table 12) developed by Marques-Quinteiro et al. (2015) by adapting the individual adaptive

performance measure. The latter used the expected observable behaviours for each adaptability sub-dimension, *Solving problems creatively*; *Dealing with uncertain and unpredictable work situations*; *Learning work tasks, technologies and procedures*; and *Handling work stress*. The authors developed eight items to measure the four subdimensions, two items to measure one of each dimension. These items measure the participants' perception of their Team's Adaptive Performance Effectiveness. The change from Individual to Team Adaptive Performance measurement was done by replacing "I" with "We" in each of the items (Marques-Quinteiro et al., 2015). In this study, this measurement's Cronbach's alpha was 0.91, showing excellent reliability between its items.

Team Work Engagement will be measured by its three dimensions (*vigour, absorption* and *dedication*) using the nine items developed by Costa et al. (2014) and adapted from Schaufeli et al.'s (2002) Utrecht Work Engagement Scale (UWES). The UWES has 17 items, 6 for vigour, 5 for dedication and 6 for absorption and the subject in the first-person singular. Costa et al. (2014) changed the subject from the first-person singular to the first-person plural and reduced the items to 9 (3 for vigour, 3 for dedication and 3 for absorption). The study showed through this measure that "TWE has higher correlations with team-level variables, as expected, but also with work-related ones" (Costa et al., 2014: 41), which justifies the research's items as a team-referent measure of engagement.

The measurement for the teams' Problem Solving Competency will use Aladwani's (2002) scale-based items. Aladwani's (2002) five items for measuring Problem Solving Competency cover Simon's (1960) three-stage Problem Solving Process, with the first two items, problem identification and definition, covering the first stage, alternative solution generation and alternative solution review cover the second stage, and the third refers to best option selection. Cronbach's alpha in Aldwani's (2002) study was 0.97, showing adequate reliability.

Chapter 5: Data Analysis

Chapter 5.1: Aggregation

Because this study focuses on teams, the data from leaders and subordinates on the variables of interest had to be aggregated to reduce individual differences inside the team (Bliese, 2001). Since the variables were all multi-item scales, the aggregation occurred by computing the Rwg for each one. The Rwg has a minimum criterion of 0,70 (James, Demaree, & Wolf, 1993). Failing to meet this threshold will result in the team level variables being deemed inappropriate for further analysis. The variables that underwent this aggregation were Adaption, Team Work Engagement and Problem Solving.

All three variables showed strong agreement since their values were larger than 0.71 and and lower than 0.90 (Biemann et al., 2012). Adaptation had the largest Rwg mean value out of the three, 0.9011, with only two teams (approximately 4.08 % of teams) showing weak and moderate agreement (ranging from .31 to .70), whilst the rest (approximately 95.92 %) have strong (approximately 38.78 %) or very strong levels (57.14%) of agreement (ranging from .71 to 1.00). The mean value for the Rwg of Team Work Engagement shows a strong level of agreement of 0.8863. Within the 49 teams, one (approximately 2.04 %) showed lack of agreement by having an Rwg ranging from 0.00 to 0.30, four (approximately 8.16 %) showed weak and moderate agreement, whilst the rest (approximately 87.55 %) demonstrated strong (approximately 32.65 %) and very strong (approximately 55.10 %) levels of agreement. Finally, and similar to Team Work Engagement, Problem Solving had a strong mean level of agreement (0.8835). As with the other two variables, most teams (approximately 89.80 %) showed strong (approximately 28.57 %) and very strong (approximately 61.23 %) levels of agreement, whilst only four showed moderate agreement and only one showed weak agreement. Given that all mean values surpass the criterion, reaching three strong values, bordering on the very strong, and to preserve the sample's statistical viability since it only comprises 49 teams, no teams were excluded from the analysis in any variable.

Chapter 5.2: Hypothesis Testing

Observing table 5.1 allows one to assert the existence of correlations between every possible pair of variables under study and the strength and direction of these relationships. However, it is important to note that "the association(correlation) of two variables with each other in the statistical sense does not imply that one is the cause and the other is the effect" (Wahed and Hsu, 2010; 131). This study seeks to verify the postulated hypothesis by validating whether or not there is causality between the respective variables of each hypothesis, something that will be tested further on.

The coefficient used to assess the existence of correlation was the Pearson Correlation Coefficient (r), one can see by looking at the table that there is correlation between Problem Solving and Team Work Engagement ($r = .43$, $p = .002$), Problem Solving and Adaptation ($r = .67$, $p < .001$) and Team Work Engagement and Adaption ($r = .63$, $p < .001$). This correlation shows at least a positive relationship of causality between the variables, meaning that as the values in one increase, so do the values on the other. Whilst the first correlation relationship is only medium ($.3 < r < .5$), the latter two have a large strength of association ($r > .5$) (Laerd, 2018). Efficacy as Performance measured by the leader only shows correlation with adaptation ($r = .29$, $p = .04$), even though it is only a small strength of association ($r < .03$) (Laerd, 2018).

Military Experience is the only variable so far that appears to contradict the hypotheses of the present study so far by showing no correlation with any other variable. However, one must note that the absence of correlation in this test does not necessarily mean no correlation. This test only shows there is no increase or decrease in the values of the other variable when values of the dummy variable for military experience reach close to 0 (0 = Veteran, 1 = Non-Veteran), something that could be skewed by the small number of veteran-led teams in the sample (6 in 49).

Table 5.1 – Descriptive Statistics and Correlations of the study variables

	Rwg	M	SD	1	2	3	4	5
1. Team Work Engagement	.89	5.53	.55	-				
2. Problem Solving	.88	6.00	.52	.43**	-			
3. Adpatation	.90	5.90	.45	.67***	.63***	-		
4. Military Experience	-	.88	.33	-.18	-.09	-.11	-	

5. Performance measured by the leader	-	5.95	.84	0.10	.27	.29*	.24	-
6. Number of elements	-	3.45	1.29	-.29*	-.13	-.15	-.26	-.24

*Note: *p<.05; **p<.01; ***p<.001*

N=49.

