Loyal until death (?)

The nature, measurement and predictors of loyalty in a military context

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Abstract
The overall aim of this thesis was to broaden the understanding of the concept of loyalty within a military context, by focusing on how the nature of loyalty is experienced, how it can be measured and how it can be predicted. To achieve this, the thesis was structured in three interrelated studies, which initially aimed to examine the content of loyalty within the Swedish Armed Forces (SAF), then to develop and validate a scale to measure loyalty, and finally to examine possible predictors of loyalty.

The aim of Study I was to examine how loyalty is experienced within the SAF. To achieve this, Study I examined how high-ranking officers – presumed to have a large influence on professional ethics within the SAF – gave meaning to their experiences of loyalty. The results showed that although the nature of loyalty in the military organization is based on a strong identification with the profession, loyalty is a multifaceted phenomenon which requires the individual to manage competing and sometimes counteracting domains (objects) of loyalty.

The aim of Study II was to develop a psychometric scale for measuring loyalty in a military context, based on the findings of Study I. Given the complex and varying nature of loyalty and dealing with different domains of loyalty in the military, the scale was developed to consider several domains for an individual’s loyalty (e.g., workgroup, mission, nation). Additionally, there was a focus on the overall nature of loyalty involving sacrifice and action to protect the domain of loyalty. To achieve this, three independent samples, consisting of military personnel (in training and on overseas mission), were invited to answer a questionnaire based on the results from Study I. Exploratory and confirmatory factor analyses resulted in a scale measuring loyalty, denoted the Swedish Military Loyalty Scale (SMiLS). The SMiLS was found to consist of a four-dimensional representation of the willingness to act loyally. The dimensions are sectioned in loyal sacrifice and loyal action, further divided into moderate and extreme loyal sacrifice and loyal action, respectively.

The aim of Study III was to examine how individuals’ willingness to act loyally to certain domains (the closest workgroup, the unit, and the unit mission) can be predicted by social identity fusion and developmental leadership. To achieve this, a sample consisting of military personnel serving on an overseas mission in Mali, took part in a survey, using the SMiLS as the dependent variable. Demographic factors, such as rank and gender, were also examined, taking the outcome of loyalty into consideration. The results show that social identity mainly predicted the sacrificial dimensions of loyalty, while developmental leadership predicted all dimensions of loyalty for all domains.

In conclusion, the present thesis broadens the understanding of loyalty within a military context. It also contributes with a scale for measuring loyalty and identifies two predictors for loyalty. Further research should focus on a deepened understanding of loyalty within the military and in the context of total defense organizations, further validation of the SMiLS and the examination of additional possible predictors for loyalty.

Keywords: loyalty, behavior, measurement, dimensionality, predictors, social identity fusion, leadership, IPA, factor analysis, Swedish Armed Forces, military, extreme environment, dilemma.
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Sammanfattning

Det övergripande syftet med denna avhandling var att bredda förståelsen för begreppet lojalitet inom en militär kontext. Detta gjordes genom att undersöka hur lojalitet upplevs, hur den kan mätas och hur den kan prediceras. Avhandlingen består av tre sammanhängande delstudier.

Syftet med Studie I var att undersöka hur lojalitet upplevs inom den svenska Försvarsmakten. I denna studie genomfördes intervjuer för att undersöka hur högt uppsatta officerare på inflytelserika befattningar skapade mening av sina upplevelser av lojalitet inom yrket och inom organisationen. Resultaten visade att lojalitet inom den militära organisationen kan grunda sig på en stark identifikation med yrket och att lojalitet är ett mångfacetterat fenomen som kräver att individen kan hantera olika lojaliteter, som ibland kan vara både konkurrerande och motverka varandra.


Syftet med Studie III var att undersöka om individers vilja att agera lojalt gentemot vissa objekt (den närmaste arbetsgruppen, det egna förbandet, samt förbandets uppdrag) kan prediceras av social identitetsfusion och utvecklande lederaskap. Deltagare från ett militärt förband på utlandsuppdrag i Mali fick delta i en enkätundersökning baserad på SMiLS. Resultaten visade att både social identitet och utvecklande lederaskap kunde predicera lojalitet.

Resultaten av denna avhandling bidrar till att vidga förståelsen för fenomenet lojalitet inom en militär organisation. Den vidgade förståelsen består av tre delar: en fördjupad beskrivning av lojalitetens natur inom den
militära professionen och organisation, en fyrdimensionell modell av hur lojalitet kan mätas (SMiLS) samt kunskapen om att social identitetsfusion och utvecklande ledarskap är tydligt relaterade till lojalitet. Fortsatt forskning inom området bör fokusera på en fördjupad förståelse av lojalitet dels inom militären, dels inom ramen för totalförsvar. Vidare behövs ytterligare validering av mätskalan SMiLS samt en fortsatt undersökning av fler möjliga faktorer som kan predicera lojalitet.

**Nyckelord:** lojalitet, beteende, mätning, dimensionalitet, prediktorer, social identitetsfusion, utvecklande ledarskap, IPA, faktoranalys, Försvarsmakten, militär, extrema miljöer, dilemma
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List of studies


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II. Engelkes, T., Lindholm, T., & Sverke, M. Measuring loyalty: Developing a scale for an ambiguous virtue., (manuscript)


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List of Abbreviations

CFA Confirmatory factor analysis
EFA Exploratory factor analysis
ELS Extreme loyal sacrifice
ELA Extreme loyal action
IPA Interpretative Phenomological Analysis
MINUSMA Multidimensional integrated stabilization mission in Mali
MLS Moderate loyal sacrifice
MLA Moderate loyal action
NATO North Atlantic Treaty Organization
NCO Non-Commissioned Officer
OCB Organizational citizen behavior
PA Parallel analysis
SAF Swedish Armed Forces
SIF Social identity fusion
SMiLS Swedish military loyalty scale
UN United Nations
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Introduction

Loyalty

Loyalty has been mentioned as an important virtue since the ancient Greeks and is likely a behavior that has accompanied humanity throughout its development (Fletcher, 1993). Loyalty, manifested in trust and mutual dependence between individuals and groups, has been crucial for the survival of the species, while treason has constituted the ultimate betrayal (Graham, et al., 2011). Overall, the willingness to sacrifice yourself for the benefit of the group or to take excessive overt action (e.g., use lethal violence) to protect them seems to be the common theme of loyal behavior (e.g., Haidt & Joseph, 2007; Swann, et al., 2010; Umphress & Bingham, 2011). Although sacrifice and overt action both represent active decisions to act in some way, in this thesis acts of loyalty that may cause the individual to lose something is denoted as sacrifice, and overt acts – directed against others – as action.

Historically, loyalty to a profession was an especially important status issue and ultimately a matter of honor (Andersson, 2002). Today, there is a discussion about whether occupations that involve a professional calling – such as the police, medicine and the military – require an engagement beyond the ordinary, involving various types of self-sacrifice, or whether they are professions just like any other (e.g., Dahl, 2010; Kallin, 2010; Moskos & Wood, 1988). Previous research into military values has identified loyalty to be one of the most recurrent virtues in military organizations (Robinson, 2008). Although loyalty seems to be a desired virtue in the military and also in other professions operating in extreme environments, studies of loyalty and its significance for the individual and the organization in these contexts are limited. The scarcity of research is particularly surprising within the military context, where loyalty as a concept is very highly regarded (Olsthoorn, 2011).

As a first step in enabling an understanding of the meaning of loyalty in contexts such as the military, it seems vital to examine how loyalty is defined and experienced by representatives of the profession. Military organizations are hierarchical by nature (Ångström & Widén, 2014). Therefore, it is especially important that commanders at high levels are clear about the meaning of organizational values, such as loyalty, for subordinates to be able to be loyal and act accordingly (Larsson, Alvinius et al., 2007). The impact of the top leadership’s intents and behavior will affect the entire military organization as they act both as policy makers and as role models (Larsson, Haerem et al., 2007). Therefore, senior representatives can provide valuable
insights into what kinds of behaviors are considered the essence of loyalty in each context. They can also be informative about whether and how the organization, in terms of loyalty, may conflict with other domains (objects) to which the individual is expected, or perhaps wants to be loyal to. Such information can also be central when developing instruments designed to measure loyalty to various aspects of an organization.

Scales measuring loyalty in the military context – focusing on central aspects such as the willingness to take self-sacrificial or overt action for the benefit of someone or something else – are scarce (Olsthoorn, 2011). Moreover, current scales developed to measure loyalty focus mainly on shopping behavior, examining the extent to which customers are loyal to a particular brand or business (El-Manstrly & Harrison, 2013).

It is also vital to understand how loyalty to an organization – or various aspects central to the organization, or to other domains – may arise. There are a number of suggestions regarding potential predictors of loyalty, such as personality, identity with certain domains, group cohesion, leadership, and organizational culture (Kleinig, 2014). Other research emphasizes mutual trust (e.g., Beard, 2014; Moskos & Wood, 1988) and reciprocity between individuals and organizations (e.g., Fitriyani, 2018; Olsthoorn, 2011). Although several predictors have been suggested, identity and leadership seem to be possible overarching predictors of loyalty as they are prerequisites for close emotional bonds (identity) and for the feeling of mutual exchange between the organization and the individual (leadership).

Overall, there is a need for a more in-depth examination of loyalty within organizations. This entails an understanding of what is considered to be central regarding the nature of loyalty, creating measures for professional loyalty (which encompasses various aspects of the profession, and loyalty to external entities), and exploring potential predictors of loyalty. This becomes especially pertinent in organizations that place specific demands on loyalty, such as the military.

The military setting

The military profession contains one essential feature: to be used as a coercive power in the interests of the state. The most essential expressions of this coercive power are the use of, or the threat to use, organized violence (Ångström & Widén, 2014). However, the military power must be loyal to the state and not let its own interests and agenda affect the mission of the national armed forces. Furthermore, the hallmarks of military culture are hierarchy and obedience (e.g., Coleman, 2009), which might contrast with the culture of a democratic state (Burk, 2002). Hence, the state needs means of control to ensure the loyalty of the military. Political scientists (e.g., Huntington, 1985) have suggested that the state should control the military partly through delimited mandates and strong institutional hierarchies (objective control),
and partly by influencing the military identity through ethics and ideology (subjective control). In contrast, sociologists (e.g., Janowitz, 1960) have stressed a focus on social control of the military by ensuring a close relationship between civil society and the officer corps. Such close relationships ensure that a society’s democratic values are incorporated within the military. Regardless of how the military is controlled in a democratic state, military personnel must be able to handle the roles of warrior, civil servant, and that of a good democratic citizen (Hedlund, 2011).

An official Swedish government investigation (SOU 2001:23) emphasizes that military personnel must adeptly navigate various contexts within their profession: armed conflict (defending the country); international missions (peace-keeping/peace enforcement), peacetime production (administrating and training units), and the military profession (e.g., developing professional skills and norms). Each of these four contexts, in turn, influences at least four different perspectives of the officer profession:

1. The role or identity of the officer in a specific context (e.g., the protector of the nation, the peacekeeper, the civil servant, or the warrior).
2. The doctrinal approach to command in each context. The Swedish Armed Forces’ (SAF) command doctrine emphasizes mission command. Mission command means that commanders at all levels should – considering the overall aim of the mission – be creative and use initiative to act smarter and faster than the enemy. The opposite – detailed command – means acting according to specific orders, not taking the initiative (which enhances hierarchical control). Mission command is the prevailing doctrinal approach in all contexts except that of peacetime production, where finance, peacetime laws etc. delimits the mission command approach to a more detailed command approach.
3. The levels of risk management associated with each context (e.g., undertaking high-risk actions when defending national independence versus minimum risk during routine peacetime production).
4. The legal framework also varies depending on context, from the highly regulated laws and policies of peacetime production to the more permissive laws of war.

