



# A Systematic Review of Self-Determination Theory's Application in Military and Police Organizations

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## Abstract

Self-determination theory (SDT) represents one of the most comprehensive theories of human motivation and psychological growth. SDT theorizes how social contexts may sustain or inhibit human functioning, depending on their ability to fulfill individuals' basic psychological needs (autonomy, competence, and relatedness). Although there are some reviews and meta-analyses that address the application of the SDT in organizational environments, no systematic review has previously been dedicated to broadly investigating this framework in military and police organizations and training institutes. This work aims to apply this theory in hierarchical settings and provide an overview of the outcomes associated with the principles of SDT. For this purpose, after a full-text analysis of 2147 studies, we selected 29 articles that aligned with our objective. Our analysis focused on outcomes related to well-being, engagement, various types of motivation, positive affect, prosocial behavior, and other constructs. The purpose of the current systematic review is to understand the dynamic interplay between motivation and positive outcomes in military and police contexts through SDT framework.

**Keywords** Motivation · Basic psychological needs · Self-determination theory · Military · Police

## Introduction

Motivation is a crucial construct for military and police personnel: it can be defined as the energetic forces that allow behaviors to start and determine their form, direction, intensity, and duration (Pinder 2008). Indeed, motivation leads people to do something and defines how much time and effort it takes (Arnold 2014). The construct above is interpreted in various ways: as a cause (Fazel and Ahmadi 2011; Hauser 2014), as an outcome (Hardré et al. 2007; Jaakkola and Liukkonen 2006; Neumeister and Finch 2006), or as a mediating variable between causes and outcomes (Fernandez 2008; Saltson and Nsiah 2015; Syafii et al. 2015).

Self-determination theory (SDT; Deci and Ryan 1985) offers a challenging perspective, as it distinguishes between different types of motivation—intrinsic and extrinsic—and how these are internalized by individuals. Recognizing motivation as a dynamic interplay of intrinsic and various extrinsic motivations, SDT underscores the importance of satisfying basic psychological needs for relatedness, competence, and autonomy. These needs are as critical in military and police contexts as they are in civilian life, influencing well-being, effectiveness, and engagement. In this kind of organization, characterized by its demanding nature and hierarchical structure, understanding and fostering the right type of motivation is essential. SDT provides a framework to explore how a supportive environment that nurtures autonomous motivation can lead to better well-being, engagement, and performance in these demanding settings. Thus, applying SDT in military and police contexts, a focus of the current review is aimed to offer insights to enhance motivation and well-being in this organizational environment.

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## Self-Determination Theory and Different Sources of Motivation

SDT offers one of the most comprehensive frameworks on human motivation and personality development complexities. It posits that human development hinges on active engagement, the pursuit of information, behavioral regulation, and integration within social structures. This theory has been applied across various real-life domains: parenting (e.g., Grolnick et al. 2021), education (e.g., Alivernini et al. 2023), healthcare (e.g., Osei-Frimpong 2017), sports and physical activity (e.g., Mallia et al. 2019), psychotherapy (e.g., Keleher et al. 2019), virtual worlds (e.g., Van Minkelen et al. 2020), and work motivation (e.g., Gagné et al. 2018).

The theory originated in 1971 with the work of Deci, who elaborated on the distinction between intrinsic and extrinsic motivation. These concepts were further developed to suggest that an individual can have qualitatively different reasons for engaging in extrinsically motivated behaviors (Deci and Ryan 1985).

SDT does not explain motivation as a unitary phenomenon: it differentiates types of motivation, which have different catalyzers, concomitants, and consequences. SDT views motivation as a product of the alignment between personal needs and the environment: social and contextual factors can either support or undermine human motivation. Different kinds of motivation are located along a continuum from autonomy to control. Behaviors are autonomously motivated when people experience volition, and the action is seen as an expression of oneself. On the contrary, controlled motivation is linked to internal or external pressures. Intrinsically motivated behaviors can be defined as autonomous; extrinsically motivated behaviors depend on the degree to which they are located on the aforementioned continuum (Ryan and Connell 1989). Indeed, SDT does not define extrinsic motivation as a negative construct (Gerhart and Fang 2015), because it can enhance, decrease, or have no effects on intrinsic motivation (Deci 1972). Within this theory, extrinsic motivation can be internalized: the degree of internalization corresponds to the degree to which the behavior is regulated in an autonomous or controlled way. The regulation can be external (controlled by self-alien forces) or introjected (the person has not completely accepted external control): the difference is due to the phenomenal drivers and the quality of consequent behaviors. Extrinsically motivated behaviors can be located near the autonomous limit of the continuum when there is identification with the value of extrinsic behavior. Lastly, the regulation can be fully accepted and integrated with personal values and beliefs. It is also possible a full lack of intentionality and motivation:

in this case, SDT refers to amotivation. It can be due to an inability to attain aims or a lack of interest or relevance.

In sum, SDT considers motivation as a dynamic construct: a person can be motivated by intrinsic or different types of extrinsic motivation, also simultaneously.

## Basic Psychological Needs

The result of the dynamic interaction between people and their daily contexts is the satisfaction (or dissatisfaction) of basic psychological needs for relatedness, competence, and autonomy (Van den Broeck et al. 2010; Ryan and Deci 2019). Within SDT, basic psychological needs are essential nutrients for growth, integrity, and well-being (Ryan and Deci 2017). Basic psychological needs require satisfaction to guarantee development and well-being. Equally to physical needs, their deprivation or satisfaction has objective and measurable consequences (Deci et al. 1989; Ryan and Grolnick 1986; Williams et al. 1996). The need for autonomy is related to feeling volitional, congruent, and integrated (DeCharms 1968; Friedman 2003; Ryan 1993; Shapiro 1981). Competence is associated with the need to feel able to operate effectively in important life contexts (Deci and Moler 2005). Relatedness involves feeling socially connected and being a significant social group member (Deci and Ryan 2014). A social context can be characterized by the degree to which it supports autonomy, enhances effectiveness, and fosters relational connections.

## SDT and Workplace Motivation

Work is not only a way to survive but also an important means for self and collective realization: people search for jobs that let them feel a sense of purpose and fulfillment (Ryan et al. 2008). SDT has deepened the relationship between work motivation and the constructs of performance and well-being. Promoting organizational conditions where workers experience support in their autonomy leads to more personal satisfaction and fosters parallel positive outcomes for organizational effectiveness (Deci et al. 2017). SDT studies have demonstrated that satisfaction with basic psychological needs is related to a wide variety of antecedents and outcomes in organizational contexts. The work by Van den Broeck et al. (2016) has confirmed that each basic need is an independent predictor of psychological growth, internalization, and well-being: specifically, each need uniquely predicts an internalization process towards autonomous forms of motivation. Other studies have underlined how organizations that encourage autonomous forms of motivation have workers with less exhaustion, burnout, and ill-being (e.g., Olafsen et al. 2017). A meta-analysis by Slemp et al. (2020) has shed light on a specific workplace: they have found that autonomous teachers' motivation was positively