Hypothesis 1a proposed that Adaptation mediated the relationship between Problem Solving and Efficacy as Performance Measured by the leader, and Hypothesis 1b asserted that the relationship between Team Work Engagement and Efficacy as Performance Measured by the leader were mediated by Adaptation. The underlying assumption was that teams with more Problem Solving capabilities and Team Work Engagement were more Effective when they simultaneously showed greater adaptation.

By observing tables 5.2 and 5.2 that the results contradict hypotheses 1a and 1b. Adaptation showed no significative mediation between Problem Solving and Efficacy as Performance measured by the leader (Indirect effect = .18, *SE* = .16, *p* = .09, 95% CI [-.08;.53]) nor between Team Work Engagement and Efficacy as Performance measured by the leader (Indirect Effect = .44, *SE* = .17, *p* = .82, 95% CI [.10;.87]). However, it is important to note that Problem Solving demonstrated a significant positive effect on Efficacy as performance measured by the leader (*b* = .388, *t* (46) = 1.716, *p* = .007) and on Adaptation (*b* = .530, *t*(46) = 5.384, *p* < .001), as did Team Work Engagement (*b* = .557, *t* (46) =5.907, *p* < .001), and Adaptation also showed a significant positive effect on efficacy (*b* = .794, *t*(45)=2.292, *p* = .027).

Table 5.2 – Regression Results for Simples Mediation of Adaption between Problem Solving and Efficacy

Independent Variable	Efficacy (Performance)	
	B	Standard Error
Total and Direct Effects		
Problem Solving → Efficacy (c)	.39**	.23
Problem Solving → Adaptation (a)	.53***	.10
Adaptation → Efficacy (b)	.34	.34
Problem Solving → Efficacy (c')	.21	.29
Team Size	-.126	.09

Bootstrap results for Indirect Effect		
Problem Solving → Efficacy		
Confidence Interval	LLCI	ULCI
CI (95%)	-.08	.53

Adjusted R^2 =	.13
F =	2.30

*Note: *p<.05; **p<.01; ***p<.001; n=49; CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit; Bootstrap sample size =5000.*

Table 5.2 – Regression Results for Simples Mediation of Adaption between Team Work Engagement and Efficacy

Independent Variable	Efficacy Performance	
	B	Standard Error
Total and Direct Effects		
Team Work Engagement → Efficacy (c)	.05	.23
Team Work Engagement → Adaptation (a)	.56***	.09
Adaptation → Efficacy (b)	.79*	.35
Team Work Engagement → Efficacy (c')	-.39	.29
Team Size	-.16	.09
Bootstrap results for Indirect Effect		
Team Work Engagement → Efficacy		
Confidence Interval	LLCI	ULCI
CI (95%)	.103	.87

Adjusted R^2 =	.16
F =	2.77

*Note: *p<.05; **p<.01; ***p<.001; n=49; CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit; Bootstrap sample size =5000.*

The following two models sought to verify whether Military Experience on behalf of the leader played a moderating effect between Problem Solving and Adaptation, and Team

Work Engagement and Adaption. Hypotheses 2a and 2b proposed that the assumed positive relationship between Problem Solving and Adaptation and between Team Work Engagement and Adaptation was stronger in team leaders with military experience.

Tables 5.3 and 5.4 tested this moderation with Problem Solving and Team Work Engagement as the independent variable respectively. These tests showed that neither Problem Solving (b = .098, t (44) =.211, p = .834) nor Team Work Engagement (b = -.805, t (44) = -1.164, p = .251) had no main effect on Adaptation. The main effect of Military Experience on Adaption is negative, meaning that lower values on the dummy variable "Military Experience",, that is values closer to zero (the value attributed to veterans), lead to higher values on adaptation, something that supports the underlying assumption of the hypotheses. However, the tests show that this main effect on Adaption is not statistically significant (b = -1.538, t (44) = -1.001, p = .322; b = -4.036, t (44) = -1.974, p = .055).

These models explain approximately 41% and 48% of the variations on Adaptation when influenced respectively by Problem Solving ($F_{(4, 44)}$ = 7.90, p < .001) and Team Work Engagement ($F_{(4, 44)}$ = 10.58, p < .001), percentages that are statistically significant according to the tests.

Finally, when looking at the interaction effect of Problem Solving with Military Experience (b = .234, t(44) = .936, p = .355) on Adaptation and the interaction effect of Team Work Engagement with Military Experience on Adaptation (b = .700, t(44)= 2.00, p = .052) the results show that neither are statistically significant. The aforementioned results demonstrate that Hypotheses 2a and 2b could not be supported.

Table 5.3 – Regression Results for the Simple Moderation of Adaptation on the relationship between Problem Solving and Adaptation.

	Adaptation	
Model	B	Standard Error
1. Control Variable		
Number of Elements	-.04	.04
2. Main Effect		
Military Experience	-1.54	1.54
Problem Solving	.33	.23

3. Interaction		
Problem Solving*Military Experience	.23	.25
Adjusted R^2 =		0.41
F =		7.90***

*Note: *p<.05; **p<.01; ***p<.001; n=49.*

Table 5.4 – Regression Results for the Simple Moderation of Adaptation on the relationship between Team Work Engagement and Adaptation.

	Adaptation	
Model	B	Standard Error
1. Control Variable		
Number of Elements	-.01	.04
2. Main Effect		
Military Experience	-4.04	2.04
Team Work Engagement	-.11	.35
3. Interaction		
Team Work Engagement * Military Experience	.70	.35
Adjusted R^2 =		0.48
F =		10.58***

*Note: *p<.05; **p<.01; ***p<.001; n=49.*

Hypotheses 3a and 3b proposed that Military Experience on behalf of the leader moderate the strength of the relationships mediated by Adaptation between Problem Solving and Performance as Efficacy as Performance measured by the leader and between Team Work Engagement and Performance as Efficacy as Performance measured by the leader, respectively.

Tables 5.5 and 5.6 show the regression results for hypotheses 3a and 3b, respectively. The tests show that neither of these hypotheses can be supported since the moderating variable (Military Experience) showed no statistically significant effect on the mediation of Adaptation on the relationship between Problem Solving and Efficacy as performance measured by the leader (Indirect Effect = .21, *SE* = .29; 95% CI [-.38; .79]) and between Team Work Engagement and Efficacy as performance measured by the leader (Indirect Effect = .56, *SE* = 2.41; 95% CI [-3.24; 1.26]).