Additionally, the different contexts show that there will be multiple domains of loyalty depending on each context.
The first context identified in SOU 2021:23 is armed conflict, where officers must lead their personnel and make decisions in extreme situations. In armed conflict the role requires a creative and independent mindset where taking significant risks is a central part of performance. The domains of loyalty within this context are likely to be the overall mission to defend the country, but also loyalty to the unit mission, loyalty to orders, and loyalty to the closest comrades upon whom your survival depends (e.g., Shalit, 1988).

The second context is international missions initiated by the United Nations (UN) or by the North Atlantic Treaty Organization (NATO), which, to some extent, are like armed conflicts. However, in this context, creativity, risk management, and the mandate to take coercive measures (rules of engagement) are much more restrictive. Although the domains of loyalty in this context could involve the local population in the mission area and allied military units from other countries, they are likely to mainly concern the individual’s own unit and closest colleagues, rather than the overall mission or one’s own nation (e.g., Moskos, 1975).

The third, and most usual context, is the role of civil servant, which involves the training and production of military units in peacetime. In this context, activities are strictly regulated – as with any other Swedish authority – in terms of issues such as finance, safety, and regulations concerning working hours and work environment. The domains of loyalty are likely to be with the individuals in the immediate workgroup and within the unit but can...
also involve loyalties to organizational values and regulations. Furthermore, as this context also involves everyday life after working hours, loyalties to family, friends, and societal values are likely to have an impact (e.g., Peterson & Uhnoo, 2012; Segal, 1986).

The fourth context is the overall professional context, characterized by officers’ training, traditions, and professional norms, including issues such as mission command, initiative taking, and heroic role models (SOU 2001:23). All these professional settings contain different and sometimes contradictory expectations from society and the employer, which, in turn, places high demands on the leadership of military officers at all levels of the organization. The domains of loyalty in this context are likely to focus on professional military norms and the status of the profession within society (e.g., Abrahamsson, 2005; Huntington, 1985; Weber, 1978).

Altogether, there appears to be a variety of different loyalty domains that military personnel must be able to handle, depending on the context and situation – an issue that military leadership must take into consideration. In the military profession, leadership must be practiced in situations where decisions and behaviors may result in severe moral stress among both leaders and their subordinates (Kallenberg et al., 2016). In summary, military leadership at all levels must be well thought through to enable the handling of complex professional ethics and to create a feeling of belongingness to desired domains such as professional values (Weber, 1968) or the mission of the unit (Shalit, 1988).

General aim of the thesis
The overall aim of this thesis was to broaden the understanding of the concept of loyalty within a military context, by focusing on how the nature of loyalty is experienced, how it can be measured and how it can be predicted. To achieve this, the thesis was structured in three interrelated studies, which initially aimed to examine the content of loyalty within the Swedish Armed Forces (SAF), then to develop and validate a scale to measure loyalty, and finally to examine possible predictors of loyalty.

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The aim of Study III was to examine how individuals’ willingness to act loyally to certain domains (the closest workgroup, the unit, and the unit mission) can be predicted by social identity fusion and developmental leadership. Demographic factors, such as rank and gender, were also examined, taking the outcome of loyalty into consideration.
On loyalty

The nature of loyalty

Loyalty is typically used to denote an important virtue concerning human interaction (Fletcher, 1993). However, loyalty seems to be a complex and multifaceted concept that can encompass a range of attitudes, behaviors and emotions. Moral foundations theory (Haidt & Joseph, 2007) describes loyalty to be one of five moral foundations explaining moral conflicts and disagreements between individuals and cultures. According to Moral foundations theory loyalty/ingroup, together with authority/respect and purity/sanctity are moral foundations with a clear focus on group relations. These moral foundations guide the individual (and the group) in how to adapt to the group to fit in (Graham et al., 2011). While loyalty focuses on group cooperation, belongingness and rage against traitors, authority/respect focuses on the negotiation of hierarchy within the group. Hence, loyalty is part of the human way to organize themselves into groups to manage the competition with other groups. Group loyalty is based on belongingness such as kinship, ingroup virtues, language, religion, etc. Self-sacrifice (and heroism) for the good of the group is one important feature of loyalty (Haidt & Joseph, 2007).

Loyalty is often considered to be a natural behavior that has developed through human evolution to enable survival of the individual, group or specific communities (Haidt & Joseph, 2007). By being sociable, strong emotional bonds with other individuals, groups or specific communities can be built — creating mutual bonds and subsequently resulting in a reciprocal bond of loyalty (Ewin, 1990). This feeling of reciprocity is assumed to lead to feelings of safety which, in turn, may motivate individuals to take risks or overt action for the sake of the domain of loyalty (e.g., Swann et al., 2010; Walzer, 1994). Nevertheless, the concept of loyalty is often described as divergent and unclear, prompting the need for further examination to facilitate operationalization in future studies of both individual and organizational behavior (Arvidsson & Axelsson, 2014).

An individual can have multiple loyalties to a variety of domains and prioritizing one above the other does not make the individual disloyal (Coleman, 2009). Being disloyal is rather when the individual acts only for the benefit of him/herself and not for any loyalty domain (e.g., Coleman, 2009). One recurrent aspect associated with loyalty is persistence in long-term relationships, with one or several domains of loyalty with which the individual identifies strongly (Kleinig, 2014). The emotional dedication that follows
strong loyalties will influence how individuals think, feel, act, and behave in relation to a particular person, group, profession, organization, or value (e.g., Ewin, 1990; Hirschman, 1970; Royce, 1908).

Although loyalty is mainly developed within important social ingroups such as families, friends, and the specific community the individual lives in, other domains calling for the individual’s loyalty can be professions, organizations, companies, religious or ideological communities and nations (Kleinig, 2014; Wieseke et al., 2014). This type of more distal groups may create feelings similar to familiar bonds by amplifying collective identities and personal reciprocity (Konvitz, 1973). Key factors in creating loyalty to an organization seem to be a leadership that amplifies the identification with the workgroup and the organization, ensuring a reciprocal psychological contract on safety (Rousseau & Schalk, 2000), and strong emotional bonds with either the organization or the cause that the organization stands for (e.g., Bass, 1999; Fitriyani, 2018; Peng et al., 2020).

At the individual level, loyalty may motivate extreme sacrificial behavior, such as risking your life for the benefit of the group (e.g., Swann et al., 2010; Walzer, 1994) or extreme overt action, such as the use of lethal force (Koistra & Mahoney, 2016; Swann et al., 2010; Van Creveld, 1982). Although the use of force is part of the military profession, extreme action such as intentional use of lethal force against other individuals is something that most people find very difficult to perform (e.g., Cushman et al., 2006; Greene et al., 2009) unless the act is justified by very strong emotional bonds (Swann et al., 2010).

However, loyal behavior is not limited only to extreme sacrifices or extreme overt action. Loyalty is also expressed through more modest sacrifices and action, such as accepting inconvenience (e.g., Hornsey & Jetten, 2005) or speaking well of the group in front of others (e.g., Van Dyne et al., 1994). Further, loyalty can be expressed through more excessive, but moderate sacrifices, such as giving up one’s own resources (Beer & Watson, 2009) or risking social exclusion (e.g., Baumeister & Leary, 1995) or through moderate overt action such as breaking rules and laws that might lead to a prison sentence (e.g., disobeying speed limits, stealing supplies, harassing potential aggressors) lying (Umphress & Bingham, 2011).

Loyalty within an organization can also be destructive. Unbalanced loyalties, such as unchallenged loyalty to one’s own group, or ingroup, can cause behavior that prioritizes the ingroup’s needs before organizational needs. Furthermore, misdirected loyalties can cause unethical behavior, such as overlooking violations of societal norms (Umphress & Bingham, 2011) and, in the worst case, committing war crimes (Robinsson, 2009).

Nomological network
A nomological network is a conceptual framework that outlines the lawful relationships and connections among various constructs within a given scientific domain, providing a structured representation of empirical
regularities and theoretical links (e.g., Cronbach & Meehl, 1955). Loyalty seems to be part of a nomological network including constructs such as obedience (e.g., Huntington, 1957; Lewy, 1961), duty (e.g., Coleman, 2009), and organizational commitment (e.g., Allen & Meyer, 1990). Obedience could be defined as the submission of an individual’s will to the rule of someone or something, and disobeying means a risk of exposure to sanctions (Brownlee, 2004). According to Milgram (1974), obedience is a product of socialization where the individual has learned to submit to legitimated authority. The submission is grounded in the individual’s need to negotiate for a place in the hierarchy of the group (Haidt & Joseph, 2007). Furthermore, by submitting to authority the individual gets protection from outside threats, hence establishing a reciprocal relation with authority (Haidt & Joseph, 2007). A person who perceives him/herself as a subordinate to authority may conceive himself as an agent for the authority. By being an agent, all responsibility for the action is put on the authority and not the agent, hence legitimizing the actions as part of the norm within the organization (Milgram, 1974). Obedience to perform unethical orders is greater when orders are given directly by a superior leader, and lower when leaders disagree or when coworkers oppose orders (Da Costa, et al., 2021). Also, identification with normative societal values will support the individual in disobeying non-normative orders. While obedience to authority secures a formal hierarchical structure and an organizational protection for the individual, loyalty ensures safety and protection through cooperation within the group, group values, norms and emotions such as belongingness (Haidt & Joseph, 2007).

Duty could be understood as a feeling of obligation to act in a certain way within a certain context. Duty is part of a social contract, often expressed in rules, within a group, an organization, or a society (Karlborg, 2015). Duty has some similarity with obedience in the sense that the individual is submitting to authority (e.g., rules) rather than a voluntary choice to act (Coleman, 2009). Even though duty and loyalty have similarities (e.g., reciprocity, the protection of common values), duty seem to be close to what Waltzer (1994) denotes as thin moral bonds (justification of acts by rules or policy) while loyalty is closer to thick moral bonds (justification of acts by strong emotional bonds). Coleman (2009) separates duty from loyalty by stressing that duty is a matter of integrity (acting fair and according to commonly accepted rules), while loyalty is a matter of moral dilemmas strongly influenced by emotional bonds.

Organizational commitment describes the individual’s beliefs in and acceptance of organizational values, a willingness to strive for organizational goals and the will to remain within the organization (Mowday et al., 1979). Allen and Meyer (1990) describe an attitudinal perspective on commitment denoted by three components: affective commitment (identification and a willingness to remain in the organization), continuance commitment (a need to remain in the organization), and normative commitment (a feeling that one wants, or ought, to remain in the organization). Allen and Meyer (1990) imply that loyalty is a (passive) part of a normative organizational commitment to
stay in the organization. However, loyalty is rather an emotionally guided intention on how to act and contains feelings of both of joy and of rage (e.g., Haidt & Joseph, 2007), passive behavior (e.g., Hirschman, 1970), self-sacrifice (e.g., Walzer, 1994) and overt action (e.g., Koistra & Mahoney, 2016; Swann et al., 2010).

In conclusion, obedience and duty are mainly based on hierarchy, rules, regulations, and possible sanctions – action oriented and mainly directed to one specific domain. Organizational commitment is based on the individual’s attitude to one domain, the organization, based on emotions, norms and on own well-being. Loyalty differs from the others partly by describing intentions on how to act and partly by being directed to an array of possible domains that the individual must balance between – therefore differing from the other constructs by presenting possible emotional and moral dilemmas when choosing who or what to be loyal to.

In simplified terms, while obedience means leaving responsibility to authority and duty means to act accordingly to set rules and policies, loyalty means choosing to act or not to act depending on emotional ties. Hence, loyalty may cause dilemmatic situations regarding on how to behave, when set against obedience, duty or commitment by adding the emotional and moral perspectives to the context (e.g., Coleman, 2009; Segal, 1986).