associated with their well-being, job satisfaction, and autonomy-supportive functioning and negatively linked to distress and burnout. Autonomously motivated teachers were more satisfied, committed, and engaged than teachers characterized by controlled motivation; besides, autonomously motivated teachers recorded greater well-being and less burnout and distress. Another meta-analysis (Van den Broeck et al. 2021) has assessed the validity of each of SDT's types of motivation in predicting organizational behavior. Results have shown that, among all the types of motivation, mostly autonomous forms of motivation guarantee employee well-being, attitudes, and behavior. Furthermore, the aforementioned meta-analysis has demonstrated that if organizations want to achieve employee well-being, positive attitudes, and performance, they should avoid incentives and sanctions because external regulation has proved to be the weaker form of motivation toward performance. A need-supportive environment is fundamental for organizations, too: workers' self-motivation guarantees organizational profitability and effectiveness (Deci et al. 2017), but also long-term organizational health, customer satisfaction and loyalty, and financial success (Doshi and McGregor 2015; Mackey and Sisodia 2014). A study conducted in more than three thousand Dutch companies has confirmed that the job autonomy of employees was an important predictor of the profitability of the organization (Preenen et al. 2016).

### **Peculiarities of the Military and Police Organization**

Military and police organizations can be defined as greedy institutions: they make great demands on workers regarding commitment, loyalty, time, and energy (Segal 1986). Militaries and policemen must constantly invest their physical and psychological resources to respond to institutions' requests and undergo procedures, rules, attitudes, and sanctions (Caforio and Nuciari 1994). More than other workers, police officers and militaries are exposed to occupational stress: operational duties, shift work, transfers, time pressures, and lack of communication (Biggam et al. 1997; Toch 2002). The main peculiarity of military and police organizations is the strict hierarchical structure; the rigid system characterizes not only training institutes but also the following working environment (Soeters 2018). Centralization and hierarchy are the primary features of this context, with absolute subordination from top to bottom. Since people enter military and police training, they are called to face demanding and harsh experiences, observe strict rules, and accept a highly formalized hierarchical role system (Caforio 2018; Soeters 2018). Command-and-control (C2) is historically the most widely described leadership style in military and police contexts (Harris and White 1987). Its adoption is closely tied to the need for coordination within large and complex organizations (Cropley et al. 2005). This

process is essential for ensuring effective operations on a large scale, particularly in emergency situations where the speed and efficiency of resource management can be critical, along with strict obedience to orders (Houghton et al. 2006). Nowadays, militaries and policemen often operate in extremely delicate and complex situations: emergencies and wars all over the world require ready personnel characterized by authentic motivation to serve. Military and police personnel must be capable of adaptability, mainly because of these volatile and unpredictable international events. Work motivation contributes to effectiveness during the service: war, crisis, and peace support (Kirke 2009). Military and police organizations play a key role in the maintenance of society, so nations worry about having effective military and police deployments, and they require high levels of performance (Reiter and Wagstaff 2018). For all these reasons, it is necessary to shed light on this organizational field to safeguard the motivation of militaries and policemen and, consequently, their well-being. The present systematic review considers studies that have involved both military personnel and police officers. This choice is due to the structural similarities between these organizations (Varghese 2010). In particular, both organizations are characterized by clear hierarchies and command and control management, with well-defined roles and standardized procedures (King 2005). Military personnel and police officers attend rigorous training programs, which include physical, technical, and strategic skills. Both organizations are often involved in managing emergency situations, such as public disturbances, natural disasters, or terrorist attacks. Militaries and policemen have the duty to protect the citizens' safety, although in different contexts: militaries focus on national security, while policemen work on public safety at the local level. Both professions require a strong commitment to public service and can involve personal sacrifices, leading to stress. In some situations, such as peacekeeping operations, wars, or national emergencies, military personnel and police officers can work together (Mattingsdal et al. 2023).

### **The Present Review: SDT in Military and Police Organizations**

Even if there are some reviews and meta-analyses that investigate the application of SDT in work contexts (e.g., Slemp et al. 2020; Van den Broeck et al. 2016, 2021), no systematic review has previously been dedicated to comprehensively investigating this framework in military or police organizations.

The present work aims to shed light on the challenging application of this complex theory in a hierarchical environment, providing an overview of the outcomes associated with SDT tenets.

## Method

### Procedure

To search for studies, between May 2023 and September 2023, we conducted independent searches on Scopus. We used the following keywords associated with SDT and the military/police world: “autonomy support\*” OR “competence support\*” OR “relatedness support\*” OR “need support\*” OR “need satisf\*” OR “need fulfil\*” OR “need frustrat\*” OR “need thwart\*” OR “self-determin\*” OR “motivation\*” OR “motivational climate” OR “motivational atmosphere” OR “autonomous motivat\*” OR “controlled motivation” OR “extrinsic motivat\*” OR “intrinsic motivat\*” OR “intrinsic interest” OR “amotivation” AND “militar” OR “soldier” OR “police” OR “police officer” OR “police force” OR “police service” OR “army” OR “armed force” AND “work” OR “job” OR “organization\*” OR “military academ\*” OR “train\*”. Our systematic review protocol is registered with PROSPERO (registration number: CRD42024501443).

### Study Selection and Eligibility Criteria

The initial search found 2147 results. Exclusion of 26 duplicates reduced this number and a further 2.077 studies were excluded if inclusion criteria were not met in the abstract

or the text. We used eligibility criteria to assess studies obtained from the aforementioned database. Inclusion criteria were as follows: SDT framework; military context; police context; active soldiers; militaries on training; policemen on training; work motivation; enlist motivation. Exclusion criteria were: veterans; retired service personnel; physical activity motivation. The records retrieved were analyzed by Rayyan software as a screening tool (Ouzzani et al. 2016). After a full-text review, 29 useful articles were included in our analysis.

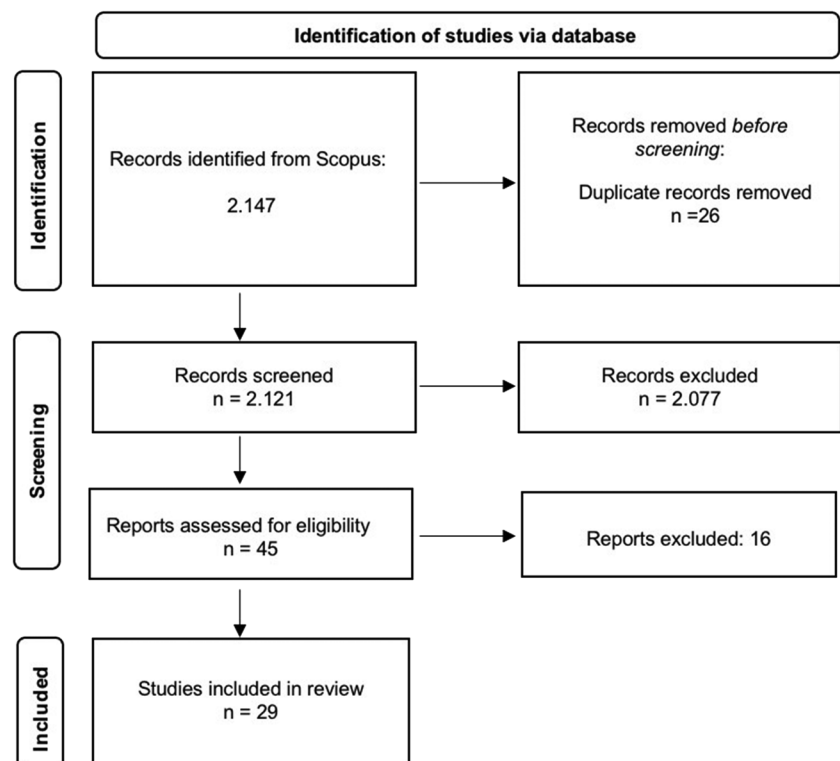
### Data Extraction

Information from the 29 articles were sorted by the first author into alphabetical order. The table contained in the “Appendix” was built to extract the following study characteristics: (1) study (authors, year, title), (2) theoretical framework, (3) sample, (4) context (organization or training), (5) instruments, (6) outcomes, (7) results.