Furthermore, neither the existence of military experience nor the non-existence of such experience in team leaders show any statistically significant effect on the mediation of adaptation on the relationship between Problem Solving and Efficacy (Veterans (0): *b* = .11, *SE* = .19; 95% CI [-.07; .54]; Non-Veterans (1): *b* = .20, *SE* = .16; 95% CI [-.60; 3.74]). However, the non-existence of military experience in team leaders showed no statistically significant effect on the mediation of Adaptation on the relationship between Team Work Engagement and Efficacy (Non-Veterans (1): *b* = .47, *SE* = .21; 95% CI [.1; .92]), whereas the existence of this experience did not (Veterans (0): *b* = -.08, *SE* = 2.43, 95% CI [-.60; 3.74]).

Table 5.5 – Regression Results for the Mediation of Adaptation, moderated by Military Experience, on the relationship between Problem Solving and Efficacy

	Efficacy (Performance) measured by the Leader			
	Adaptation			
Moderator	Conditional Indirect Effect	Standard Error	Boot LLCI	Boot ULCI
Military Experience				
Veterans (0)	.11	.19	-.07	.54
Non-Veterans (1)	.20	.16	-.11	.54

Note: Listwise n = 49; *CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit; Bootstrap sample size =5000.*

Table 5.6 – Regression Results for the Mediation of Adaptation, moderated by Military Experience, on the relationship between Team Work Engagement and Efficacy

	Efficacy (Performance) measured by the Leader			
	Adaptation			
Moderator	Conditional Indirect Effect	Standard Error	Boot LLCI	Boot ULCI
Military Experience				
Veterans (0)	-.08	2.43	-.60	3.74
Non-Veterans (1)	.47	.21	.1	.92

Note: Listwise n = 49; *CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit; Bootstrap sample size =5000.*

In conclusion, the analysis of the tests conducted on the data gathered during this research concludes that the Analytical Model proposed by this study could not be supported. The data shows no statistically significant evidence to support the existence of a moderating effect of adaptation on the relationships between Problem Solving and Efficacy as performance measured by the leader and between Team Work Engagement and Efficacy as performance measured by the leader. Moreover, there was no statistically significant evidence to support that Military Experience moderates the relationships between Problem Solving and Adaptation and between Team Working Engagement. Lastly, the data also does not support the existence of mediated moderations.

Chapter 6: Discussions and Conclusions

Chapter 6.1: Discussion

This study intended to validate if Veteran-led teams were more adaptable than other non-Veteran-led teams, based being trained to adapt to uncertainty in life and death situations, would therefore make them better at adapting to situations in less dire circumstances.

Specifically, this research sought to find if adaptability played a mediating role between two emergent states, problem solving competencies and team work engagement, and team performance, as measured by the leader. Furthermore, there was also an attempt to verify if the existence of a military background had a moderating factor between these two emergent states and adaptability, and on their adaptability-mediated relationship with team performance measured by the leader.

Based the IMOI model, six hypotheses were tested to validate if there was any weight to the assumption mentioned above. After conducting an analysis on all hypotheses tests, it can be asserted that none were verified and that none showed any statistically significant results.

It is possible that these results corroborate the only quantitative study on the topic by Dexter (2020) and that Veteran managers aren't inherently better leaders because of their military training and experience. Neither this study or the one by Dexter (2020) explored further as to why this is the case. Several arguments could be made. First, it could be that Veterans who only undergo training but never go through any combat experience might not gain any enhancements to their leadership, adaptability, problem solving capacity or work engagement. Second, there could also be a problem of poor transfer, the military and civilian contexts are quite different in a lot of aspects and being a good leader in the "life and death" military context might not necessarily translate to superior leadership in less dire contexts. Third, even if Veterans, regardless of combat experience, tend to be more effective and adaptable leaders, then it could be a problem of adapting to civilian life. As Gagliardo (2020) found, Veterans were only more effective leaders if they adapted successfully to the civilian context, otherwise, their performance could actually be worse than non-Veterans.

When it comes to the relationship between Problem Solving and Effectiveness (Giampaoli et al., 2017; Lee et al., 2012; Yuzhu et al., 2011) and Team Work Engagement and effectiveness (Torrente et al., 2012; Costa et al., 2015; Mäkikangas et al., 2016), many studies have found a positive relationship between these three variables. Since this study did not

corroborate these findings there can be some circumstances that have led to these results. On the side of problem solving and adaptability, it could be that the teams have either not faced many situations that require adaptation or that they have some sort of structured work method in place that establishes a course of action for many different situations. In that sense, they and their leader don't need to partake in a creative process of finding solutions to their problems, as they already have pre-set answers to those questions. Whilst one the side of Team Work Engagement, it could be that given that most of the teams in teams in sample work in an auditing and consulting context. These contexts can be quite competitive, and that could harm their overall team spirit, meaning that even though they might have a high degree of work engagement, they might not have it as high at the team level.

Another factor that might have impacted the results is the perception of performance itself. This study used performance as measured by the leader, and, as one can see in figures 6.1 and 6.2, leaders tend to perceive higher performance in their teams than their subordinates. This misalignment might have other rippling effects, as this misalignment in terms of perspective between leaders in subordinates might impact just how the team handle lack of performance.

Chapter 6.2: Limitations

The first limitation worth mentioning is that the sample included only a small number of teams (n = 49, only six of which were led by Veterans). It is crucial to mention that a large sample size would not necessarily show different results. However, a larger sample size could reach the point of being representative of the population, depending on the sampling method and the size. Furthermore, a larger sample size would consequently add more data which could have changed some of the results, potentially aligning them with results from other research that reached different conclusions. However, it could also further cement the results of this study.

Another limitation is the main focus of the research itself, Portuguese Veteran Managers. As seen before, the Portuguese Armed Forces are shrinking in size in all categories, and although this means some Veterans will get jobs in leadership positions, there are some considerations one has to take into account. First, not all of them will have leadership positions, decreasing the number of eligible participants for this study. Second, some might not have reached leadership positions in the civilian world yet, or they might have in the past but not at the moment, or they might be in non-eligible leadership roles for this study (p.e. CEOs.