Summary

In summary, it could be said that the nature of loyalty is based on long-term emotional bonds between the individual and the domain of loyalty. The reciprocal exchange between the individual and the domain of loyalty – leading to a sense of security for the individual – can generate a willingness to make sacrifices or take certain actions for the benefit of the loyalty domain. Loyal behavior can entail both moderate and extreme sacrifices as well as moderate and extreme action. The importance of loyalty within the military is motivated by the demands on personnel operating in an extreme environment, and by the notion that military personnel hold both the information and means to either protect the state or to commit treason. Therefore, there is a need for military organizations not only to be able to measure levels of loyalty, but also – perhaps more importantly – to be able to predict levels of loyalty.

Measuring loyalty

Measuring loyalty requires a conceptualization of the different facets of the construct (Curren & Kotzee, 2014). The loyalty scales available in behavioral research vary and depend on the field of research, however none of them considering extreme environments where risk of life or use of lethal force is necessary. Rather, most scales measuring loyalty are linked to consumer behavior and therefore focus on the individual’s loyalties towards different
brands and products (e.g., Becker & Nobre, 2013; Bobâlcă et al., 2012), services (El-Manstrly & Harrison, 2013), or institutions such as schools (Skallerud, 2011). In customer behavior, strong loyalty is manifested when an individual continues to buy a product or a service even though there are equal or better ones at equal or lower prices (El-Manstrly & Harrison, 2013; Oliver, 1997). In this context loyal action are limited to accepting certain shortcomings or paying a higher price for the product or service.

In research on organizational commitment, loyalty is sometimes described interchangeably with commitment or allegiance to a certain domain (Gordon & Ladd, 1990). Other research suggests that loyalty is one dimension of commitment that should be measured separately (Gallagher & Strauss, 1991). In these contexts, loyalty is seen as a passive dimension expressed in feelings of belongingness and agreement on political stands. In the military context, it is suggested that normative commitment is the expected obligation to be loyal (Gade, 2003).

Van Dyne et al. (1994) measure loyalty as part of the broader construct of organizational citizen behavior (OCB). Although they characterize one dimension as loyalty, containing mainly overt action (e.g., defending the organization), loyalty items with a sacrificial connotation (e.g., working overtime without extra pay) are part of a dimension labeled “functional participation”. Based on Van Dyne et al. (1994), Van der Vegt et al. (2003) selects a total of four loyalty items from the functional participation dimension to measure loyal behavior, mixing both sacrificial (e.g., stay overtime without pay) and overt action (e.g., doing much more than can be reasonably expected). Although, both studies take the standpoint of measuring loyal behavior, they seem choose a different conceptualization of what loyalty means, at least in denoting a behavior as loyal.

Within the realm of interpersonal behavior, reciprocity and a high level of support to another person seem to be the recurring content of items within the loyalty construct (Hargrave et al., 1991). In this context, loyalty is often expressed as a passive act, like refraining from a positive privilege for the benefit of someone or something else also. Extended to pro-group behavior (similar to loyal behavior), such behavior ranges from rather modest sacrifices or action like accepting inconvenience (Hornsey & Jetten, 2005), to more moderate sacrifice like spending time or money (Beer & Watson, 2009), to extreme sacrifice and action like killing and dying for a prioritized ingroup embody the ultimate loyal behavior (Swann et al., 2010).

Looking at existing measures of loyalty, some scales measure loyalty as a factor per se, linked to interpersonal relations. An example of this type is the Relational Ethics Scale (Hargrave et al., 1991) which measures loyalty as vertical (e.g., to stand by your family) and horizontal (e.g., to meet the needs of the family). Other scales measure loyalty as a multidimensional construct, such as the Expectations of Filial Piety Scale (Kao & Travis, 2005) which measures loyalty conceptualized by four different dimensions (respect, honor, support, and family unity), with focus on family. Furthermore, the
Expectations of Family Loyalty of Children Toward Elderly Relatives scale (Kao et al., 2012) measures expectations of loyalty between the elderly and their children in two dimensions (respect and priority). In the context of loyalty within the family, loyalty is often described as helping each other by standing by each other through life events.

Loyalty can also be measured as a passive-constructive (having patience with organizational problems) or a passive-destructive (neglecting the same organizational problems) phenomenon (Hagedoorn et al., 1999). While a passive-constructive loyalty means that the individual shows patience about organizational problems, waiting for them to be resolved, a passive-destructive loyalty means avoiding the same problems (Hagedoorn et al., 1999). Measures of passive loyalty focus on attitudes rather than actual behavior (e.g., passive-constructive: “Trusting the organization to solve the problem without your help; passive-destructive: “Report sick because you do not feel like working”).

The Individual and Groups Loyalty Scale (Beer & Watson, 2009) measures loyalty as a two-dimensional phenomenon, distinguishing between loyalty towards individuals and groups. Most items in the scale portray loyal expressions as passive (e.g., not criticizing the domain of loyalty), while some items describe active expressions, both sacrificial (e.g., sacrificing time and money for a friend) and overt action (e.g., coming to the aid of a friend).

Other scales measure loyalty as a part of a dimension, either using loyalty as an unspecified term (e.g., Hornsey & Jetten, 2005; Meyer et al., 1993), or indirectly by assuming that extreme pro-group behavior, such as dying or killing for the benefit of a certain group, signify loyalty (e.g., Swann et al., 2010).

In conclusion, while several measures for different aspects of loyalty exist, none of them captures a wider range of loyalty including moderate (e.g., Beer & Watson, 2009; Umphress & Bingham, 2011) or extreme sacrifice or overt action (e.g., Robinson, 2009; Swann et al, 2009) altogether. Furthermore, there are no scales measuring expressions of loyalty in organizations facing extreme demands like the military, something addressed by previous research related to military context (e.g., Olsthoorn, 2011). In the extreme military environment, an individual has to choose between several domains of loyalty (e.g., their own survival, protection of a colleague or the closest ingroup, the unit, the mission and the safety of the nation, (e.g., Shalit, 1988 or Van Creveld,1982); therefore, a scale measuring loyalty should be applicable to several different domains. This is supported by the different features of the military profession where each feature enhances different domains of loyalty to be prioritized (see table 1).
Predicting loyalty

Since an individual’s loyalty seems to be desired by various parties (e.g., family, friends, organizations, workgroups, superiors, brands, etc.), there are also different views on what loyal behavior entails (e.g., staying with the same brand, respecting and caring for one’s family, obeying regulations, sacrificing or taking specific action for the benefit of a certain domain of loyalty). Consequently, there are also several suggestions regarding possible predictors of loyalty. While trust in reciprocal exchange between the individual and the domain of loyalty are proposed as basic foundations for loyalty (e.g., Fitriyani, 2018; Olsthoorn, 2011), it is also suggested that additional factors such as personality, social identity, group cohesion, leadership, and organizational culture could be predictors for loyalty (e.g., Kleinig, 2014).

Military organizations seem to demand loyal behavior. This implies extreme pro-group behavior, including both sacrifice (e.g., risking one’s life) and overt action (e.g., using lethal violence). Indeed, these are often emphasized as part of the professional identity (e.g., Connor et al., 2019; Huntington, 1985; Shalit, 1988). Thus, identity can be expected to be a predictor of loyalty within the military. Furthermore, the professional socialization of the loyalty norm requires leadership, from top levels to frontline commanders that emphasizes loyalty as a desired behavior (e.g., Kleinig, 2014). Leadership is known to be an important factor for creating feelings of belongingness and group cooperation which corresponds to loyalty as described in Moral Foundations Theory (Haidt & Joseph, 2007). Furthermore, leadership is assumed to have a significant impact on the perception of reciprocity (a prerequisite for loyalty) between the employer and the employee (e.g., Rousseau & Schalk, 2000). Hence, both social identity and leadership are likely to be important predictors of loyalty in professions with strong vocational callings, such as the military.

Social identity

As recognized in the above section on the nature of loyalty, loyalty can be expected to be influenced by emotional bonds between an individual and a domain of loyalty. Furthermore, the stronger the individual identifies with a domain of loyalty, the stronger the loyalty to that domain. Identification with domains outside of one’s personal identity could be described as social identities (Tajfel & Turner, 1979). Social identity theory describes an individual’s self-perception as being composed of personal identity traits complemented by social identities (Tajfel & Turner, 1979). Hence, an individual’s personal identity could be more or less integrated (fused) with a specific social identity (e.g., a certain group, a community, or an ideology).

Social identity fusion theory suggests that the more an individual is fused with a certain social identity (domain of loyalty), the more willingness there is to make extreme sacrifices and/or take extreme action for the benefit of the
domain (Swann et al., 2010). Therefore, social identity fusion appears to be a possible predictor of loyalty to any specific domain that the individual identifies with. From an organizational perspective, creating or strengthening certain social identities with which individuals could fuse can therefore be expected to influence levels of loyalty in desired directions. Fusing with one or more social identities should also generate feelings of reciprocity with fused domains – another foundation for creating and maintaining loyalty. In the military context, identification with the profession and its values is often used as a method to create strong social identities (e.g., Abrahamsson, 2005; Caforio, 2006).

**Leadership**

Within professional organizations, employee loyalty can be described as a reciprocal phenomenon, where mutual expectations between the leadership of the organization and the individual can create strong emotional bonds (Zaccaro et al., 2001). However, the mutual understanding of what is expected concerning reciprocity may vary (e.g., Chambel & Oliveira-Cruz, 2010, Gouldner, 1960; Zaccaro et al., 2001) among leaders and employees. Previous research has shown that military officers become less loyal to the organization if they experience a lack of reciprocal exchange (Heinecken, 2009). Subsequently, a lack of reciprocity might also cause a lack of identification with organizational values which, in turn, may decrease loyalty to the organization (Heinecken, 2009).

The reciprocal view of loyalty also indicates that different domains within the organization (e.g., top management, the nearest superior officer or the closest workgroup) may be experienced differently in terms of levels of reciprocity. Subsequently, this may cause different levels of loyalty within these different domains. Hence, it has been suggested that strong loyalty with one domain of the organization can cause reduced loyalty to other domains within the organization, such as other units, common values, or goals (Hogg & Terry, 2000). Such competing domains of loyalty could cause inter-organizational conflicts of interest between the organizational goals and norms, and sub-unit interests or personal relations (Rice et al., 2017; Umphress & Bingham, 2011). Thus, an organizational leadership style – practiced at all levels of an organization – should strive to create strong emotional attachments to prioritized domains (e.g., organizational goals and mission, workgroups, and leaders), and a feeling of reciprocal loyalty.

Leadership research typically distinguishes between transactional leadership (characterized by a reward and punishment approach, control and rules) and transformational leadership (which emphasizes strong group relationships, participation in decisions, and clear and transcendent goals (Bass, 1997)). It has been found that transformational leadership enhances pro-organizational behavior (Luan et al., 2022) and relates positively to loyalty among employees (Bass, 1999; Fitriyani, 2018; Peng et al., 2020;
Zaccaro et al., 2001). Transformational leadership has been adapted to the Scandinavian cultural context under the term Developmental Leadership (Larsson, 2006). Developmental leadership differs from Transformational leadership on some significant aspects. While transformational leadership only addresses one destructive leadership style (laissez-faire), developmental leadership addresses four more: insecure/indistinct, arrogant/unjust, threatening/excessive demand, and ego-centered/false (Larsson et al., 2018). Furthermore, charisma – part of transformational leadership – is replaced by influencing and motivating subordinates (Boe & Holth, 2015). In addition, developmental leadership adds a focus on the reciprocal care and consideration of employees and can be assumed to relate to behavioral outcomes in a manner similar to transformational leadership (Larsson, et al., 2003).

Hence, it is expected that developmental leadership could be positively related to a willingness to behave loyally (Larsson, et al., 2017). However, research into the relationship between leadership and loyal behavior is scarce (Connor et al., 2019), and in a military context, virtually non-existent (Olsthoorn, 2011).
Summary of studies

This section describes the methodological rationale and the research context for this thesis, followed by a methodological overview and ethical considerations. Then, a summary of each of the three studies is presented.