### PRISMA Flow Diagram of Study Selection Process

To achieve the goal of the present review, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were used to report results (Moher et al. 2009). Based on a guideline checklist, it represents a powerful instrument for writing literature reviews because it is useful to assess the methodological quality of the process

**Fig. 1** Flow diagram showing the process of inclusion and exclusion of studies from the review



and its replicability (Pussegoda et al. 2017). Figure 1 displays a flow diagram showing how relevant studies were identified.

## Participants and Contexts

The present review has included studies that involved 67,641 participants. Of all the studies included in the systematic review, seventeen involved military personnel as participants (Bekesiene et al. 2022a, b; Bosdotter et al. 2022; Chambel et al. 2015; Delahajj et al. 2014; Filosa et al. 2021; Gillet et al. 2017; Ivey et al. 2015; Lepinoy et al. 2022; Morin et al. 2023; Patrick et al. 2012; Raabe et al. 2020; Rybakovaitė et al. 2022; Sáiz-Pardo et al. 2021; Tremblay et al. 2009; Wrzesniewski et al. 2014; Zeijen et al. 2020), while twelve had a sample of police officers (Andersson Arntén et al. 2016; Chan and Hagger 2012; Garcia et al. 2017; Gillet et al. 2013, 2018; Honess 2020; Hu et al. 2022; Jones et al. 2021; Legate et al. 2023; Masal and Vogel 2016; Otis and Pelletier 2005; Wallace 2021). Within these articles: eleven studies have considered military and police sample attending training programs (Bekesiene et al. 2022b; Delahajj et al. 2014; Filosa et al. 2021; Gillet et al. 2018; Honess 2020; Legate et al. 2023; Lepinoy et al. 2022; Patrick et al. 2012; Raabe et al. 2020; Wallace 2021; Wrzesniewski et al. 2014), seventeen studies have included personnel that actively served (Andersson Arntén et al. 2016; Bekesiene, et al. 2022a; Bosdotter et al. 2022; Chambel et al. 2015; Chan and Hagger 2012; Garcia et al. 2017; Gillet et al. 2017; Hu et al. 2022; Ivey et al. 2015; Jones et al. 2021; Masal and Vogel 2016; Morin et al. 2023; Otis and Pelletier 2005; Rybakovaitė et al. 2022; Sáiz-Pardo et al. 2021; Tremblay et al. 2009; Zeijen et al. 2020), and a single article has compared police officers' motivation and results obtained by police officers involved in continuous vocational training (Gillet et al. 2013).

## Results

### Psychological Outcomes Included in the Study

Most of the articles screened evaluated well-being ( $N=7$ ; Chambel et al. 2015; Filosa et al. 2021; Garcia et al. 2017; Ivey et al. 2015; Morin et al. 2023; Otis and Pelletier 2005; Rybakovaitė et al. 2022), and turnover ( $N=8$ ; Bekesiene et al. 2022b; Bosdotter et al. 2022; Delahajj et al. 2014; Filosa et al. 2021; Hu et al. 2022; Ivey et al. 2015; Morin et al. 2023; Otis and Pelletier 2005), six articles have shed light on work engagement (Chambel et al. 2015; Gillet et al. 2013, 2017; Ivey et al. 2015; Rybakovaitė et al. 2022; Zeijen et al. 2020), eleven articles have studied different types of motivation as outcomes (Andersson Arntén et al. 2016; Bekesiene et al. 2022a; Chambel et al. 2015; Garcia et al.

2017; Gillet et al. 2013, 2018; Honess 2020; Jones et al. 2021; Lepinoy et al. 2022; Otis & Pelletier 2005; Tremblay et al. 2009), four articles have addressed the positive affects (Gillet et al. 2017, 2018; Legate et al. 2023; Otis & Pelletier 2005), three articles have studied prosocial behaviors (Filosa et al. 2021; Patrick et al. 2012; Sáiz-Pardo et al. 2021), and other four articles have emphasized other positive outcomes (Bekesiene, et al. 2022a; Chan & Hagger 2012; Masal & Vogel 2016; Wrzesniewski et al. 2014). See the Appendix for all the specific outcomes and other details of each study.

### Well-being

Three of the seven articles evaluating well-being among militaries and policemen have considered distress, evaluating how autonomy and basic psychological needs satisfaction fostered reduction influenced this construct (Garcia et al. 2017; Ivey et al. 2015; Morin et al. 2023). Two other studies have focused on burnout: their results have confirmed that autonomous work motivation was negatively related to burnout (Chambel et al. 2015; Filosa et al. 2021). Two articles have shed light on general health and physical symptoms: data have shown that self-determined motivation was negatively associated with perceived daily hassles and physical symptoms, and that satisfaction of basic psychological needs seemed to partially mediate the relationship between hardiness and general health (Otis and Pelletier 2005; Rybakovaitė et al. 2022).

### Turnover

Two of the eight articles related to turnover intention have studied the positive influence of self-determination motivation on the decision to remain (Filosa et al. 2021; Otis and Pelletier 2005). It has been seen how external motivation, amotivation, and reduction of motivation over time led to turnover intention (Bosdotter et al. 2022; Filosa et al. 2021). In two studies satisfaction of basic psychological needs negatively related to intention to quit (Delahajj et al. 2014; Ivey et al. 2015). Three articles have focused on mediating and moderating factors: needs satisfaction seemed to mediate the effects of job demands and resources on turnover intentions; intrinsic motivation positively mediated the relationship between psychological resilience and the intention to remain in the active reserve after training; fringe benefits moderated effect of satisfaction on the relationship between work-family conflict and turnover intention (Bekesiene et al. 2022b; Hu et al. 2022; Morin et al. 2023).

### Engagement

Two of the six studies about work engagement have analyzed the satisfaction of basic psychological needs: it seemed to

partially mediate the relationship between hardiness and engagement (particularly the need for autonomy); moreover, it has been seen that providing support based on autonomous motivation correlates with the provider's work engagement through satisfying the provider's needs (Ivey et al. 2015; Rybakovaitė et al. 2022; Zeijen et al. 2020). Two articles have underlined that autonomous motivation was linked to high levels of work engagement (Chambel et al. 2015; Gillet et al. 2017). One of the six studies has underlined how engagement indicators (vigor, absorption, and dedication) were significantly and positively predicted by self-determination work motivation (Gillet et al. 2013).