Directors, etcetera). At least four Veterans failed to participate in this study either because they no longer held team leader positions or because they performed non-eligible leadership roles. This last difficulty alone nearly halved the potential number of teams led by Military Veterans in this study. The third and last consideration regarding this limitation is that this population can sometimes be hard to reach. LinkedIn was the primary tool used to reach them. However, not all Veterans use LinkedIn. Furthermore, the Snowball sampling method proved much less fruitful than anticipated because Veterans do not leave the military at the same time as their colleagues frequently, losing touch with those that remain or only leave later. The same applies to active Servicemembers. Some acquainted active Servicemembers could not suggest people for the study because they had not kept in touch with former comrades from the Armed Forces after their departure and were not even aware of their current job situation.

Another possible limitation was the size of the survey questionnaire. Although there were not many complaints about this issue, some teams took more time to answer than others, and some had participation rates lower than 100%. Regarding the teams led by Veterans, according to Qualtrics, no one left a Survey unfinished. Everyone who opened the survey finished and submitted it. However, a few potential participants were not added to the sample because none of their team members filled out the survey, nor did they reply to contact attempts following the absence of participation from their subordinates. A possible explanation is that they were uncomfortable answering honestly to a survey handed out by their team leader that attempted to measure the efficacy and capabilities of their team. Even though there is no known case of such an occurrence, the team leader was the only point of contact with these teams, hence why they were the ones who gave their subordinates their respective survey. If subordinates did not participate because of this discomfort, it is unlikely that they shared such concerns with their leader, and if they did, their team leaders did not disclose them.

Lastly, the aggregation of individual survey responses into team level responses by using the mean value of each team could have jeopardized the reliability of the Data. However, this effect was most likely mitigated by using the RWG index, which showed that all aggregated levels surpassed its criterion level.

Chapter 6.3: Recommendations for Future Research

The scarcity of research on the topic of Veterans in the job market, be it in leadership positions or not, made itself notable when reviewing literature for this study. Indeed, even in the United

States, with so many academic contributions and culture around its military, not much literature has been produced on this topic. Most of the research focuses on the military rather than what comes after for Servicemembers. Further research is crucial to understand what contributions this type of experience can bring to the job market, both in hard and soft skills and leadership.

Moreover, although there is an ever-growing number of people leaving military service, there is no easy way of knowing who or where they are exactly, making them hard to reach. However, according to the data from the past decade, tens of thousands of veterans left the military, and it is reasonable to assume that many of them will continue working after leaving the military. Hence, future researchers wishing to study Veterans using quantitative techniques should consider doing so in partnership with governmental institutions such as any or all branches of the Portuguese Armed Forces, the Ministry of Defence or the Military University Institute. Since the State is likely to have a database or means to reach former Servicemembers, collaborating with one of these institutions might hold a key to such information.

Lastly, because this population is difficult to reach and its size appears to be small in the scope of Portuguese society, another methodology might be more suitable. A Qualitative Method, rather than a Quantitve one, like in this study, would not produce statistically significant results and, consequently, would not be able to extrapolate the results to the whole population. However, a qualitative approach would provide more insight into the individual perspective of each team leader, paving the way for the formulation of new questions, new hypotheses and alerting researchers to potential hurdles when studying this population.

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Appendix

Tables

Table 1 – Active Military personnel of the Portuguese Armed Forces by type of service (2011-2016)

Type of Service	Branch / Year	Navy	Army	Air Force	Total
Permanent Board	2016	6 499	5 376	3 844	15 719
	2015	6 784	5 317	3 845	15 946
	2014	6 950	5 396	3 827	16 173
	2013	7 140	5 871	3 837	16 848
	2012	7 065	5 833	3 489	16 387
	2011	7 177	6 021	3 933	17 131
Contract Regime	2016	881	7 807	2 100	10 788
	2015	978	8 608	2 112	11 698
	2014	1 254	9 650	2 151	13 055
	2013	1 518	11 549	2 506	15 573
	2012	1 571	10 184	2 609	14 364
	2011	2 016	10 837	2 714	15 567
Voluntary Regime	2016	0	168	0	168
	2015	0	79	0	79
	2014	0	25	0	25
	2013	0	217	0	217
	2012	0	965	0	965
	2011	0	732	0	732

Data source: Ministério da Defesa Nacional (2016)

Table 2 – Military Personnel of the Portuguese Armed Forces, inflow and outflow by Category and type of service in 2016

	Type of Service / Category	Permanent Board	Contract Regime	Voluntary Regime	Total
Inflow	Officers	173	178	0	351
	Sergeants	101	114	0	215
	Enlisted Grades	3	2 028	169	2 200
	Total	277	2 320	169	2 766
Outflow	Officers	270	270	0	540
	Sergeants	331	208	0	539
	Enlisted Grades	150	2 938	99	3 187
	Total	751	3 416	99	4 266
Balance	Total	- 474	- 1 096	70	- 1 500

Data source: Ministério da Defesa Nacional (2016)

Table 3 – Military Personnel of the Portuguese Armed Forces, inflow and outflow by Category and type of service in 2015

	Type of Service / Category	Permanent Board	Contract Regime	Voluntary Regime	Total
Inflow	Officers	174	177	0	351
	Sergeants	122	144	0	266
	Enlisted Grades	109	1 612	117	1 838
	Total	405	1 933	117	2 455
Outflow	Officers	166	257	0	423
	Sergeants	262	243	0	505
	Enlisted Grades	182	2 744	13	2 939
	Total	610	3 244	13	3 867
Balance	Total	- 205	- 1 311	104	- 1 412

Data source: Ministério da Defesa Nacional (2017)

Table 4 – Military Personnel of the Portuguese Armed Forces, inflow and outflow by Category and type of service in 2014

	Type of Service / Category	Permanent Board	Contract Regime	Voluntary Regime	Total
Inflow	Officers	166	65	-	231
	Sergeants	239	49	-	288
	Enlisted Grades	-	1 450	77	1 527
	Total	405	1 564	77	2 046
Outflow	Officers	194	302	-	496
	Sergeants	361	272	-	633
	Enlisted Grades	65	2 572	59	2 696
	Total	620	3 146	59	3 825
Balance	Total	- 215	- 1 582	18	- 1 779

Data source: Ministério da Defesa Nacional (2015)

Table 5 – Military Personnel of the Portuguese Armed Forces, inflow and outflow by Category and type of service in 2013