Methodological rationale

To reach the overall aim of this thesis – examining the nature of loyalty, how it can be measured and how it can be predicted – a decision was made to use a bottom-up methodological approach. Hence, in order to examine the nature of loyalty, the starting point was to conduct interviews focusing on high-ranking military officers in the Swedish Armed Forces (SAF) and their individual experiences of loyalty in the organization (Study I). Based on these interviews, a measure of loyalty within the military was developed and psychometrically evaluated (Study II). Finally, the scale was used to examine how certain factors, specifically leadership and social identity, can predict loyalty in extreme operational contexts (Study III).

Given this approach, a combination of qualitative and quantitative methods was deemed suitable (e.g., Hinkin, 1998). The qualitative approach enables an open exploration of complex experiences and concepts, without too many presumptions regarding the topic of interest (Braun & Clarke, 2013). The results of the qualitative research can then be used to identify variables of interest to investigate using quantitative measures (e.g., Hinkin, 1998). The quantitative approach enables an investigation of the phenomenon of loyalty within large samples (Flora & Flake, 2017). For instance, it enables the validation of the measure of the construct. Furthermore, the quantitative approach enables examination of possible associations with other constructs and comparisons between different populations.

Research context

All studies were conducted using data from employees in the SAF. The SAF is a self-governing authority led by the Supreme Commander (a four-star general). The SAF is commanded by the Armed Forces Headquarters, which also contains the Joint Operational Command and the services commands. The
SAF staff consist mainly of military personnel divided into three categories: tactical officers, specialist officers (i.e., officers and non-commissioned officers/NCOs), and soldiers. Tactical officers are officers ranked between Second Lieutenant and four-star General, with the responsibility and training to lead tactical military units. Specialist officers are ranked between Sergeant and Sergeant Major. The soldier category consists of both professional and conscript soldiers, however in this study only professional soldiers participated. The SAF also has civilian personnel in different positions ranging from administrative personnel to managerial positions in the SAF Headquarters. The main missions of the SAF are to defend Sweden against hostile attacks from foreign states, to maintain Sweden’s territorial integrity, to participate in international military missions, and to give assistance to Swedish civil society if needed. Because of the shifting security situation in Europe the focus of the SAF has recently shifted from international missions to national defense.

All Swedish military personnel must complete basic military training (7–12 months depending on position). Then, enlisted soldiers are trained according to the unit to which they are assigned. Specialist officers are trained over three semesters mixing leadership theory and branch specific knowledge with duty in their assigned units. The career of the specialist officer contains further training for each rank. Tactical officers complete three years of education with academic studies at the Swedish Defense University (SDU) leading to a bachelor’s degree in War Science, supplemented with special-to-arm in their assigned units. After graduating from the SDU, tactical officers are also trained at different service schools within the SAF – focusing on unit command. During the tactical officers’ career, they also complete two years of academic education at the SDU leading to a master’s degree in War Science.

Methodological overview

In Study I – using methodology inspired by Interpretative Phenomenological Analysis (IPA) – a qualitative approach was used to examine the nature of loyalty as perceived by individuals in a military context. The sample in Study I, the interview study, consisted of nine high-ranking military officers.

Study II of the thesis was separated into two parts (Study 1 and Study 2) in order to develop and validate the Swedish Military Loyalty Scale (SMiLS), a measure of loyalty. Study 1 started with item generation based on the interviews in the Study I of the thesis, followed by a survey study, done with a sample of officers during training, using exploratory factor analysis to examine possible variables constituting loyalty, and to exclude variables that were not part of the construct. Study 2 started with confirmatory factor analysis, based on data collected from a survey done with two independent samples (one consisting of officers during training, and on consisting of
military personnel on an overseas mission) to validate the scale developed in Study 1. Study 2 also examined measurement invariance, reliability, associations within the four loyalty dimensions, and with potential correlates between the two samples.

In Study III, the loyalty scale (SMiLS), developed in Study II, was used to examine how leadership and social identity fusion can predict loyalty. Data from one of the three independent samples in Study II was used also in Study III, namely a unit on an international UN mission. The samples across the three studies are presented in Table 2.

Table 2. Methodological overview of all three studies.

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample</th>
<th>Data collection</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study I</td>
<td>High-ranking military officers in the SAF (N=9)</td>
<td>Semi-structured interviews</td>
<td>IPA-inspired thematic analysis</td>
</tr>
<tr>
<td>Study II</td>
<td>Three independent samples. Military personnel (N=63; 87; 155)</td>
<td>Questionnaires</td>
<td>Exploratory factor analysis (EFA), confirmatory factor analysis (CFA), reliability tests and correlations</td>
</tr>
<tr>
<td>Study III</td>
<td>A Swedish military unit on a mission abroad (N=155)</td>
<td>Questionnaires</td>
<td>Hierarchical multiple regression analysis</td>
</tr>
</tbody>
</table>

Ethical considerations

Participants in the three studies were treated in accordance with the law on human research (SFS 2003:460), the law on additional regulations with the European Union general data protection regulation (GDPR, 2018:218), and the principles formulated by the Swedish Research Council (2011, 2017).

Conducting research in organizations such as the SAF, with a strong hierarchy, interdependence, and peer pressures, raises questions about participation being voluntary. Discussing moral dilemmas and ethical issues with military personnel, particularly those in decision-making positions, can be problematic because of the risk of participants answering to please their superiors (social desirability bias; van Baarle, 2015).

Furthermore, when asked to participate in the study, there is a risk that direct or indirect group pressure – such as in Study II and Study III – may make individuals feel compelled to participate even though they may be unwilling (Leentjens, 2013). Hence, in these studies, voluntariness and
confidentiality were strongly stressed in the approval section of the questionnaires, and when meeting the participants (such as in Study I).

When collecting data in a military setting, there is a risk that sensitive or classified information may emerge. Excluding certain data or research results to protect society’s best interests is highly debatable, but not unthinkable (Kuhlau, 2013). However, if it concerns national security, it is absolutely necessary. In this thesis, the author’s own expertise in matters of defense confidentiality made it possible to avoid such situations (e.g., by avoiding questions and issues that could lead to the mention of classified information).

The thesis project, including all data collection, was approved by the Regional ethical review board in Stockholm, Sweden (ref. no. 2017/924-31/5).

Study I

Aim
The overall aim of Study I was to clarify the meaning of loyalty within the military. Important core values of an organization are often formulated – or strongly influenced – by its leaders. Therefore, the aim of this study was to explore how high-ranking officers in the SAF give meaning to their own personal experiences of loyalty and to describe possible common patterns within the participant group.

Sample and procedure
Nine active generals/admirals from different services of the SAF were asked to participate in the study, and all agreed. The participants were chosen as they were all very experienced officers and should, therefore, be able to reflect on loyalty within the organization from a broad perspective. Furthermore, all participants were in appointments with a considerable impact in the organization and, therefore, likely to affect the armed forces’ personnel’s views about expectations of loyal behavior. All participants were male and in the age range 53 to 60 years.

The interviews were semi-structured and conducted in the participants’ offices at their workplace. The interviews lasted approximately 60 minutes each. Interviews were conducted by the author, who himself is an experienced officer (Army) with a relatively broad contextual understanding of the military environment, which was seen as facilitating the interviews.
Interview guide

A first interview guide was developed following the guidelines given by Smith et al. (2009) when using IPA. The interview guide was first tested on two high ranking military officers not participating in the study. A final version was then formulated after feedback from research colleagues. The interview guide consisted of three main areas: (a) experiences of own loyal behavior to others; (b) experiences of others’ loyal behavior; (c) expectations of loyal behavior (see Table 3 for the interview guide). All three areas had supplementary follow-up questions aimed at deepening participants’ descriptions of their experiences of loyalty and loyal behavior. The participants were given the main questions in advance in order to allow them to reflect on the issue before the interview.

Table 3. Interview guide.

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
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<tbody>
<tr>
<td></td>
<td><strong>Experiences of own loyal behavior towards others</strong></td>
</tr>
<tr>
<td>1</td>
<td>what loyalty means to you.</td>
</tr>
<tr>
<td>2</td>
<td>your own loyalties and what they mean to you.</td>
</tr>
<tr>
<td>3</td>
<td>a situation (or situations) when you had to weigh your loyalties.</td>
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<td></td>
<td>against each other.</td>
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<tr>
<td>4</td>
<td>your experience of loyalty through your career and on the different</td>
</tr>
<tr>
<td></td>
<td>levels that you have worked on.</td>
</tr>
<tr>
<td>5</td>
<td>a person to whom you experience strong loyalty.</td>
</tr>
<tr>
<td></td>
<td><strong>Experiences of others’ loyal behavior</strong></td>
</tr>
<tr>
<td>6</td>
<td>a situation when your expectations of loyalty were met and how</td>
</tr>
<tr>
<td></td>
<td>you felt/feel about that.</td>
</tr>
<tr>
<td>7</td>
<td>a colleague that you experience to be very loyal.</td>
</tr>
<tr>
<td>8</td>
<td>a situation where strong loyalties has affected the organization</td>
</tr>
<tr>
<td></td>
<td>negatively or positively.</td>
</tr>
<tr>
<td></td>
<td><strong>Expectations of loyal behavior</strong></td>
</tr>
<tr>
<td>9</td>
<td>your expectations of loyalty from the employees of the Swedish Armed</td>
</tr>
<tr>
<td></td>
<td>Forces and how far this loyalty should stretch.</td>
</tr>
<tr>
<td>10</td>
<td>your expectations of loyalty from the organization.</td>
</tr>
</tbody>
</table>
Analysis
The interviews were digitally recorded and transcribed verbatim. Data analysis was inspired by IPA, following the steps described by Smith et al. (2009). The first step meant reading through the transcriptions, making initial descriptive notes about what was said. Step 2 involved re-reading the data with a linguistic approach – focusing on the language used by the participant to describe an experience. The third step concerned re-reading the data, this time focusing on the interpretation of the conceptual meaning (the literal meaning) of words used. In the fourth step, based on the notes from previous steps, emergent themes were developed, sorted and described. A fifth and final step identified recurrent themes which, in turn, were clustered into superordinate themes. Themes were considered recurrent if identified among at least four of the nine participants in the sample.

Results
The analysis resulted in seven recurrent, superordinate themes: (1) To choose and balance between loyalties; (2) Loyalty as a professional norm and a personal identity; (3) To comply or to oppose; (4) Loyalty means sacrifice; (5) Extended action – to do more; (6) Leadership and loyalty; and (7) Destructive loyalty.

(1) To choose and balance between loyalties. During the interviews the participants described a complex picture of loyalty where loyalty dilemmas seemed to be a recurrent element of the extreme nature of the military profession. Loyalty dilemmas concerned situations in which a choice between different domains of loyalty had to be made (e.g., to stay at home and support your family, or to go to work; to be loyal to a commander, or to the mission; to question a command, or to obey). Loyalty dilemmas were experienced as causing frustration or moral stress.

(2) Loyalty as a professional norm and a personal identity. Several participants stressed that loyalty is created through a strong sense of cohesion with the military profession and the unique vocation of being an officer: thus, separating them from civilian personnel. Most of the participants also described the profession as a natural and extended part of life and their identity.

(3) To comply or to oppose. Most participants were concerned with contradictory norms, such as the conflict between executing confirmed orders and the moral obligation to question ideas and decisions from superior officers. Although most of the participants stressed the importance of questioning and sometimes of disobedience, all of them had experienced negative consequences of doing so.

(4) Loyalty means sacrifice. While all participants stated that they have multiple loyalties to consider, they also argued that you only can be loyal to one thing at a time. Most of the participants had experiences whereby being
loyal to one specific domain also meant sacrificing something – or someone – else.