### Positive Affects

Two of the eleven studies concerning positive outcomes were related to the reduction of negative affects: these articles have demonstrated the positive influence of SDT's tenets on the levels of daily hassles and prejudice (Legate et al. 2023; Otis and Pelletier 2005). Other two studies have considered the effect of self-determined motivation on positive affects: high levels of self-determined motivation were related to high levels of positive affect and high performance; the highest levels of autonomous motivation were associated with the highest levels of communication, supervisor support, and positive affects (Gillet et al. 2017, 2018).

### Prosocial Behaviors

Three articles have analyzed the positive relationship between SDT's theorization and different constructs linked to prosocial behaviors: organizational citizenship behaviors, internal knowledge transfers, and motivation to transfer (Filosa et al. 2021; Patrick et al. 2012; Sáiz-Pardo et al. 2021).

### Other Positive Outcomes

Bekesiene et al. (2022a) have analyzed the construct of self-efficacy as an outcome: intrinsic motivation fully determined self-efficacy and perceived military competencies among reservists. Wrzesniewski et al. (2014) have shed light on two other positive outcomes: the probability of being considered for early promotion and staying in the military following their mandatory service period and seeing how intrinsic motivation predicted these positive outcomes. Chan and Hagger (2012) have worked on motivation for injury prevention: work motivation fully mediated the relationship between autonomy support from supervisors and autonomous motivation for injury prevention. Masal and Vogel (2016) have confirmed that police leaders could use performance information in a supportive manner to positively influence employees' job satisfaction.

## Different Types of Motivation as Outcomes

In three of the eleven studies concerning different types of motivation as outcomes, it has been studied the advantages of a "need nurturing" working context that seemed to foster self-determined motivation toward work (Chambel et al. 2015; Garcia et al. 2017; Gillet et al. 2013; Otis and Pelletier 2005). Other three studies have shed light on issues related to trainees' motivation: it has been found a mediating role of basic needs satisfaction between the learning environment and motivation; it has been underlined the negative contribution of the mandatory nature of the training; besides, an initially high level of self-determined motivation for entering the training program was related to a slight increase in motivation over the long period. (Gillet et al. 2018; Honess 2020; Lepinoy et al. 2022). Another study has focused on the effects of support perception and a positive work climate which seemed to foster intrinsic motivation, introjected regulation, integrated regulation, and identified regulation; work satisfaction and commitment were found to be positively related to self-determined motivation (Tremblay et al. 2009). Bekesiene et al. (2022a) have seen that resilience mediated the relationship between self-efficacy and intrinsic motivation. Andersson Arntén et al. (2016) have worked on affective profile models and their influences on motivation in police personnel perceptions: high levels of expressed positive affect were associated with self-determination types of motivation (intrinsic motivation and identified regulation); the opposite effect was obtained for negative profiles. Jones et al. have focused attention on the use of cognitive-behavioral one-to-one coaching (CBC) in critical performance contexts: it was predictive of the increase of self-determined motivation and the satisfaction of basic psychological needs (well-being) (Jones et al. 2021).

### Descriptive Studies

A study by Wallace (2021) has focused on motivations to enter the police profession in Trinidad and Tobago. The results indicated that job security was the primary motivation for choosing policing as a career path. Male recruits' motivations were more altruistic than female recruits' answers, which were mainly self-serving. Raabe et al. (2020) have studied attrition rates among cadets, assessing cadets' perceived cadre behavior, basic psychological needs satisfaction, and motivation, and exploring potential differences among participants. Cadets reported relatively high levels of involvement from their cadre, needs fulfillment, and self-determined motivation, but they perceived limited autonomy support from their cadre.

## Discussion

The purpose of the current systematic review was to understand the dynamics interplay between motivation and positive outcomes in military and police contexts through SDT framework. SDT goes beyond carrot and stick theories to encourage practical alternatives that foster employees' highest quality motivation and organizations' success (Ryan and Deci 2019). The theory proposes that the internalization process toward more autonomous forms of motivation should guarantee the optimal functioning of employees (Deci and Ryan 2000). Particularly, the integrated form of motivation, which is the most autonomous form of extrinsic motivation, involves not only identifying with external values and beliefs but also integrating them with one's system of values and beliefs (Gagné and Deci 2005).

The results of our review have shown a close relationship between motivation and well-being, highlighting how applying the SDT's tenets fosters a reduction in distress, physical symptoms, and burnout. Among the analyzed studies, Otis and Pelletier (2005) have found that self-determined motivation could protect police officers from perceiving a negative perspective of stress. These results are in line with previous literature in other work contexts: Trépanier et al. (2013a) found that employees with high autonomous motivation experienced lower stress levels when faced with high job demands compared to those with low autonomous motivation. When well-being is compromised, people can consider the idea of leaving military or police organizations. Militaries and police officers who leave the organizations bear the costs of time wasted, personal resources exhausted, and sacrifices made without achieving their goals. Conversely, military organizations incur the expense of financial and human resources invested in individuals who leave the organization (Dahlman 2007). Our analysis has demonstrated how the application of SDT principles can prevent turnover. For example, the aforementioned study by Filosa et al. (2021) supported what Deci and Ryan (1985) asserted in their theory: the strongest negative correlation with turnover intentions was associated with amotivation, which reflected a maladaptive form of motivation closely linked to the likelihood of dropping out.

On one hand, there are soldiers and police officers who quit the organization; on the other hand, there is the personnel who are engaged in their duties. It has been seen that the satisfaction of basic psychological needs and self-determined motivation promote work engagement, both as a unified construct and when analyzed in its individual dimensions (vigor, absorption, and dedication). In the study above by Gillet et al. (2013), self-determined work

motivation fully mediated the effects of self-determined work motivation on engagement; besides, self-determined work motivation partially mediated the relationship between perceived support of the organization on the three dimensions of engagement. Previous studies related to the educational environment have demonstrated that work engagement is positively associated with self-determined forms of motivation and negatively correlated with more controlled forms of motivation (e.g., Meyer 2014).

Many of the studies above analyzed have revealed other positive outcomes associated with the application of SDT in military and police contexts. The outcomes examined have included positive affects (e.g., Legate et al. 2023), prosocial behaviors (e.g., Patrick et al. 2012), self-efficacy (Bekesiene et al. 2022a), early promotion (Wrzesniewski et al. 2014), and injury prevention (Chan and Hagger 2012). Additionally, positive outcomes highlighted in some studies, such as organizational citizenship behaviors, internal knowledge transfers, and motivation to transfer, underscore the significance of motivation dynamics for individual workers and the military/police organization. These findings confirm that SDT is a theory oriented towards a eudaimonic approach. (Waterman 1993).