	Type of Service / Category	Permanent Board	Contract Regime	Voluntary Regime	Total
Inflow	Officers	171	102	6	279
	Sergeants	224	-	55	279
	Enlisted Grades	137	2 339	1 005	3 481
	Total	532	2 441	1 066	4 039
Outflow	Officers	184	165	86	435
	Sergeants	275	8	172	455
	Enlisted Grades	22	1 185	1 315	2 522
	Total	481	1 358	1 573	3 412
Balance	Total	51	1 083	- 507	627

Data source: Ministério da Defesa Nacional (2014)

Table 6 – Military Personnel of the Portuguese Armed Forces, inflow and outflow by Category and type of service in 2012

	Type of Service / Category	Permanent Board	Contract Regime	Voluntary Regime	Total
Inflow	Officers	168	2	-	170
	Sergeants	247	-	-	247
	Enlisted Grades	197	703	732	1 632
	Total	612	705	732	2 049
Outflow	Officers	310	187	-	497
	Sergeants	864	289	-	1 153
	Enlisted Grades	117	2 542	156	2 815
	Total	1 291	3 018	156	4 465
Balance	Total	- 679	- 2 313	576	- 2 416

Data source: Ministério da Defesa Nacional (2012b)

Table 7 – Military Personnel of the Portuguese Armed Forces, inflow and outflow by Category and type of service in 2011

	Type of Service / Category	Permanent Board	Contract Regime	Voluntary Regime	Total
Inflow	Officers	206	63	-	269
	Sergeants	274	103	-	377
	Enlisted Grades	210	4 375	765	5 350
	Total	690	4 541	765	5 996
Outflow	Officers	250	203	-	453
	Sergeants	555	252	-	807
	Enlisted Grades	81	3 209	384	3 674
	Total	886	3 664	384	4 934
Balance	Total	- 196	877	381	1 062

Data source: Ministério da Defesa Nacional (2011)

Table 8 – Military Personnel of the Portuguese Armed Forces, inflow and outflow by type of service (2010-2015)

	Type of Service / Year	Permanent Board	Contract Regime	Voluntary Regime	Total
Inflow	2016	277	2 320	169	2 766
	2015	405	1 933	117	2 455
	2014	405	1 564	77	2 046
	2013	532	2 441	1 066	4 039
	2012	612	705	732	2 049
	2011	690	4 541	765	5 996
Outflow	2016	751	3 416	99	4 266
	2015	610	3 244	13	3 867
	2014	620	3 146	59	3 825
	2013	481	1 358	1 573	3 412
	2012	1 291	3 018	156	4 465
	2011	886	3 664	384	4 934
Balance	2016	- 474	- 1 096	70	- 1500
	2015	- 205	- 1 311	104	- 1 412
	2014	- 215	- 1 582	18	- 1 779
	2013	51	1 083	- 507	627
	2012	- 679	- 2 313	576	- 2 416
	2011	- 196	877	381	1 062

Data source: Ministério Nacional da Defesa (2012a, 2012b, 2014, 2015, 2016 and 2017)

Table 9 – Categories, Subcategories and Ranks of the branches of the Portuguese Armed Forces (translated)

Category	Navy		Army		Air-Force	
	Subcategory	Ranks	Subcategory	Ranks	Subcategory	Ranks
Officers	Generals	Admiral	Generals	General	Generals	General
		Vice-Admiral		Lieutenant-General		Lieutenant-General

		Counter-Admiral Commodore		Major-General Brigadier-General		Major-General Brigadier-General
	Superior Officers	Captain-of-Sea-and-War Frigate Captain Lieutenant-Captain	Superior Officers	Colonel Lieutenant-Colonel Major	Superior Officers	Colonel Lieutenant-Colonel Major
	Subordinate Officers	First Lieutenant Second Lieutenant Sub-Lieutenant or Midshipman Officer Candidate	Captains Subordinate Officers	Captain Lieutenant Ensign Officer Candidate	Captains Subordinate Officers	Captain Lieutenant Ensign Officer Candidate
Sergeants		Sergeant Major Chief Sergeant Assistant Sergeant First Sergeant Second Sergeant Sub-Sergeant Second Sub-Sergeant		Sergeant Major Chief Sergeant Assistant Sergeant First Sergeant Second Sergeant Furriel Second Furriel		Sergeant Major Chief Sergeant Assistant Sergeant First Sergeant Second Sergeant Furriel Second Furriel

Enlisted Grades		Corporal Major Corporal First Sailor Second Sailor First Seaman Second Seamon	Section-Corporal Assistant Corporal First Corporal Second Corporal Private	Section-Corporal Assistant Corporal First Corporal Second Corporal Private

Source: Decreto-Lei n.º 90/2015 de 29 de maio - Estatuto dos Militares das Forças Armadas, DR nº 104/2015 – Série I.

Table 10 – Military Unit Structure of the Portuguese Army

Unit	**Commanding Officer Rank**	**Size**
Fireteam	Corporal	4 to 5 soldiers (including the leader)
Section	Furrier / 2nd Sergeant / Section Corporal	2 Fireteams
Platoon	Subordinate Officer	Three Sections
Company/Squadron/Battery	Captain	Four platoons
Battalion	Major / Lieutenant-Colonel	Five Companies
Regiment	Lieutenant-Colonel / Colonel	A varying number of Battalions or equivalent subunits of the same service
Brigade	Brigadier-General	A varying number of Regiments or Battalions

Source:

Table 11 – Relation between Leadership and organisational levels

Leadership Influence	Leadership Functions	Levels of Leadership	Conflict and Operational Levels	Categories of Officers
Indirect	Leading the Institution	Strategic	National Strategic Military Strategic	Political Unit Generals
		Organisational	Operational	Superior Officers
Direct	Leading People	Direct	Tactical	Subordinate Officers and Captains

Source: Rouco (2012)

Survey Questionnaire (Portuguese)

QUESTIONÁRIO AOS COLABORADORES

1. Este questionário insere-se num projeto de investigação levado a cabo por um grupo de investigadores do ISCTE-Instituto Universitário de Lisboa, focado na eficácia do trabalho em equipa em contexto de empresas de consultoria e auditoria. O principal objetivo deste projeto é identificar os fatores relacionados com o trabalho em equipa que contribuem para a eficácia dos projetos realizados e para a satisfação, quer dos clientes, quer dos próprios consultores.
2. Os dados recolhidos serão exclusivamente analisados pela equipa de investigação, estando garantido o anonimato.
3. As perguntas estão construídas de modo a que apenas tenha de assinalar a resposta que lhe parecer mais adequada. Procure responder sem se deter demasiadamente em cada questão.
4. Não há respostas certas ou erradas. O que nos interessa é exclusivamente a sua opinião pessoal.
5. Para cada pergunta existe uma escala. Pode utilizar qualquer ponto da escala desde que o considere adequado.
6. Responda a todo o questionário de seguida, sem interrupções.