(5) Extended action – to do more. All participants said that the norm is always to do your utmost to complete your tasks, in combat as well as in day-to-day work. When in combat situations, this means that you are expected to use massive, organized violence and, in doing so, put yourself, your colleagues and even your friends at great risk.

(6) Leadership and loyalty. The results showed three recurrent aspects of leadership influence on loyalty: (a) professional core values that foster the desired behavior; (b) the ability to convey contextual understanding for the purpose of a certain mission or task; and (c) the need for basic trust in superior officers’ competence and the decisions they make.

(7) Destructive loyalty. The results indicated a recurring perception that there are at least three different forms of misguided or destructive loyalty behaviors: (a) conformism (to act as the majority acts); (b) obedience (to execute without questioning); and (c) egocentric loyalty (to prioritize one’s own interests and wellbeing first).

Furthermore, although several domains of loyalty were addressed, five domains were recurrent: values (personal core values); one’s family (the individual’s closest family members); one’s own workgroup (e.g., an infantry squad or a command team); the unit mission; and the nation.

Conclusion
The results of Study I reveal a broad variety among the participants’ experiences of balancing and prioritizing their loyalties to different domains. Balancing between different domains of loyalty requires a well thought out moral foundation to be able to deal with loyalty decisions in dilemmatic situations. Among the participants, loyalty seemed to be strongly influenced by professional norms – sometimes contradicting each other – and by the professional identity.

Two recurrent themes that frame loyalty expressions are the sacrificial theme (loyalty means sacrifice) and the extended action theme (extended action – to do more). The sacrificial theme stressed that being loyal meant being ready to make sacrifices. These ranged from moderate sacrifices (such as spending time or neglecting one’s own values) to more extreme sacrifices (such as risking social exclusion or risking one’s health and life). The extended action theme stressed that doing the utmost to complete the mission could mean moderate action such as working for free or implementing unpleasant decisions, to more extreme action such as using lethal force.

Two of the most contradictory norms seemed to be the balance between obeying orders and speaking up about inaccuracies, something the participants had experienced personally, but had also observed among colleagues and subordinates. To conclude, loyalty seems to be a strong and important organizational norm that guides future behavior, which when explored reveals
many perspectives that are experienced as being complex to deal with. Therefore, the organization and its leaders should have a clear and well thought out normative basis for expected loyal behavior.

Study II

Engelkes, T., Lindholm, T., & Sverke, M.
Measuring loyalty: Developing a scale for an ambiguous virtue. 
*Manuscript being prepared for submission.*

Aim

The aim of Study II was to develop a scale (the Swedish Military Loyalty Scale; SMiLS) to measure loyalty within a military organization and to evaluate its measurement properties. More specifically, the aim was to develop items measuring both loyal sacrifice (moderate to extreme) and loyal action (moderate to extreme). Furthermore, the aim was to validate SMiLS in terms of factor structure, measurement invariance, reliability, associations within the SMiLS dimensions. To incorporate the notion that loyalty can be directed towards different targets, the scale was constructed to measure loyalty to different domains of loyalty (values, family, workgroup, mission, and nation).

Samples and procedures

Study II included three separate samples of participants. Sample 1 was used for exploratory factor analysis in Study 1, while samples 2 and 3 were used for confirmatory factor analysis in Study 2. Samples 1 and 2 consisted of tactical officers attending the Advanced Command and Staff course at the Swedish Defense University (SDU). During their studies, the majority of the students have no specific assignment in the SAF. The students spend one to two years at the SDU, studying war studies, military technology, command and control science, military history, leadership studies, and international law in military operations. After completing their studies, the students get a master’s degree, are promoted and assigned a new post. Sample 3 consisted of military personnel in a combat unit during an international military UN mission in Mali, the Multidimensional Integrated Stabilization Mission in Mali (MINUSMA).

Sample 1 and Sample 2 were chosen because all participants were experienced officers – quite familiar with the military setting and its different contexts – and, therefore, expected to answer the survey with a relatively high ecological validity (Schmuckler, 2001) compared to inexperienced or junior officers. Sample 3, the Swedish operational unit within the UN mission,
MINUSMA, was chosen to investigate the scale during actual mission circumstances and hence with a high level of ecological validity. Samples 1 and 2 were sent a digital survey, while Sample 3 was given a printed version of the same survey. The printed survey was sent through the unit chain of command and returned to the researcher in individually sealed envelopes.

Sample 1 initially consisted of 110 experienced officers attending a senior staff course at the SDU. The survey was answered by 77 individuals (response rate 70%). After the removal of incomplete answers, there was an effective sample of N=67. Participants were in the age range 35–56 years (M=42) and consisted of both men (91%) and women (9%). The majority of the participants were parents (77%) and were in a long-term relationship with a partner (87%). The sample represented the three services in the Swedish Armed Forces (SAF): Army (58%), Air Force (23%) and Navy (19%). The number of years’ service ranged between 10 and 35 years (M=18).

Sample 2 initially consisted of 120 Swedish officers attending the Advanced Command and Staff Course at the SDU, and responses were obtained from 98 individuals (response rate 82%). After removing nine incomplete answers and two multivariate outliers, the effective sample size was N=87. Participants were in the age range 32–70 years (M=48) and consisted of both men (88%) and women (12%). The majority of the participants were parents (79%) and were in a long-term relationship with a partner (86%). The sample represented the three services in the SAF: Army (68%), Air Force (14%) and Navy (18%). The average length of service was 25 years (ranging between 8 and 46 years).

Sample 3 consisted of military personnel in a unit in the UN mission MINUSMA. A total of 165 individuals responded to the survey, of approximately 220 who received it, giving an approximate response rate of 75%. After removing 10 incomplete answers and three multivariate outliers, the effective sample was N=155. Participants were in the age range 21–59 years (M=31) and consisted of both men (85%) and women (15%). The majority of the participants were not parents (72%) but were in a long-term relationship with a partner (70%). The number of years’ service ranged between one and 39 years (M=8). The sample consisted of officers (17%), non-commissioned officers (NCOs) (22%), soldiers (51%) and others (10%), including civilian and non-ranked military personnel.

Measures

Because Study II focuses on Swedish military personnel, item generation was based on the results of Study I, which examined high-ranking Swedish military officers’ experiences of loyalty (Engelkes et al., 2022). Results from Study I supported by previous research and indicate that loyalty could be represented by two dimensions, one sacrificial and one action-oriented (e.g., Huntington, 1985; Van Dyne et al., 1994; Van der Vegt et al., 2003). Hence, items for Study II were generated by listing different sorts of personal
sacrifices or action mentioned in Study I. However, items were also inspired by other scales measuring loyalty (e.g., the intergroup loyalty scale by Beer and Watson, 2009) for each assumed dimension. Although loyalty could be conceptualized as attitudes, behavior, and emotions to an ingroup (e.g., Haidt & Joseph, 2007), the choice was made to measure the willingness to express loyalty through acts of sacrifice or as overt action (e.g., Swann et al., 2010).

An initial pool of 40 items was sent to four experts on the subject matter (two experienced military officers and two academic researchers within the field of work and organizational psychology) for a review of face validity and phrasing. The review resulted in a total of 14 items being retained for further testing, seven of which described loyal sacrifice and seven of which reflected loyal action (see Table 4). All items were set to be measured on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). Loyal sacrifice was defined as the willingness to voluntarily give up or risk losing something of value to oneself for the benefit of someone or something else. Loyal action was defined as the willingness to voluntarily take action that would benefit someone or something else.

Five domains of loyalty stressed by the high-ranking officers in Study I were chosen: values (personal core values); one’s family (the individual’s closest family members); one’s own workgroup (e.g., an infantry squad or a command team); the unit mission; and the nation. These five domains are also recurrent in other research into loyalty: values (Wieseke et al., 2014) own family (Segal, 1986), workgroup (Connor et al., 2019), mission (Shalit, 1988) and nation (Huntington, 1985).

Analysis

After the initial item generation (see Measures), Study 1 used exploratory factor analysis (EFA) of Sample 1 to examine the initial assumption of a two-dimensional representation of loyalty, using the 14 items designed to measure loyal self-sacrifice (7 items) and loyal extended action (7 items). Study 1 also examined the reliability of the dimensions. Study 2 used a confirmatory approach to validate SMiLS using samples 2 and 3. More specifically, the dimensionality of SMiLS was analyzed using confirmatory factor analysis (CFA), with Robust Maximum Likelihood Estimation (MLR), based on data from Sample 2 (officers undergoing training) and Sample 3 (the international mission unit). SMiLS was validated testing 1–4 factor solutions (including a null solution). The two-factor solution differentiated between loyal sacrifice and loyal action. Two three-factor solutions were tested (3a and 3b); 3a grouped the two moderate dimensions together, keeping the extreme dimensions separate; 3b kept the moderate dimensions separate and grouped the two extreme dimensions together.
<table>
<thead>
<tr>
<th>Domains of loyalty</th>
<th>Values</th>
<th>Family</th>
<th>Workgroup</th>
<th>Mission</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Loyal Sacrifice</strong></td>
<td>MLS01</td>
<td>I am willing to sacrifice a large part of my own time for the benefit of my…</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>MLS02</td>
<td>I am willing to risk my economic benefits for the benefit of my…</td>
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<tr>
<td></td>
<td>MLS03</td>
<td>I am willing to risk my reputation for the benefit of my…</td>
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<tr>
<td></td>
<td>MLS04</td>
<td>I am prepared to risk my status in the Armed Forces for the benefit of my…</td>
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</tr>
<tr>
<td></td>
<td>MLS05</td>
<td>I am prepared to risk being “frozen out” by people or groups I care about for the benefit of my…</td>
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<td></td>
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<tr>
<td></td>
<td>MLS06</td>
<td>I am willing to risk my health and well-being for the benefit of my…</td>
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<tr>
<td></td>
<td>MLS07</td>
<td>I am willing to risk my life for the benefit of my…</td>
<td></td>
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<td></td>
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<tr>
<td><strong>Loyal action</strong></td>
<td>MLA01</td>
<td>In front of others, I always defend my …</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MLA02</td>
<td>Sometimes I overlook significant shortcomings in my…</td>
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</tr>
<tr>
<td></td>
<td>MLA03</td>
<td>I am prepared to knowingly lie or conceal the truth for the benefit of my…</td>
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<tr>
<td></td>
<td>MLA04</td>
<td>I am prepared to commit serious crimes (with a penalty of several years in prison) for the benefit of my…</td>
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</tr>
<tr>
<td></td>
<td>MLA05</td>
<td>I am willing to threaten other people or groups of people for the benefit of my…</td>
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<tr>
<td></td>
<td>MLA06</td>
<td>I am willing to use some amount of force for the benefit of my…</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>MLA07</td>
<td>I am prepared to use lethal force for the benefit of my…</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Response scale ranging from 1 (strongly disagree) to 5 (strongly agree).
Measurement invariance tests between samples 2 and 3 were conducted using multi-group confirmatory factor analysis (CFA). The internal consistency reliabilities of the resulting dimensions of loyalty were examined using Cronbach’s Alpha (Cronbach, 1951). Correlations were used to examine associations among loyalty dimensions, including associations across domains of loyalty, as well as associations between loyalty and external variables. All analyses involved all five domains of loyalty.

Results

Study 1
The result of the exploratory factor analyses in Study 1 indicated a four-dimensional model where both loyal sacrifice and loyal action were separated into one moderate and one extreme dimension: (a) moderate loyal sacrifice (MLS); (b) extreme loyal sacrifice (ELS); (c) moderate loyal action (MLA), and (d) extreme loyal action (ELA). Results were similar across all five domains, except for the domain workgroup which also indicated a possible three-dimensional solution.