In addition to the objectives of our systematic review, the analyzed scientific works have referred to different types of motivation of the SDT's continuum as outcomes. The study by Otis and Pelletier (2005) has confirmed that police officers who perceived their immediate supervisor's support of their autonomy were found to record higher levels of self-determined motivation toward work. Consistent with the previous study, Garcia et al. (2017) have found that autonomy negatively predicted amotivation. SDT researchers have frequently hypothesized and consistently found that social environments, such as workplaces that support the satisfaction of basic psychological needs, enhance autonomous motivation (Deci and Ryan 2000).

How is it possible to combine military/police organizational context with the SDT's tenets? Our systematic review has tried to understand motivation dynamics in this peculiar workplace, in which most of the tasks and goals must be attained because they are given by higher authorities and hierarchical chains (Rigby and Ryan 2018). Following the theoretical framework of SDT, it can be stated that the internalization process toward more autonomous forms of motivation leads to greater efficiency and effectiveness for both military/police personnel and their organizations. Particularly, the integrated form of motivation involves not only identifying with external values and beliefs but also integrating them with one's own system of values and beliefs. One of the key pillars supporting the motivation of military personnel is the *esprit de corps*, which embodies shared values and strong identification with the military organization, developing a real attachment to the organization.

Another challenge our review faced was reconciling the principles of SDT with the command-and-control leadership style. The issue of identification, previously addressed, is fundamental to collaborative relationships with leaders and obedience to orders despite this personnel management style. Furthermore, it should be noted that C2 is related to facing complexity with regard to unpredictable contexts and a substantial number of people to manage: it includes assigning specific tasks to troops and overseeing operational activities to ensure the achievement of military and police objectives. Actually, obedience to precise directives assumes a faithful relationship with the leader, mainly during operations. Especially in specific conditions, such as emergency contexts, command-and-control is crucial for directing personnel. The distinctiveness of operational environments activates military and police forces, preparing them to adhere to the directives of their superiors without perceiving these dynamics as frustrating. Speculating, the SDT's tenets and the C2 leadership style seem not to reconcile, but these could be interpreted as two separate processes, one mainly adopted to support the personnel and internalize integrated forms of motivation during everyday activities, the second (i.e., C2) needed in operational contexts where unpredictable events lead the difficulties of managing broad organizations. Additionally, the application of SDT's principles in military and police environments fosters cognitive flexibility and actively engages personnel in the decision-making process, given the shared values.

In conclusion, although the wide variety of outcomes explored in the examined studies, much could be said about SDT having significant implications for military work at individual and team performance levels. This lack of in-depth exploration is particularly noteworthy, especially considering the significance of practical activities in police and military contexts. Exploring engagement and motivation at the team level could provide valuable insights, even if the existing research has not focused on military settings (Slemp et al. 2018).

### Future Perspective

As mentioned above, there are few studies conducted in the military and police field that consider SDT as a theoretical framework. The need for further exploration in this area of research is underscored by the almost complete lack of discussion on the topic in the recent "The Oxford

Handbook of Self-Determination Theory" (Ryan 2023). Future research could address the questions raised in our discussion, enhancing the understanding of how to reconcile SDT with the military and police contexts. Specifically, a key objective should be to focus on satisfying the need for autonomy among military personnel. Future works could test results accomplished in other organizational contexts, trying to evaluate the fit of the findings in this peculiar workplace. Although it is a work environment characterized by distinctive features, it could be useful to understand if dynamics related to different kinds of motivation, basic needs, and supportive climate work in the same way for military and police personnel compared to workers in educational workplaces (e.g., Slemp et al. 2020), in hospital field (e.g., Trépanier et al. 2013b), or the general public sector (Kuvaas 2009). It would be helpful to further investigate cross-cultural differences among military and police personnel from different Nations. In light of our findings, it is crucial to emphasize the significance of dynamics driven by integrated and identified motivation in relation to outcomes. This should be accompanied by a thorough understanding of leadership styles and perceptions of the organizational context. The strict approach of militaries and policemen requires particular attention to practical aspects of work, but it is curious to note that none of the articles above analyzed consider individual worker and troop performance as an outcome. Starting from the meta-analysis of Cerasoli et al. (2014), it should be verified whether intrinsic motivation is a strong predictor of performance in such organizational contexts.

### Conclusion

The present systematic review aims to understand the dynamics interplay between motivation and positive outcomes in military and police contexts through SDT framework. As one of the most comprehensive theories of human motivation, SDT seeks to enhance the well-being and efficacy of both workers and organizations. The principles of this theory play a crucial role in promoting the optimal functioning of employees and contributing to organizational success. Undoubtedly, expanding research within the SDT framework in the military and police field is essential, given the unique characteristics and distinct features of such organizations.



## Appendix

Authors	Theoretical framework	Participants	Context	Instruments	Outcomes	Results
Andersson Armén et al. (2016)	- Affective profile model—SDT	595 Swedish police-men	Organization	- Positive Affect and Negative Affect Schedule (PANAS) (Watson et al. 1988) - The Learning Climate Questionnaire (LCQ) (Bartram et al. 1993) - Situational Motivation Scale (Guay et al. 2000)	Different types of motivation	High levels of expressed positive affect were associated with self-determination types of motivation (intrinsic motivation and identified regulation); the opposite effect was obtained for negative profiles. Besides, they have shed light on the fact that motivation may be predicted from dimensions of the learning climate
Bekesiene et al. (2022a)	- Self-efficacy theory - SDT	354 soldiers from active Lithuanian Army Reserve	Organization	- Brief Resilience Scale (BRE) (Smith et al. 2008) - Self-Efficacy Scale (EFF) (Buch et al. 2015) - Intrinsic Motivation Scale (INM) (some items from Grant 2008) - Perceived Military Competence Scale (PMC) (Johansen et al. 2014) - Connor-Davidson resilience scale: 10 items (CD-RISC; 2003) - Intention to stay in the active reserve: 3 items - Intrinsic motivation: 9 items from Ryan and Deci's questionnaire (2000) - Prosocial motivation: 4 items from the Grant scale (2008) - Long-term goals: 4 items from the Short Grit Scale (Grit-S) (Duckworth and Quinn 2009) - Proactivity: 6 items from Claes et al.'s scale (2005) - Situational exploitation ability: 6 items (Buch et al. 2015) - Competence achieved following the completion of the training: 14 items	- Intrinsic motivation - Perceived military competence - Self-efficacy	Intrinsic motivation fully determined self-efficacy and perceived military competencies among reservists
Bekesiene et al. (2022b)	- SDT - Theory of psychological resilience	354 Lithuanian reserve soldiers	Training		Turnover intention	Intrinsic motivation positively mediated the relationship between psychological resilience and the intention to remain in the active reserve after training
Bosdotter et al. (2022)	- Expectancy theory - SDT - Equity theory	248 fighter pilots and the SAF	Organization	- Qualitative interviews (semi-structured) - Survey targeting active pilots	Factors that foster drop-out	The authors identified ideal types of workers (specialist, family-oriented, extrinsically motivated, high-performing), their respective motivational factors, and their influenced dropout's decision was the decrease in motivation over time