Para qualquer esclarecimento, ou para receber informação adicional sobre o estudo por favor contacte: Prof.ª Doutora Ana Margarida Passos (ana.passos@iscte-iul.pt).

Obrigado pela sua colaboração!

Para responder a este questionário pense no projeto de consultoria/ auditoria em que está atualmente envolvido e na equipa em que está a trabalhar

1. As questões que a seguir se apresentam procuram descrever os **comportamentos da equipa**. Indique em que medida concorda com cada uma delas utilizando a escala de resposta:

Discordo Totalmente	Discordo muito	Discordo em parte	Não concordo nem discordo	Concordo em parte	Concordo muito	Concordo Totalmente
1	2	3	4	5	6	7

A **nossa equipa** é eficaz…

1.	A levar a cabo ações criativas para resolver problemas para os quais não há respostas fáceis ou diretas.	1	2	3	4	5	6	7
2.	A encontrar formas inovadoras de lidar com situações inesperadas.	1	2	3	4	5	6	7
3.	Em ajustar-se e lidar com situações imprevistas, mudando rapidamente de foco e tomando as medidas adequadas.	1	2	3	4	5	6	7
4.	A desenvolver planos de ação alternativos, num curto espaço de tempo, para lidar com imprevistos.	1	2	3	4	5	6	7
5.	Na procura e desenvolvimento de novas competências para dar resposta a situações/ problemas.	1	2	3	4	5	6	7
6.	A ajustar o estilo pessoal de cada membro ao da equipa como um todo.	1	2	3	4	5	6	7
7.	Na melhoria das relações interpessoais tendo em consideração as necessidades e aspirações de cada membro.	1	2	3	4	5	6	7
8.	A manter o foco mesmo quando lida com várias situações e responsabilidades.	1	2	3	4	5	6	7

2. As seguintes afirmações referem-se a **sentimentos** que algumas equipas têm **em relação ao seu trabalho**. Utilize, por favor, a mesma escala apresentada anteriormente.

1.	Quando estamos a trabalhar sentimo-nos cheios de energia.	1	2	3	4	5	6	7
2.	Sentimo-nos com força e energia quando estamos a trabalhar.	1	2	3	4	5	6	7
3.	Estamos entusiasmados com este trabalho.	1	2	3	4	5	6	7
4.	Este trabalho inspira-nos.	1	2	3	4	5	6	7
5.	Durante o trabalho, temos vontade de participar nas diversas atividades.	1	2	3	4	5	6	7
6.	Somos felizes quando estamos envolvidos neste trabalho.	1	2	3	4	5	6	7
7.	Estamos orgulhosos com o nosso trabalho nesta consultora.	1	2	3	4	5	6	7
8.	Estamos imersos no trabalho desta consultora.	1	2	3	4	5	6	7
9.	“Deixamo-nos levar” pelas atividades deste trabalho.	1	2	3	4	5	6	7

3. Por favor, pense agora nos **resultados do trabalho da sua equipa**. Continue, por favor, a utilizar a mesma a escala.

1.	A minha equipa tem um bom desempenho.	1	2	3	4	5	6	7
2.	Estamos satisfeitos em trabalhar nesta equipa.	1	2	3	4	5	6	7
3.	A minha equipa é eficaz.	1	2	3	4	5	6	7
4.	Não hesitaria em trabalhar com esta equipa em outros projetos.	1	2	3	4	5	6	7
5.	Esta equipa poderia trabalhar bem em futuros projetos.	1	2	3	4	5	6	7

4. Considerando **a sua equipa como um todo**, indique em que medida esta é heterogénea (de 0 a 100%).

Nada heterogénea	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	Muito heterogénea

5. As questões que se seguem dizem respeito à **forma como a sua equipa funciona enquanto grupo**. Indique, por favor, com que **frequência** cada uma destas situações se verifica na realização do vosso trabalho. Utilize, por favor, a seguinte escala:

Discordo Totalmente	Discordo muito	Discordo em parte	Não concordo nem discordo	Concordo em parte	Concordo muito	Concordo Totalmente
1	2	3	4	5	6	7

Em que medida a sua equipa trabalha ativamente para…

1.	Identificar os principais desafios que espera enfrentar	1	2	3	4	5	6	7
2.	Garantir que todos os elementos da equipa compreendem claramente os objetivos da mesma	1	2	3	4	5	6	7
3.	Desenvolver uma estratégia global para orientar as atividades da equipa	1	2	3	4	5	6	7
4.	Solicitar feedback oportuno por parte dos *stakeholders* (ex: clientes, gestores de topo, outras estruturas organizacionais) acerca do alcance dos objetivos da sua equipa	1	2	3	4	5	6	7
5.	Monitorizar aspetos importantes do ambiente de trabalho (ex: inventários, equipamentos e operações, fluxos de informação)	1	2	3	4	5	6	7
6.	Garantir que os membros prestam ajuda aos outros membros da equipa (entreajuda) quando necessário	1	2	3	4	5	6	7
7.	Coordenar as atividades de entre si	1	2	3	4	5	6	7
8.	Lidar com conflitos pessoais de forma justa e equitativa	1	2	3	4	5	6	7
9.	Estimular o melhor de cada um	1	2	3	4	5	6	7
10.	Manter um ambiente emocional equilibrado em equipa							

6. As questões que se seguem dizem respeito à forma como a sua **equipa trabalha e funciona**. Continue, por favor, a utilizar a mesma escala.