Reliability tests (Cronbach’s alpha) for the four dimensions – and across all five domains – ranged between .70 and .98 (except for MLA in the workgroup domain, which showed a lower value [.55]). The EFA analyses also resulted in dropping four items (two of which were initially developed to measure sacrifice and two designed to measure loyal action), resulting in a revised scale comprising 10 items (see Table 5). The four dropped items (MLS01, MLS02, MLA01, MLA02) could be considered as relatively modest sacrifices (e.g., sacrificing time or economic benefits) respectively modest overt action (e.g., defending in front of others or overlooking shortcomings).
Table 5. Retained Items, after EFA, for the Swedish Military Loyalty Scale, SMiLS.

<table>
<thead>
<tr>
<th>Swedish Military Loyalty Scale – SMiLS</th>
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</thead>
<tbody>
<tr>
<td>Moderate loyal sacrifice (MLS)</td>
</tr>
<tr>
<td>MLS 01</td>
</tr>
<tr>
<td>MLS 02</td>
</tr>
<tr>
<td>MLS 03</td>
</tr>
<tr>
<td>Extreme loyal sacrifice (ELS)</td>
</tr>
<tr>
<td>ELS 01</td>
</tr>
<tr>
<td>ELS 02</td>
</tr>
<tr>
<td>Moderate loyal action (MLA)</td>
</tr>
<tr>
<td>MLA 01</td>
</tr>
<tr>
<td>MLA 02</td>
</tr>
<tr>
<td>MLA 03</td>
</tr>
<tr>
<td>Extreme loyal action (ELA)</td>
</tr>
<tr>
<td>ELA 01</td>
</tr>
<tr>
<td>ELA 02</td>
</tr>
</tbody>
</table>

Study 2
The results of Study 2 – including both Sample 2 (experienced officers in training) and Sample 3 (military unit on the UN mission MINUSMA) – showed that the four-dimensional model suggested by Study 1 provided a substantially better fit when compared with all other models. The results generally indicated that the four-dimensional model provided a good to acceptable fit for all domains, although the chi-square statistic indicated that it did not provide a perfect fit. However, for the domain Family, a three-factor model (ELS and MLS combined into one dimension) showed a fit similar to the four-factor model. Overall, the four-factor model showed a significantly better fit than all other models tested.

Factor loadings were generally strong. However, two of the items in the MLA dimension (MLA03 and 04) showed low factor loadings for the values (.38) and nation (.39) domains for Sample 2 and the nation domain (.34) for Sample 3.
The tests for configural invariance showed that the four-dimensional model generally provided an acceptable fit, suggesting that the factor structure was equivalent between the samples for all domains of loyalty. In terms of metric invariance, the fit indicators generally supported the factor loading equivalence between the two samples, although the chi-square test indicated an impairment in model fit. However, the models testing scalar (equivalence concerning also intercepts) and strict (equivalence concerning also residual errors) invariance provided a poor fit to data.

The internal consistency reliability of all dimensions in all domains was generally above .70. However, the moderate loyal action dimension exhibited a low reliability (.55) for the domain workgroup in Sample 2, and Cronbach’s alpha ranged between .45 and .67 for four of the domains in the moderate loyal action dimension Sample 3, the exception being the domain of family (alpha = .73).

Correlations were generally strong between moderate sacrifice (MLS) and extreme sacrifice (ELS), between moderate action (MLA) and extreme action (ELA), and between ELS and ELA. The correlations between the MLS and the ELA dimensions were somewhat weaker. Comparing the two samples, the correlations were relatively similar, possibly indicating, however, somewhat stronger correlations for the domain nation within Sample 3.

Conclusion
The results of the EFAs in Study 1 (using Sample 1) showed that the willingness to behave loyally could be measured using a four-dimensional representation, consisting of moderate and extreme loyal sacrifice, and moderate and extreme loyal action, respectively. While the item generation initially resulted in 14 items, four of these had to be dropped based on the EFAs in Study 1. The distinction between moderate and extreme levels of loyal sacrifice and loyal action is supported by previous research indicating that loyal members of a group are prepared to take moderate but norm-breaking measures (e.g., lying; Umphress & Bingham, 2011) to protect the group. But also, that loyal members are willing to take extreme measures (e.g., killing or dying; Chinchilla et al., 2021; Swann et al., 2010) when the group is severely threatened.

The CFAs conducted in Study 2, based on the 10 retained items, provided further support for the four-dimensional representation of loyalty suggested in the exploratory part (Study 1). In addition, the tests for measurement invariance generally showed support for configural and metric invariance between the two confirmatory samples. This indicates that the items used to measure the four dimensions, for all five domains, function similarly for officers during training (Sample 2) and for a unit on an international mission (Sample 3). Overall, the reliabilities were acceptable, with the exception of the moderate loyal action dimension (particularly for Sample 3, the UN mission unit).
Thus, there is a need for further development of SMiLS in terms of correlations within dimensions and correlations with external variables.

Study III

Aim
The overall aim of this study was to examine how ingroup identification and leadership can predict the willingness to behave loyally within the military. Following the results of Study II, a distinction was made between being willing to make sacrifices and the willingness to take overt action against someone for the benefit of a certain domain of loyalty.

Similarly, a distinction was made between extreme and moderate levels in the willingness to make loyal self-sacrifices (risking one’s own life vs. one’s reputation, respectively) and engaging in loyal action (using lethal force vs. lying, respectively). These associations were investigated for the three domains of loyalty specifically related to the organization, namely, the workgroup, one’s own unit, and the unit mission.

Sample and procedure
The sample in Study III was the same as Sample 3 in Study II (i.e., a military unit on a warlike UN mission in Mali, MINUSMA).

Measures

**Dependent variable**
Loyalty was measured using the Swedish Military Loyalty Scale (SMiLS), developed in Study II (see Table 5). Based on the results of Study II, SMiLS was found to measure loyalty in four dimensions – moderate loyal sacrifice (MLS); extreme loyal sacrifice (ELS); moderate loyal action (MLA); and extreme loyal action (ELA) – and for various domains of loyalty.

Three domains of loyalty, which focused on different organizational domains, were chosen: the workgroup, the unit, and the mission (of the unit). Although additional domains were measured, these three were chosen – firstly, because they were clearly related to the military profession and secondly, because they could be expected to be influenced by both leadership and social identity fusion.
Independent variables
Social identity fusion was assessed using the pictorial measure of social identity fusion, developed by Swann et al. (2009), derived from pictorial scales measuring attachment in close relationships (Aron et al., 1992) and identification with groups (Coats et al., 2000). Figure 1 presents this measure, adapted to the three domains of loyalty, which were the focus of Study III.

Figure 1. Social identity fusion scale. Based on the pictorial fusion scale (Swann et al., 2009).

Developmental leadership was measured using selected parts of the Developmental Leadership Questionnaire, DLQ (Larsson, 2006). The scale used in study III contained 17 items measuring developmental leadership behavior. Developmental leadership is the Swedish Armed Forces’ established leadership model and therefore relevant to measure in a Swedish military sample such as in this study.

Demographic variables
Demographic variables were used as control variables, measuring rank (officer vs. not officer), family conditions (living in a family vs. not living in a family), and gender (male or female).

Analysis
Hierarchical multiple regression analysis was used to investigate how social identity fusion and developmental leadership may predict the willingness to engage in loyal behavior. Separate analyses were conducted for the four loyalty dimensions (MLS, ELS, MLA and ELA) and for each of the three different domains of loyalty (workgroup, unit, and mission). The predictors were entered in three predetermined steps: (1) demographics; (2) social identity fusion; (3) developmental leadership.

Results
The demographic control variables (rank, family conditions and gender) entered in the first step of the hierarchical multiple regression analyses
generally accounted for small or non-significant proportions of variance in both the moderate (MLS) and extreme (ELS) dimensions of loyal sacrifice, across all three loyalty domains (workgroup, unit, and mission). These variables generally explained a somewhat larger portion of the variance in the loyal action dimensions (MLA and ELA). Rank and family conditions were unrelated to all loyalty dimensions in all domains. Gender was negatively related to both MLA, and ELA for all domains of loyalty and to ELS for the domain workgroup, with women generally reporting lower levels of willingness to behave loyally.

Adding social identity fusion to the model in Step 2 resulted in significant increases in explained variance for the sacrificial dimensions, MLS, and ELS in all three domains. Thus, the more fused individuals were with a certain domain, the greater their willingness to engage in moderate and extreme loyal sacrifice. However, social identity fusion was unrelated to moderate loyal action and extreme loyal action.

Finally, adding developmental leadership in the third step resulted in significant increases in explained variance in all loyalty dimensions across all domains, except for ELA for the mission domain.

In total, the three steps in the model accounted for significant proportions of variance in all loyalty dimensions, across all domains of loyalty. Overall, the explained variance, taking all predictors into account, was relatively modest and ranged between 5 and 20 percent.

Conclusion

Study III aimed to investigate how social identity fusion and developmental leadership may predict loyalty in a military context. In general, developmental leadership seemed to be important for all dimensions of loyalty, while social identity fusion seemed to matter specifically for loyal sacrifice. These results warrant attention concerning what organizational social identities should be increased (or decreased) in order to enhance desired loyalties. Furthermore, organizations should examine how organizational leadership is perceived by its employees and, if necessary, support leaders in developing leadership that enhances loyalty.

In this study we examined some demographic variables, i.e., social identity fusion and leadership. However, levels of explained variance indicated that there might be other plausible predictors of loyalty worth examining. Such variables might be individual traits, such as personality, and organizational variables, such as commitment and organizational culture.
Loyalty is a widely acknowledged concept (e.g., Fletcher, 1993), desired within relationships between individuals (e.g., Graham et al., 2011) but also within professions (e.g., Anderson, 2002) and organizations (e.g., Moskos & Wood, 1988). One profession where the importance of loyalty is particularly stressed is the military, often motivated by the critical role of the individual endeavor to accomplish important and dangerous missions (e.g., Coleman, 2009; Huntington, 1957). Although the importance of loyalty is often emphasized in the military context, research into loyalty and how to conceptualize it within the military is scarce and in need of development (e.g., Olsthoorn, 2011). Therefore, the overall aim of this thesis was to broaden the understanding of the concept of loyalty within a military organization, by focusing on how loyalty is experienced, how it can be measured, and how it can be predicted.

To achieve this aim, the present thesis was structured into three interrelated studies. Study I aimed to explore the nature of loyalty by examining how loyalty is experienced among high-ranking military officers. Study II aimed to develop a psychometric scale for measuring loyalty within the military context. The aim of Study III was to examine the extent to which individuals’ willingness to act loyally towards specific domains (the closest workgroup, the unit, and the unit mission) can be predicted by developmental leadership and social identity fusion. In order to get a broad perspective on loyalty, samples representing all military categories of the Swedish Armed Forces (SAF) were used, with participants from the SAF top management (Study I), officers on the middle management level (Study II) and with officers and soldiers from a military unit on an overseas mission in Mali (Study II and Study III).

The following discussion of the results from the three studies focuses on the nature of loyalty (Study I), measuring loyalty (Study II), and predicting loyalty (Study III). Then, methodological considerations are discussed followed by possible theoretical and practical implications, future research and conclusions from the results of this thesis.
The nature of loyalty

The nature of loyalty is often described as complex and even elusive in its character (e.g., Curren & Kotzee, 2014; Kleinig, 2022) and existing conceptualizations of loyalty are inadequate for an extreme environment such as the military context (e.g., Coleman, 2009; Olsthoorn, 2011). Study I aimed to examine the nature of loyalty by investigating how loyalty is experienced among high-ranking military officers. The results of Study I indicated that loyalty – within a military context – could be structured into seven themes:

1. To choose and to balance between loyalties. This theme indicates that there are several possible domains for loyalty, and that the individual must prioritize between them, depending on the situation.

2. Loyalty as a professional norm and a personal identity. This suggests that loyalty is a critical part of the military identity, which in turn is closely related to the personal identity.