Authors	Theoretical framework	Participants	Context	Instruments	Outcomes	Results
Chambel et al. (2015)	- SDT - Social exchange theory	1045 Portuguese soldiers	Organization	- Perceived Organizational Support Scale (Eisenberger et al. 1986) - 7 items by the scale developed by Scandura and Graen (1984) to measure Leader-member exchange - Portuguese adapted version of the Motivation at Work Scale (MAWS) (Cagné et al. 2010) - Maslach Burnout Inventory (Maslach et al. 1997) - Portuguese version of the Utrecht Work Engagement Scale (UWES) (Schaufeli et al. 2002)	- Autonomous motivation - Controlled motivation - Burnout - Engagement	Autonomous work motivation was negatively related to burnout and positively and significantly related to work engagement. Autonomous motivation at work partially mediated the effects of perceived organizational support on burnout. Autonomous motivation partially mediated the effects of perceived organizational support on work engagement. Autonomous work motivation was significantly related to contextual factors (organizational support and leader-member exchange). Controlled motivation showed the opposite results
Chan and Hagger (2012)	Trans-contextual model (TCM): integration of SDT and TPB (theory of planned behavior)	207 Chinese police officers	Organization	- Health Care Climate Questionnaire (HCCQ) (Williams et al. 1996) - Treatment Self-Regulation Questionnaire (TSRQ) (Williams et al. 1996) - Behavioral Regulation in Sport Questionnaire (BRSQ) to measure autonomous work motivation (Lonsdale et al. 2008) - Items to measure TPB (according to Ajzen's recommendations, 2002) - 6 items to measure self-reported treatment adherence (based on a measure from a previous study by Chan et al. 2009) - 5 items from the severity subscale of the Sports Injury Rehabilitation Beliefs Survey (SIRBS) (Taylor and May 1996)	- Autonomous motivation for injury prevention - Intention for injury prevention	Work motivation fully mediated the relationship between autonomy support from supervisors and autonomous motivation for injury prevention. The effect of autonomous motivation for injury prevention on intention was fully mediated by attitude and subjective norms
Delahajj et al. (2014)	SDT	208 recruits in the basic military training of the Dutch Royal Navy	Training	- Modified version of Learning Climate Questionnaire (LCQ) (to measure the instructor's autonomy) (Williams et al. 1996) - 13 items to measure Self-efficacy - 3 items from the scale developed by Hardè and Reeve (2003) to measure training value - 3 items based on a scale developed by Vallerand et al. (1997) to measure Intent to quit	- Intention to quit the training - Training value	Autonomy support negatively predicted intent to quit and this relationship was mediated by self-efficacy. Cadets who reported their instructor as guaranteeing a learning environment that endorses recruits' intrinsic motivation to develop individual competencies believed more in their abilities to finish military training and consequently had lower intentions to quit

Authors	Theoretical framework	Participants	Context	Instruments	Outcomes	Results
Filosa et al. (2021)	SDT	2,344 cadets from Guardia di Finanza	Training	Military Academic Motivation Scale (MAMS)	<ul style="list-style-type: none"> <li>- Work engagement</li> <li>- Emotional exhaustion</li> <li>- Cynicism</li> <li>- Interpersonal strain</li> <li>- Organizational citizenship behaviors</li> <li>- Commitment</li> <li>- Performance</li> <li>- Intention to quit</li> </ul>	Emotional exhaustion and cynicism (core dimensions of burnout) were positively related to amotivation and extrinsic motivation and negatively related to intrinsic motivation and introjected regulation. Intention to quit had a positive correlation with external motivation and amotivation. Intention to quit had a negative correlation with intrinsic motivation. Organizational citizenship behaviors were positively related to intrinsic motivation and identified regulation; the same construct was negatively related to amotivation and extrinsic motivation. There is a positive correlation between interpersonal strain, amotivation, and extrinsic motivation; the interpersonal strain was negatively related to intrinsic motivation and introjected regulation
Garcia et al. (2017)	SDT	617 Swedish policemen	Organization	<ul style="list-style-type: none"> <li>- The Learning Climate Questionnaire (Bartram et al. 1993)</li> <li>- Stress-Energy Questionnaire (Kjellberg and Iwanowski 1989)</li> <li>- Situational Motivation Scale (Guay et al. 2000)</li> </ul>	<ul style="list-style-type: none"> <li>- Motivation (intrinsic, external, amotivation)</li> <li>- Stress and energy (well-being)</li> </ul>	Experiencing autonomy was significantly related to distress reduction, accompanied by high energy levels and low amotivation
Gillet et al. (2013)	<ul style="list-style-type: none"> <li>- Hierarchical model of intrinsic and extrinsic motivation</li> <li>- SDT</li> </ul>	379 French police officers	Organization and training	<i>Study 1:</i> <ul style="list-style-type: none"> <li>- Global Motivation Scale (Guay et al. 2003)</li> <li>- Perceived Organizational Support Scale (Eisenberger et al. 1986)</li> <li>- Motivation at Work Scale—Revised (Eisenberger et al. 1986)</li> <li>- Utrecht Work Engagement Scale (UWES-9) (Schaufeli et al. 2006)</li> </ul> <i>Study 2:</i> <ul style="list-style-type: none"> <li>- Motivation at work scale (Gagné et al. 2010)</li> <li>- Situational motivation scale (Guay et al. 2000)</li> </ul>	<ul style="list-style-type: none"> <li>- Work engagement</li> <li>- Motivation (vigor, dedication, absorption)</li> <li>- Motivation</li> </ul>	<p>The three dimensions of engagement (vigor, absorption, and dedication) were significantly and positively predicted by self-determination work motivation.</p> <p>Self-determination work motivation fully mediated the effects of global self-determination work motivation on vigor, absorption, and dedication. Self-determination work motivation partially mediated the relationship between the perceived support of the organization on the three dimensions of engagement. Perceived organizational support and perceived supervisor support were positively related to self-determined motivation</p>