1.	A minha equipa facilita a integração e aceitação de pessoas de diversas faixas etárias	1	2	3	4	5	6	7
2.	Na minha equipa são dadas oportunidades de formação e desenvolvimento a todos os colaboradores, independentemente da sua idade	1	2	3	4	5	6	7
3.	Sinto que o líder da minha equipa faz um bom trabalho na gestão de pessoas de diferentes idades	1	2	3	4	5	6	7

7. Pense agora na forma **como a sua equipa olha para si própria**. Indique em que medida concorda com cada uma das seguintes afirmações. Continue, por favor, a utilizar a mesma a escala.

1.	Se a minha equipa encontrar numa situação difícil, conseguimos pensar em várias formas de sair dela.	1	2	3	4	5	6	7
2.	Neste momento, somos uma equipa bem-sucedida.	1	2	3	4	5	6	7
3.	Conseguimos pensar em várias formas de atingir os nossos objetivos de equipa.	1	2	3	4	5	6	7
4.	Nós, enquanto equipa, vemos com expectativa a vida que temos pela frente.	1	2	3	4	5	6	7
5.	O futuro reserva muitas coisas boas para a minha equipa.	1	2	3	4	5	6	7
6.	No geral, espero que nos aconteça mais coisas boas do que más.							
7.	Às vezes nós "forçamo-nos" a fazer coisas, quer nós queiramos ou não.							
8.	Quando estamos numa situação difícil, geralmente conseguimos encontrar uma solução.							
9.	Não nos incomoda se existirem pessoas que não gostem de nós.							

10. Nós, enquanto equipa, estamos confiantes de que poderemos lidar eficientemente com eventos inesperados.
11. Nós, enquanto equipa, conseguimos resolver a maioria dos problemas se investirmos o esforço necessário.
12. Nós, enquanto equipa, conseguimos manter a calma ao enfrentar dificuldades, pois confiamos nas nossas capacidades para lidar com os problemas.

8. Pense nos **elementos que constituem a sua equipa de trabalho**. Por favor, continue a utilizar a mesma escala de resposta.

1.	Na minha equipa sabemos exatamente qual é o membro especialista numa determinada área	1	2	3	4	5	6	7
2.	Quando os membros da minha equipa dão informação ou indicações, faço questão de confirmar individualmente se estão corretas	1	2	3	4	5	6	7
3.	Sentimo-nos confortáveis em aceitar sugestões de outros membros da equipa sobre os procedimentos a seguir	1	2	3	4	5	6	7
4.	Confio no conhecimento dos outros membros da minha equipa	1	2	3	4	5	6	7
5.	A minha equipa tem poucos mal-entendidos sobre o que fazer							
6.	Cada membro da minha equipa é especialista numa área de conhecimento relevante para o nosso projeto							
7.	A minha equipa trabalha bem e de forma coordenada							
8.	Cada membro da equipa é responsável por uma área de conhecimento distinta							

9. Pense no trabalho realizado pela equipa durante o projeto (por exemplo, análise dos resultados, contacto entre os membros, reuniões, etc.). Indique a percentagem (%) de **tempo em que a sua equipa comunicou**, na última semana, através dos diferentes métodos. A soma dos quatro métodos de comunicação deverá corresponder a 100%.

1. Face-a-face.
2. Comunicação áudio por telefone ou outros dispositivos através da Internet.
3. Comunicação visual através de Zoom, Teams ou outras plataformas *online.*
4. E-mail (correio eletrónico).

100%

10. As questões que se apresentam de seguida referem-se à forma como **atua enquanto membro da sua equipa**. Utilize, por favor, a seguinte escala:

Discordo Totalmente	Discordo muito	Discordo em parte	Não concordo nem discordo	Concordo em parte	Concordo muito	Concordo Totalmente
1	2	3	4	5	6	7

1.	Tenho a iniciativa de desenvolver e dar sugestões relativamente a questões que podem influenciar o desempenho da minha equipa	1	2	3	4	5	6	7
2.	Tenho iniciativa de sugerir novos projetos que são benéficos para a minha equipa	1	2	3	4	5	6	7
3.	Apresento sugestões para melhorar os procedimentos de trabalho da minha equipa	1	2	3	4	5	6	7
4.	Tenho iniciativa de apresentar sugestões construtivas que ajudam a minha equipa a alcançar os seus objetivos.	1	2	3	4	5	6	7
5.	Apresento sugestões construtivas para melhorar o funcionamento da minha equipa	1	2	3	4	5	6	7

11. Pense agora no **projeto em que a sua equipa está envolvida e na forma como trabalham uns com os outros.** Indique em que medida concorda ou discorda com cada afirmação. Continue a utilizar a mesma escala

1.	Se alguém comete um erro neste equipa, geralmente isso é utilizado contra ele/ela	1	2	3	4	5	6	7
2.	É difícil pedir ajuda aos outros membro da equipa	1	2	3	4	5	6	7
3.	É seguro correr riscos dentro da minha equipa	1	2	3	4	5	6	7
4.	Os membros da minha equipa não toleram os erros uns dos outros	1	2	3	4	5	6	7
5.	Ninguém da minha equipa atuaria deliberadamente de forma a prejudicar um membro da equipa	1	2	3	4	5	6	7

12. Pense agora no **comportamento de liderança** da sua chefia. Indique em que medida concorda com cada uma das afirmações. Por favor, continue a utilizar a mesma escala:

O <u>líder</u> da nossa equipa…

1.	Responde prontamente às necessidades ou preocupações dos membros da equipa.	1	2	3	4	5	6	7
2.	Envolve-se em ações que demonstram respeito e preocupação pelos membros da equipa	1	2	3	4	5	6	7
3.	Vai para além dos seus interesses pessoais pelo bem-estar da equipa	1	2	3	4	5	6	7
4.	Faz coisas para tornar agradável ser um membro da equipa	1	2	3	4	5	6	7
5.	Atenta pelo bem-estar pessoal dos membros da equipa	1	2	3	4	5	6	7

13. Continue a pensar na **atuação do líder da sua equipa.** Procure pensar na atuação do líder **na gestão remota da sua equipa** neste período de pandemia. Por favor, continue a utilizar a mesma escala de resposta.