3. To comply or to oppose. The theme indicates two possible aspects of loyalty, either to just accept the situation or to engage in change.

4. Loyalty means sacrifice. This theme is related to the first one and indicates that if one aspect of loyalty is chosen, another one may have to be neglected.

5. Extended action – to do more. This theme indicates that being loyal means to always do the utmost for a certain domain of loyalty.

6. Leadership and loyalty. This theme indicates that the perceived leadership from superiors or from the organization influences directions as well as levels of loyalty.

7. Destructive loyalty. The theme indicates that there are negative sides of loyalty that must be managed.

In relation to the first theme (1), an important finding was that that individuals must be able to manage several domains that demand loyalty by balancing them depending on the situation. Although this finding was expected and in line with previous research (e.g., Kleinig, 2014) it highlights that loyal behavior is dependent on the individual and the specific situation at hand. One finding in line with previous research (e.g., Konvitz, 1973; Wieseke et al., 2014), is that domains of loyalty varied from concrete ones, such as the family and the closest work group, to more abstract domains, such as the overall mission (defending the country), or professional values such as always doing the utmost to complete a mission. While most previous research into loyalty focuses on emotional bonds between individuals (e.g., Beer & Watson, 2009; Hargrave et al., 1991; Kao et al., 2012), the results of Study I suggest that such emotional bonds may also arise between the individual and abstract domains of loyalty, such as organizational goals (e.g., the mission), professional values (e.g., being prepared to make loyal sacrifices or engage in loyal action) and a unit (the unit as such, independent of its members). This finding is important, because it implies that organizations can foster the individual’s loyalties to
professional or organizational values or artefacts (such as units or symbols). This may enable the individual to continue to strive for these domains, despite other domains of loyalty being injured or dead (e.g., colleagues or family). Furthermore, these findings align with previous suggestions that an individual must be able to manage several domains of loyalty at the same time (Kleinig, 2014). These findings imply that the military organization must see that it has explicit strategies and methods to assist and to help personnel in managing competing or even counteracting loyalties in their work and personal life.

Furthermore, a recurrent issue regarding balancing between different domains of loyalty concerned the importance of balancing between work-related domains, on one hand, and the family on the other, where the family was not always the prioritized domain. Although work-life balance and family issues have been described before (e.g., Coser, 1974; Innstrand et al., 2008; Michel et al., 2010), the military context is unique in setting aside normal societal values. A natural focus in times of danger, such as war, would be to protect one’s family. However, military personnel must prioritize the mission to defend the country first. In extreme contexts prioritizing between the survival of your colleagues or completing the mission is a further loyalty conflict to be managed, something that is seen as very difficult in combat situations (e.g., Shalit, 1988). This implies that in extreme contexts, such as war or in dangerous international peace-keeping missions, the balance between different domains of loyalty is likely to cause moral stress and complicate decision making when competing loyalties are set against each other.

The second theme (2), where loyalty was described as part of the professional norm and the military identity, is perhaps not surprising, because loyalty is an explicitly stated virtue in the military (e.g., Robinson, 2008). However, the finding that most participants experienced the military identity to be an important part of their personal identity indicates a close emotional merge of identities, or social identity fusion (e.g., Swann et al., 2012). In turn, such social identity fusion implies that some military values, applied in extreme contexts are transferred to everyday life. This was exemplified by situations when participants choose to go to work (because officers do not let down their subordinates) even though they were experiencing traumatic family crises. These findings indicate that social identity fusion may be a possible predictor of loyalty, something that was investigated in Study III.

One finding that might seem contradictory in a military context is the third theme (3), the dilemma of either complying with or opposing orders or a certain situation. While obedience might be seen as a foundation of military behavior (e.g., Coleman, 2009; Da Costa et al., 2021), the military reality is more complex. It involves making decisions on your own to achieve the overarching goal of the mission, hence legitimizing questioning whether orders are relevant, (e.g., Ångström & Widén, 2014) or possibly illegal or immoral (e.g., Da Costa et al., 2021). This illustrates that a conflict of loyalty between two military norms may occur, for instance obedience to given orders...
or question the relevance of orders. Furthermore, while obeying orders should be the right thing to do formally, it might not be the morally (or even legally) correct thing to do. Hence, disobeying orders may cause stress because of the possible negative consequences of disobedience (e.g., Coleman 2009). Conversely, following orders may also cause moral stress (Kallenberg et al., 2016) because of a failure to question the relevance or moral justification of the order. Consequently, an organization stressing the importance of loyalty must be aware of the risks and the emotional impact it may have on the individual’s choices.

One key finding in Study I is that loyalty can be expressed through acts of sacrifice (theme 4). The fact that the high-ranking officers said that levels of loyalty could vary from moderate (e.g., sacrificing resources or sacrificing status or reputation) to extreme levels (e.g., risking one’s health or life) is in line with some previous research (e.g., Hirschman, 1970; Horsey & Jetten, 2005; Kleinig, 2014, Swann et al., 2009). The military context encompasses the whole range, from moderate to extreme, thus contributing to a conceptualization of the nature of loyalty within the military.

Another key finding was the theme of extended action, whereby being loyal also means always doing one’s utmost (5) for the benefit of the domain of loyalty. The fact that such loyal action, similar to loyal sacrifice, can be both moderate (e.g., working overtime, breaking employment law or regulations, lying or committing crime) and extreme (e.g., using violence including lethal violence) is also in line with previous research (e.g., Hargrave et al., 1991; Hirschman, 1970; Umphress & Bingham, 2011). Again, the military setting encompasses all levels of loyal action, also contributing to a conceptualization of the nature of loyalty.

The influence of leadership (6) was found to be relevant in terms of the directions and levels of loyalty. Results indicated three perspectives of leadership: first, through professional (and possibly organizational) core values, such as prioritizing the mission and the defense of the country; second, through both direct and indirect leadership (e.g., Larsson et al., 2007), mainly through professional socialization within the profession and the organization, and through senior officers acting as role models; the third perspective focuses on trust in superior officers’ competence and their ability to make relevant decisions. Furthermore, the participants stated that understanding and accepting the purpose of a task or mission enhanced the motivation for loyal sacrifice and/or loyal action, in line with the concept of sense-making as a strategy to support decision-making in ethical dilemmas (e.g., Thiel et al., 2012). In line with previous research (e.g., Beard, 2014; Gouldner, 1960; Heinecken, 2009), the participants experience was that a leadership style showing personal consideration for the coworker also enhanced their feelings of reciprocity. This in turn enhances identification, and hence loyalty, with organizational goals. The results contribute to a broader understanding of how leadership can influence loyalty within organizations operating in extreme environments.
With respect to the seventh theme, (7) destructive loyalty, which emerged from the interviews with the high-ranking officers, the results indicate that there are at least three different types of misguided or destructive loyalty that are important to consider. One is conformity, when the individual is loyal to the majority, or the leader of the group, and acts without questioning. This may lead to unethical behavior such as a culture of silence or the protection of subgroups on behalf of the greater purpose of the organization (e.g., Umphress & Bingham, 2010) or war crimes (e.g., Da Costa, 2021; Milgram, 1965; Umphress & Bingham, 2010). Another perspective is blind loyalty or unreflective obedience, which may lead to dogmatic behavior based on rules and policies rather than responsible and creative decisions (e.g., Gabriel, 1982; Milgram, 1965). A third aspect of destructive loyalty concerned the egocentric perspective, i.e., being mainly loyal to one’s own interests instead of the greater good of the organization. While being loyal to oneself is not necessarily a bad thing, it could be said that being loyal to others is motivated by an individual’s interest in remaining safe and protected by others (e.g., Graham et al., 2011). Egocentric loyalty might, in fact, be labeled a lack of loyalty to any other domains, perhaps due to a perceived lack of reciprocity from other domains (e.g., Heinecken, 2009) or a lack of identification with other domains (e.g., Swann et al., 2009).

The key findings in Study I could be narrowed down to five overarching conclusions: First, there seems to be a distinction in loyalty between loyal sacrifice and loyal action. Second, there also seems to be a distinction between moderate and extreme loyal sacrifice, and between moderate and extreme loyal action. Third, loyal sacrifice and loyal action can be directed to different domains of loyalty. Fourth, the results of Study I could serve as a basis for a quantitative measurement of loyalty within the military. Finally, the results also indicate possible predictors of loyalty.

Measuring loyalty

The key findings of Study I showed a conceptualization of loyalty consisting of moderate and extreme loyal sacrifice, and moderate and extreme loyal action. Furthermore, the findings of Study I showed a need for a scale that can measure loyalty across different domains. Although there are some measures of loyalty (e.g., Becker & Nobre, 2013; Bobâlcâ et al., 2012; Hagedoorn et al., 1999; Hargrave et al., 1991; Wieseke et al., 2014) none of them are directly suitable for a military context (e.g., Olsthoorn, 2011).

On this basis, Study II aimed to develop a psychometric scale for measuring loyalty within the military, hence filling the present gap in research. A key finding of Study II was that loyalty, measured by the Swedish Military Loyalty Scale (SMiLS), could be measured using four dimensions. The four dimensions of loyalty were moderate loyal sacrifice (MLS), extreme loyal sacrifice (ELS), moderate loyal action (MLA) and extreme loyal action.
The SMiLS was generally found to measure loyalty in a similar way across the tested domains of loyalty (values, family, workgroup, mission and nation).

The four-dimensional representation
The conceptualization of loyalty in the military context was mainly drawn from the results of Study I, and was based on two possible overarching dimensions, loyal sacrifice, and loyal action. Items were generated from the findings of Study I and then reviewed by subject matter experts. After initial exploratory factor analyses, where four items were dropped, the scale was validated using confirmatory factor analysis. The findings of Study II showed that both loyal sacrifice and loyal action could be further divided into moderate and extreme loyal sacrifice and/or moderate and extreme loyal action, resulting in a four-dimensional representation.

Compared to other models (1-, 2- or 3-dimensional) the four dimensions were found to be distinctive. The distinction could be described as loyalty behavior possibly causing harm to oneself (loyal sacrifice), and loyal behavior causing harm to someone else (loyal action). The distinction between loyal sacrifice and loyal action could be explained by moral justification. While self-sacrifice for the benefit of someone or something else could be moral justifiable for most people (e.g., Di Nucci, 2013; Thomsson, 2008), using lethal force against others is something that most people would find unacceptable (e.g., Cushman et al., 2006; Greene et al., 2009). However, the military setting legitimizes the use of force, making it morally accepted in that specific context (e.g., Ångström & Widén, 2014).

Items used to measure loyal sacrifice ranged from moderate to extreme behavior. Moderate sacrifices are mainly described in research on consumer behavior (e.g., Beer & Watson, 2009) and pro-group behavior (e.g., Hornsey & Jetten, 2005), although not together in one scale and without a range of items developed for a military context. Extreme loyal sacrifice – such as dying for a certain domain – has previously been described as an extreme pro-group behavior (Swann et al., 2010). However, there are no scales measuring extreme sacrifice as a mean of loyalty, other than SMiLS.

Similarly, to loyal sacrifice, loyal action also ranged from moderate to extreme. Previous research using moderate loyal action focuses on speaking well of or supporting a certain domain ahead of others (e.g., Hargrave et al., 1991) or lying to others in order to protect a certain domain (e.g., Umphress & Bingham, 2011). However, the use of moderate loyal action as a definition in a scale measuring loyalty has not been previously used. Regarding extreme loyal action, Swann et al., (2010) again killing of another human being as a sign of extreme pro-group behavior, although used in a theoretical moral dilemma, and not a concrete organizational, professional setting.