Authors	Theoretical framework	Participants	Context	Instruments	Outcomes	Results
Gillet et al. (2017)	SDT	1406 soldiers from the French Air Force	Organization	<ul style="list-style-type: none"> <li>- French version of the Multidimensional Work Motivation Scale (Gagné et al. 2015)</li> <li>- Utrecht Work Engagement Scale (Schaaufeli et al. 2006)</li> <li>- French-Canadian version of the Positive and Negative Affect Schedule (PANAS) (Gaudreau et al. 2006)</li> <li>- Perceived Organizational Support Scale (Eisenberger et al. 1986)</li> <li>- Questionnaire sur les Ressources et les Contraintes Professionnelles (to measure communication and supervisor support) (Lequeurre et al. 2013)</li> <li>- Multidimensional Work Motivation Scale (Gagné et al. 2015)</li> <li>- Demands and resources were assessed by four subscales taken from a comprehensive measure developed and validated by Lequeurre et al. (2013)</li> <li>- Job-related Affective Well-being Scale (JAWS) (Van Katwyk et al. 2000)</li> </ul>	<ul style="list-style-type: none"> <li>- Positive and negative affects</li> <li>- Engagement</li> </ul>	The motivational profiles with the highest levels of autonomous motivation were linked to the highest levels of work engagement. The highest levels of autonomous motivation were associated with the highest levels of communication, supervisor support, and positive affects
Gillet et al. (2018)	SDT	1676 police officers attending vocational training	Training	<ul style="list-style-type: none"> <li>- Online survey</li> </ul>	<ul style="list-style-type: none"> <li>- Training satisfaction over time</li> <li>- Positive and negative affects</li> <li>- Performance</li> </ul>	An initially high level of self-determined motivation for entering the training program was related to a slight increase in motivation over the long period. High levels of self-determined motivation were related to high levels of positive affect and performance
Honess (2020)	- Andragogy - SDT	809 English and Welsh police officers	Training	<ul style="list-style-type: none"> <li>- Online survey</li> </ul>	<ul style="list-style-type: none"> <li>- Training satisfaction</li> <li>- Motivation</li> <li>- Efficacy</li> <li>- Information's usability</li> </ul>	Results showed the negative contribution of the mandatory nature of the training on the trainees' motivation
Hu et al. (2022)	Job demands-resources model (JD-R) SDT	421 officers from the Beijing City Police Bureau	Organization	<ul style="list-style-type: none"> <li>- 4 items to measure work pressure (Caplan et al. 1980)</li> <li>- 5 items to measure work-family Conflict (Liu et al. 2020; Carlson et al. 2000)</li> <li>- 2 items to measure turnover intention (Fried et al. 1996)</li> <li>- Survey for satisfaction of fringe benefits</li> <li>- 5 items to measure public service motivation (Wright et al. 2013)</li> </ul>	<ul style="list-style-type: none"> <li>- Turnover intention</li> </ul>	There was a moderating effect of satisfaction of fringe benefits on the relationship between work-family conflict and turnover intention, but the effectiveness of such external incentives depends on personal public service motivation

Authors	Theoretical framework	Participants	Context	Instruments	Outcomes	Results
Ivey et al. (2015)	SDT	1224 participants from the Canadian Armed Forces	Organization	<ul style="list-style-type: none"> <li>- Military Morale Scale (Britt and Dickin-son 2006)</li> <li>- Utrecht Work Engagement Scale (UWES-9) (Schaufeli et al. 2006)</li> <li>- 5 items to measure job-specific self-efficacy</li> <li>- Trust in Team Scale</li> <li>- Job Satisfaction Scale (Bernard 2004)</li> <li>- Kessler Psychological Distress Scale (K10) (Kessler et al. 2002)</li> <li>- Career Intention Scale (to measure turnover intentions)</li> <li>- Willingness to Deploy Scale</li> </ul>	<ul style="list-style-type: none"> <li>- Morale</li> <li>- Work engagement</li> <li>- Work-related challenges</li> <li>- Distress</li> <li>- Turnover intention</li> </ul>	The turnover intention was negatively related to trust in teammates, job significance, and self-efficacy (corresponding to the three basic psychological needs: relatedness, autonomy, and competence). Psychological distress is negatively related to trust in teammates, job significance, and self-efficacy. Engagement is positively linked to indicators of the three basic psychological needs
Jones et al. (2021)	<ul style="list-style-type: none"> <li>- One-to-one cognitive-behavioral coaching</li> <li>- SDT</li> </ul>	50 members of a UK County police organization	Organization	<ul style="list-style-type: none"> <li>- The Irrational Performance Beliefs Inventory (IPBI; Turner and Davis 2018)</li> <li>- The Basic Psychological Need Satisfaction in General Scale (Johnston and Finney 2010)</li> <li>- An adapted version of the Sport Motivation Scale (SMS) (Pelletier et al. 1995)</li> </ul>	<ul style="list-style-type: none"> <li>- Irrational beliefs</li> <li>- Self-determined motivation</li> <li>- Satisfaction of basic personal needs</li> </ul>	Cognitive-behavioral one-to-one coaching (CBC) predicts the increase of self-determined motivation and the satisfaction of basic psychological needs (well-being) in senior police personnel
Legate et al. (2023)	SDT (autonomy support)	34,529 UK police officers and staff	Training	<ul style="list-style-type: none"> <li>- 1 item per anti-bias training</li> <li>- Antagonism towards Investing in Diversity (AI-Khouja et al. 2020)</li> <li>- 5-item version of the Autonomy Support to Reduce Bias scale (Weinstein et al. 2023)</li> <li>- 1 item to clarity of consequences</li> </ul>	<ul style="list-style-type: none"> <li>- Diversity antagonism (prejudice)</li> </ul>	Participating in anti-bias training predicted lower prejudice when perceiving autonomy-supportive communication; there was no link between training and attitudes without autonomy-supportive communication
Lepinoy et al. (2022)	SDT	422 cadets of the Royal Military Academy of Belgium	Training	<ul style="list-style-type: none"> <li>- Critical incident technique to analyze facilitating and inhibiting events that influence motivation within a military academic learning environment</li> </ul>	Motivation	There was a mediating role of basic needs satisfaction between the learning environment and students' motivation
Masal and Vogel (2016)	<ul style="list-style-type: none"> <li>- Goal-setting theory</li> <li>- SDT</li> </ul>	1165 German policemen	Organization	<ul style="list-style-type: none"> <li>- 1 item to measure job satisfaction</li> <li>- 2 items to measure the extent of performance information use</li> <li>- 3 items for controlling the use of performance information</li> <li>- 3 items for supporting the use of performance information</li> </ul>	Work satisfaction	How followers perceived the purposes for which their leaders used performance information seemed to matter more to their job satisfaction than the magnitude to which such information is used. Their findings have shown that using performance information positively affected job satisfaction only when leaders used such information in a supportive manner

Authors	Theoretical framework	Participants	Context	Instruments	Outcomes	Results
Morin et al. (2023)	- Job demands-resources (JD-R) model - SDT	5716 from the Canadian Armed Forces	Organization	- 7-item scale developed by Edmondson (1999): team psychological safety (workgroup resource) - 4-item scale developed by Colquitt's (2001): interpersonal justice (workgroup resource) - 4-item subscale from Job Satisfaction Survey by Spector (1985): contingent recognition and reward (supervision resource) - Global Transformational Leadership Scale (Carlless et al. 2000): transformational leadership (supervisor resource) - Zohar's Scale (2000): supervisor's safety actions and expectations (supervisor resource) - 4-item version of Eisenberger et al.'s measure (1986): organizational support (organizational resource) - 3 items from the Organizational Culture Profile (O'Reilly et al. 1991): Culture of interpersonal respect (organizational resource) - 6 items by González-Romà and Loret (1998): role ambiguity (job demand) - 6 items of Reilly's questionnaire (1982): work overload (job demand) - Work-related Basic Needs Satisfaction Scale (Van den Broeck et al. 2010): need satisfaction (mediator) - Outcomes: Kessler's Psychological Distress Scale (2002) (Distress)/5 items from Netemeyer et al. (1996) (work-to-family conflict)/3 items from Colarelli (1984) (turnover intention)	- Distress - Turnover intention - Work-to-family conflict - Individual needs satisfaction	Needs satisfaction seemed to mediate the effects of job demands and resources on turnover intentions
Otis and Pelletier (2005)	SDT	122 Canadian Police Officers	Organization	- 3 items to measure autonomy support - 3 items to measure competence support - Blais Work Motivation Scale (Blais et al. 1993) - Self-determination index - Daily Hassles Inventory (DHI) (Campbell 1998) - French version of Pennebaker's scale (1982) (perception of physical symptoms) - 5 items to measure future work intentions, adapted from Pelletier et al. (2001)	- Turnover intention - Daily hassles - Self-determined - Physical symptoms	Police officers who perceived their immediate supervisor's support of their autonomy recorded higher levels of self-determined motivation toward work. Self-determined motivation was negatively associated with perceived daily hassles, which, in turn, were positively linked with physical symptoms