O Líder encoraja a equipa…

1.	A ser responsável por determinar os métodos, procedimentos, e horários para a realização do trabalho remoto	1	2	3	4	5	6	7
2.	A decidir sobre quem faz o quê dentro da equipa	1	2	3	4	5	6	7
3.	A tomar a maioria das decisões relacionadas com o seu próprio trabalho remoto	1	2	3	4	5	6	7
4.	A resolver os seus próprios problemas enquanto se encontram em trabalho remoto	1	2	3	4	5	6	7
5.	A ser responsável pelos seus próprios assuntos durante o trabalho remoto.	1	2	3	4	5	6	7
6.	A avaliar o seu desempenho em trabalho remoto	1	2	3	4	5	6	7

14. Pense agora na forma como os membros da sua equipa **trabalham uns com os outros** na realização dos projetos em que estão envolvidos. Por favor, continue a utilizar a mesma escala de resposta.

Na minha equipa, eu e os outros membros da equipa …

1.	Trocamos informações úteis que fazem o trabalho progredir	1	2	3	4	5	6	7
2.	Partilhamos conhecimentos que promovem o progresso do trabalho	1	2	3	4	5	6	7
3.	Partilhamos recursos que facilitam a realização das tarefas	1	2	3	4	5	6	7
4.	Garantimos que as nossas tarefas são concluídas a tempo	1	2	3	4	5	6	7
5.	Fazemos ajustes para cumprir os prazos	1	2	3	4	5	6	7
6.	Reorganizamos instintivamente as nossas tarefas quando é necessário fazer mudanças	1	2	3	4	5	6	7

15. Pense agora na forma como os **membros da equipa comunicam** uns com os outros. Por favor, utilize a seguinte escala de resposta.

Discordo Totalmente	Discordo muito	Discordo em parte	Não concordo nem discordo	Concordo em parte	Concordo muito	Concordo Totalmente
1	2	3	4	5	6	7

Os membros da minha equipa…

1.	Comunicam frequentemente entre si.	1	2	3	4	5	6	7
2.	Comunicam frequentemente em reuniões espontâneas, conversas telefónicas, etc	1	2	3	4	5	6	7
3.	Partilham abertamente informações relevantes para a tarefa por todos os membros	1	2	3	4	5	6	7
4.	Estão satisfeitos com a pontualidade em que recebem informações da equipa	1	2	3	4	5	6	7
5.	Estão satisfeitos com a precisão das informações recebidas de outros membros	1	2	3	4	5	6	7
6.	Estão satisfeitos com a utilidade das informações recebidas de outros membros	1	2	3	4	5	6	7

16. As questões que se seguem dizem respeito às **competências de resolução de problemas** da sua equipa. Por favor, continue a utilizar a mesma escala:

1.	A minha equipa é eficaz em identificar problemas relevantes para a tarefa	1	2	3	4	5	6	7
2.	A minha equipa é eficaz a definir os problemas	1	2	3	4	5	6	7
3.	A minha equipa é eficaz de gerar soluções alternativas	1	2	3	4	5	6	7
4.	A minha equipa é eficaz em rever alternativas	1	2	3	4	5	6	7

5.	A minha equipa é eficaz na avaliação das opções	1	2	3	4	5	6	7

17. Pense agora no **líder da sua equipa**. Por favor, continue a utilizar a mesma escala

1.	Procura feedback para melhorar as interações com outros	1	2	3	4	5	6	7
2.	Reavalia as suas decisões quando confrontado com diferentes posições	1	2	3	4	5	6	7
3.	Diz exatamente o que quer dizer	1	2	3	4	5	6	7
4.	Está disposto a admitir erros quando são feitos.	1	2	3	4	5	6	7
5.	Demostra emoções e sentimentos	1	2	3	4	5	6	7
6.	Ouve diferentes pontos de vista atentamente antes de chegar a conclusões	1	2	3	4	5	6	7
7.	Toma decisões éticas	1	2	3	4	5	6	7
8.	Toma decisões com base nas suas crenças	1	2	3	4	5	6	7
9.	Demonstra competência através das suas palavras e ações	1	2	3	4	5	6	7
10.	Mobiliza e promove um sentido coletivo de missão	1	2	3	4	5	6	7
11.	Comunica uma visão clara do futuro	1	2	3	4	5	6	7
12.	Fala do futuro com otimismo	1	2	3	4	5	6	7
13.	Demonstra uma forte convicção nas suas crenças e valores	1	2	3	4	5	6	7

18. Pense agora na forma como os membros da equipa se relacionam uns com os outros. Continue a utilizar a mesma escala:

1.	Nesta equipa, as pessoas podem contar umas com as outras.	1	2	3	4	5	6	7
2.	Temos total confiança na capacidade dos membros para realizarem as tarefas	1	2	3	4	5	6	7
3.	Nesta equipa as pessoas mantêm a sua palavra	1	2	3	4	5	6	7
4.	Nesta equipa, as pessoas têm em consideração os interesses das outras	1	2	3	4	5	6	7
5.	Existem algumas pessoas na equipa que têm agendas ocultas.	1	2	3	4	5	6	7

19. Por fim, olhe para a sua organização como um todo. Continue a utilizar a mesma escala

1.	O trabalho desenvolvido por esta equipa traduz-se, sem qualquer dúvida, em valor acrescentado quer para a empresa quer para os clientes.	1	2	3	4	5	6	7
2.	As capacidades desta equipa são raras e difíceis de encontrar no mercado.	1	2	3	4	5	6	7
3.	É difícil de encontrar no mercado uma equipa que fosse capaz de substituir esta equipa	1	2	3	4	5	6	7
4.	A empresa tem uma estrutura e organização capaz de tirar verdadeiro partido desta equipa	1	2	3	4	5	6	7

Para terminar, gostaríamos de lhe solicitar alguns dados sociodemográficos, indispensáveis ao tratamento estatístico dos questionários:

1.Sexo: ☐Masculino ☐ Feminino **2. Idade:** _____ anos

3. Função que exerce na empresa: _____

4. Há quanto tempo trabalha nesta Empresa?

☐ Menos de 1 anos ☐ 1 a 3 anos ☐ 3 a 5 anos ☐ 5 a 7 anos ☐ Mais de 7 anos

5.Número de pessoas que trabalham na sua equipa: _____

MUITO OBRIGADO PELA SUA PARTICIPAÇÃO!