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Patrick et al. (2012)	- Goal-setting theory (Locke and Latham, 1990, 2002) - SDT	232 UK military instructors of military personnel	Training	<i>Pre-training questionnaire:</i> - Perceived value of successful training was measured using three items taken from Colquitt and Simmering (1998) - The extent to which trainees believed that doing well during training would improve job performance and subsequent career was measured using five items adapted from Mathieu et al. (1993) - Motivation to learn, defined as a trainee's enthusiasm and keenness to learn, was measured via a 3-item scale (adapted from Noe and Schmitt 1986) - Pre-training self-efficacy was measured using a three-item scale adapted from Norman and Hoyle (2004) - In order to assess relevant pre-training knowledge, a 10-item test was constructed <i>Post-training questionnaire:</i> - Motivation to transfer was measured via two items adapted from Noe and Schmitt (1986) - Post-training self-efficacy used the same items as pretraining self-efficacy - The same knowledge test was administered post-training	- Pre-training self-efficacy - Motivation to transfer - Post-training self-efficacy - Knowledge acquisition	A positive effect of being in one's chosen job on motivation to transfer was partially mediated by training motivation
Raabe et al. (2020)	SDT	728 US Army Cadets of the Reserve Officers Training Corps (ROTC)	Training	- Set of demographic items - Modified version of Teacher as a Social Context Questionnaire (TASQ) (Belmont et al. 1988) - Modified version of the Basic Need Satisfaction Scale (BNSS) (Deci et al. 1989) - Modified version of the Sport Motivation Scale-6 (SMS-6) (Mallett et al. 2007) - Hardiness-Resilience Gauge (HRG) (Bar-tone et al. 2019) - Utrecht Work Engagement Scale (UWES-9) (Schaufeli et al. 2006) - Basic Need Satisfaction at Work Scale (BPN) (Deci et al. 2001; Kasser et al. 1992) - General Health Questionnaire (GHQ-12) (Goldberg and Hillier 1979)	- Attrition rates - Perceived cadre behavior - Basic psychological needs satisfaction - Motivation - Engagement - General self-reported health	Cadets reported relatively high levels of involvement from their cadre, need fulfillment and self-determined motivation. In contrast, they perceived limited autonomy support from their cadre
Rybakovaitė et al. (2022)	SDT	506 soldiers of Lithuanian land forces	Organization			The satisfaction of basic psychological needs postulated seemed to partially mediate the relationship between hardiness and general health and between hardiness and engagement

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Sáiz-Pardo et al. (2021)	SDT	208 military knowledge workers from a large European army	Organization	<ul style="list-style-type: none"> <li>- Motivation at Work Scale (MAWS) (Gagné et al. 2010)</li> <li>- Scale presented by Cabeza-Pullés et al. (2018) for transactive memory system</li> <li>- Scale from Molina et al. (2007) for internal knowledge transfers</li> </ul>	Internal knowledge transfers	Intrinsic and identified motivation positively affected internal knowledge transfers, although fully mediated by the transactive memory systems. Introjected motivation had only a slightly significant direct influence, and external motivation had no significant effect
Tremblay et al. (2009)	SDT	465 military members across Canada	Organization	<ul style="list-style-type: none"> <li>- Work Extrinsic and Intrinsic Motivation Scale (WEIMS)</li> <li>- Short version of the Survey of Perceived Organizational Support (Eisenberger et al. 1986)</li> <li>- 26 items to measure work climate (Vileneuve and Gingras 1998)</li> <li>- Affective and Continuance Commitment Scale (Allen and Meyer 1990)</li> <li>- Job Satisfaction Scale (Hackman and Oldham 1975)</li> <li>- 20-item Symptoms Checklist (to measure Work Strain) (Bartone et al. 1989)</li> <li>- Retention and Attrition Questionnaire (Bernard 2001) for turnover intentions</li> <li>- 12-items scale developed by Tyler and Blader (2002) to measure organizational involvement</li> <li>- 13 items to measure organizational citizenship behaviors (Podsakoff et al. 1997)</li> <li>- Workplace Deviance Scale (Bennet and Robinson 2000)</li> </ul>	Different types of motivation	Support perception and a positive work climate fostered intrinsic motivation, introjected regulation, integrated regulation, and identified regulation
Wallace (2021)	SDT	160 trainees from the Trinidad and Tobago Police Service academy	Training	<ul style="list-style-type: none"> <li>- Self-administered 50-item police trainee motivation questionnaire (PTMQ) (modified version of a previous instrument used by Pagon and Lobnikar 1996)</li> </ul>	Motivations to enter the police profession	Job security was the primary motivation for choosing policing as a career path. Male recruits' motivations were more altruistic than female recruits' answers, which were mainly self-serving
Wrzesniewski et al. (2014)	SDT	11,320 cadets from "United States Military Academy West Point"	Training	Survey	<ul style="list-style-type: none"> <li>- Likely to be considered for early promotion</li> <li>- Likely to stay in the military following their mandatory period of service</li> </ul>	Intrinsic motivation predicted the probability of being considered for early promotion and staying in the military following their mandatory service period. They have seen that holding both instrumental and internal motives yielded negative outcomes



Authors	Theoretical framework	Participants	Context	Instruments	Outcomes	Results
Zeijen et al. (2020)	<ul style="list-style-type: none"> <li>- SDT demands-resources model (Bakker and Demerouti 2017)</li> <li>- Goal orientation theory (Van de Walle 1997)</li> </ul>	111 police officers	Organization	<ul style="list-style-type: none"> <li>- 1 item from each dimension of the Utrecht Work Engagement Scale (Schaufeli et al. 2006)</li> <li>- Scale developed by Peeters et al. (1995) to measure social support</li> <li>- 3 items from Weinstein and Ryan's (2010) motivation to help scale</li> <li>- 3 items from Work-related Basic Need Satisfaction scale (W-BNS; Van den Broeck et al. 2010)</li> <li>- 5 items from Van Gelderen et al.'s (2007) emotional demands scale</li> </ul>	<ul style="list-style-type: none"> <li>- Work engagement</li> </ul>	<ul style="list-style-type: none"> <li>- Providing support based on autonomous motivation correlated with the provider's work engagement through satisfying the provider's needs</li> </ul>

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**Code Availability** Not applicable.

## Declarations

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