The composition of the SMiLS, using all four dimensions of loyalty, makes it the first measure to embrace both sacrifice and action with the distinction
between moderate and extreme sacrifice and action. Furthermore, SMiLS was developed using qualitative data from interviews with high-ranking military officers and then validated using three independent samples consisting of experienced military personnel. Additionally, one sample (Sample 3) was an active unit on a recognized dangerous UN-mission in Mali (MINUSMA), adding a high ecological reliability to the scale. Previous loyalty scales have primarily treated loyalty as unidimensional (e.g., Hargrave et al., 1991; Kao & Travis, 2005) or possibly two-dimensional (e.g., Hagedoorn et al., 1999. The SMiLS is the first scale to represent loyalty in four dimensions, by combining and measuring both moderate and extreme sacrifice and action in the same scale.

In addition to results showing a distinction between four dimensions, invariance tests showed that the scale was relatively equivalent across samples consisting of experienced officers during training (Sample 2) and officers and soldiers on an overseas mission (Sample 3). More specifically, metric invariance tests showed that factor loadings across the confirmatory samples were relatively similar, giving support to the generalizability (Steinmetz et al., 2009) of the SMiLS. However, the models testing scalar and strict invariance between samples showed a poor fit to data, indicating variability in the intercepts and residual variances between the samples. This, in turn, suggests problems in comparisons between samples (Cheung & Rensvold, 2002). One explanation of the differences in scalar and strict invariance between samples 2 and 3 could be the different settings, where participants in Sample 3 were in an extreme environment in a mission area, while Sample 2 were in a safe setting at the Swedish Defense University. Another explanation could be that the majority of Sample 3 were soldiers, known to differ from officers (Sample 2) in terms of their experience of loyalty (Shalit, 1988).

Applicability across different domains of loyalty

The results of Study II showed that the SMiLS can be applied to several different domains of loyalty, both physical (e.g., important groups such as family or workgroup) and abstract (e.g., values or a mission); this was indicated by the fact that the four-dimensional model generally showed a better fit than alternative models tested for all domains of loyalty.

The possibility that an individual can have dual or multiple loyalties is supported by previous research (e.g., Beer & Watson, 2009. Kleinig, 2014), including abstract ones such as values or nations (e.g., Huntington, 1967; Wieseke et al., 2014). The results from Study II could be further explained by the fact that the domains tested, emanated from results from Study 1, hence their possible relevance for the military context. Furthermore, the military value of loyalty, also being a part of the personal identity, means that professional norms are likely to be transferred and become personal norms applied in everyday life, both at work and at home.
Despite the knowledge that loyalties are likely to be directed to several domains, most scales only measure loyalty to specific groups, such as family (e.g., Hargrave et al., 1991) organizations (e.g., Hagedoorn et al., 1999) and have not been validated against more domains. Although there are scales separating individual loyalty and group loyalty (e.g., Beer & Watson, 2009), the distinction between concrete and abstract domains has not been addressed in previous research. However, the SMiLS enables the measurement of loyalty to several domains, hence also enabling the possibility to compare levels of loyalty across domains.

Presumably, other domains – not examined in this study – may also be considered important, such as loyalty to the unit (Umphress & Bingham, 2011) and the hierarchical structure (Ångström & Widén, 2014), which indicates that further examination of the validity of the SMiLS is called for.

Predicting loyalty

Organizations aim to cultivate loyal employees, and there are several reasons for this. Employee loyalty has been shown to reduce staff turnover, thereby preserving competence, and ensuring high quality job performance (e.g., Guillon & Cezanne, 2014; Hirschman, 1970). Perhaps most importantly, it motivates employees to prioritize the organization’s interests over their own (Kleinig, 2014). Historically, military organizations have emphasized loyalty to the extent that it is considered a fundamental part of professional identity (Moskos & Wood, 1988), a point affirmed in Study I. Within the military, loyalty holds immense importance in achieving operational goals, particularly in life-threatening situations. Loyal employees are also crucial when handling classified information related to national security or a specific operation (Abrahamsson, 2005). Furthermore, loyalty to orders is imperative for ensuring the complex coordination of large groups of individuals, units, and action in rapid and dangerous situations (Vego, 2007). Thus, understanding what fosters and sustains the desired loyalties is a critical prerequisite for success in any organization, especially in those where loyalties are tested in extreme circumstances and where significant values are at stake, such as the military.

While the findings of Study II indicated a four-dimensional model of loyalty, containing moderate sacrifice, extreme sacrifice, moderate action and extreme action, the findings of Study I indicated social identity and leadership as possible predictors of loyalty. To further examine what predicts loyalty, Study III aimed to examine how individuals’ willingness to act loyally to certain domains (the closest workgroup, the unit, and the unit mission) can be predicted by social identity fusion and developmental leadership. The choice of domains focused on organizational aspects (ruling out personal domains such as values or family and an overarching domain such as the nation). There was a specific focus on developmental leadership (Larson et al., 2006) because
The leadership model employed by the Swedish Armed Forces (SAF), hence a known concept with recognizable terminology for the participants. The findings of Study III were that social identity fusion was positively associated with both moderate and extreme loyal sacrifice but not with moderate or extreme loyal action. This was found for all three domains, with the exception of the mission domain, for which social identity fusion was also positively associated with extreme loyal action. Furthermore, developmental leadership was positively associated with all four loyalty domains across all domains, except the mission domain where leadership showed no significant association with the extreme loyal action dimension.

The results of Study III suggest that organizations could enhance employee loyalty by strengthening the fusion to desired domains, such as a workgroup or a unit, including abstract social identities such as a mission. The results also emphasize the importance of a leadership style that encourages trust, commitment to shared goals, and individualized consideration (cf. Bass, 1999). This present study adds to previous research showing that positive leadership styles (such as developmental and transformational leadership) legitimize the actions of the organization and produce a stronger identification with, or loyalty to, the organization and its goals (e.g., Luan et al., 2022; Umphress et al., 2010).

The relation between social identity fusion and loyalty

Results regarding the relation between social identity fusion (SIF) and loyal sacrifice are consistent with previous research into the relationship between the willingness for extreme pro-group behavior, such as dying for your group (e.g., Swann et al., 2010). The non-significant relationship between SIF and loyal action deviated from previous research (e.g., Swann et al., 2010), where it was suggested that SIF is related to loyal action (e.g., killing another human being for the benefit of a certain domain). One possible explanation for these findings is that loyal sacrifice does not involve actions directly harming others, whereas overt action does. Harming other individuals is often considered more norm-breaking than risking one’s own life (Thomson, 2008). Hence, loyal self-sacrifice could be viewed as more morally justifiable than sacrificing someone else (Di Nucci, 2013).

The sample used in Study III was a UN unit with the overarching mission to protect vulnerable people in a highly complex and dangerous environment, where hostile actors were operating alongside friendly actors. Operating in this environment may have actualized the moral dilemma of having to choose between risking one’s own life and risking the lives of innocent bystanders. Consequently, this might induce a moral stress and possibly an ambiguity regarding the use of force, while simultaneously creating a safe and secure environment. Additionally, since this operation often involved close interaction with the civilian population in the area, it is possible that a certain degree of identification with the local population could have arisen.
potentially leading to a dilemma regarding which loyalty domain to prioritize (Thomson, 2008).

However, findings were in line with previous research concerning the relationship between SIF fusion and loyal action, regarding the mission domain. This aligns partly with previous research, which suggests that the mission domain holds a special status in a military context (e.g., Shalit, 1988), especially concerning the professional identity of officers (e.g., Coleman, 2009; Huntington, 1957; Janowitz, 1959) something also identified in Study I.

The relation between developmental leadership and loyalty

The findings about the relationship between developmental leadership and loyalty also aligns with identified effects of leadership styles that foster emotional bonds, feelings of reciprocity, and mutual trust (e.g., Beard, 2014; Moskos & Wood, 1988; Olsthoorn, 2011; Peng et al., 2020; Zaccaro et al., 2001). They are also in line with findings indicating that transformational leadership is linked to loyal behavior (e.g., Bass, 1999; Ding et al., 2017; Fitriyani, 2018; Peng et al., 2020). There are several potential explanations for the relationship between developmental leadership and loyalty. One explanation could be that leadership styles that enhance trust in the moral standards of the organization also legitimize the military's use of force or other extreme action (Umphress & Bingham, 2011). Another explanation could be the implicit organizational culture of the military, which emphasizes hierarchical loyalty, where superiors' commands are not expected to be questioned (Gabriel, 1982).

Furthermore, developmental leadership emphasizes a deep sense of involvement in the organization, creating a feeling of duty (an obligation to act in a certain way) rather than a voluntary choice to act (Coleman, 2009). Therefore, it was a slightly unexpected that developmental leadership was not related to the extreme loyal action dimension in the mission domain. The mission domain should be the core of the profession. Therefore, it could be expected that leadership which strengthens pro-organizational behavior would be positively associated with loyal action in relation to the mission. (e.g., Shalit, 1988; Van Creveld, 1982). One explanation for this could be that using lethal violence is seen as a necessary part of the profession, hence morally legitimized by the profession and the mission itself. Furthermore, while the domains workgroup and the unit also contain the leaders themselves, the mission domain is more abstract. Hence, the motivation to carry out extreme loyal action is greater when protecting leaders than it is for a more “impersonal” domain such as the mission. It is also reasonable to assume that there are factors other than leadership and social identity fusion that predict loyalty concerning engagement in extreme loyal action, such as duty or one’s own survival.
The relationship between demographic variables and loyalty
Previous research has not observed any differences in organizational loyalty related to age or gender (e.g., Clifford, 2017; Khodakarami & Dirani, 2020). However, a factor, such as family conditions, could be predicative due to the possibility of it being a domain competing strongly for loyalty (e.g., Segal, 1986).

Organizational demographic factors such as tenure seem not to have been identified as predictors of loyalty, although there are suggestions that loyal employees remain longer within an organization than those who are not (e.g., Hirschman, 1970). Another possible factor predicting loyalty towards different domains could be military rank, and Shalit (1988) suggested that while officers remained loyal to the mission, soldiers prioritized being loyal to each other most.

As reviewed above, identification with an organization is a potential predictor for loyalty. This indicates that demographic factors that influence identity could be predictive regarding what domain of loyalty is prioritized (e.g., strong social identity fusion with a certain ethnicity, a religious or ideological belief, or specific group or minority).

The findings that demographic factors such as the individual’s rank and family circumstances showed no significant relationship with any loyalty dimension also aligns with previous research, where no differences regarding loyalty have been found (e.g., Clifford, 2017; Khodakarami & Dirani, 2020). Regarding gender, however, it was slightly unexpected that female participants were less willing to carry out both moderate and extreme loyal action across all domains, and that they were less willing to make extreme loyal sacrifices regarding the mission domain. Previous research has shown no differences regarding gender and loyalty (e.g., Clifford, 2017; Khodakarami & Dirani, 2020). However, the current findings are based on the very small percentage (15%) of women in the sample, making it impossible to interpret or draw any conclusions from them.

Some remarks concerning relationships
One limitation with study III concerns its cross-sectional nature. This prevents any conclusions about causal relationships between social identity and leadership on the one hand, and a willingness to engage in loyal behavior on the other (Wilkinson, 1999). Thus, it cannot be concluded that neither social identity fusion nor leadership influences loyalty; it may rather be a reciprocal exchange. Previous research has suggested that interactions between superiors and subordinates can cause reciprocal influences on different behaviors (Greene, 1975). Hence, the willingness of subordinates to be loyal could influence their superior’s leadership performance, such that strong identification between subordinates and superiors is likely to develop positive relationships between them (Thrasher et al., 2020). This could increase the
perception of positive leadership behavior. Similarly, because reciprocal loyalty enhances the safety of the individual, being loyal can become an important part of the social identity within the group (Berghaus & Cartagena, 2013), which in turn leads to the possibility that loyalty could influence levels of social identity fusion. Therefore, further research, based on longitudinal data, is necessary to investigate the potential reciprocal interactions between assumed predictors and the willingness to behave loyally.

Methodological considerations

This thesis employed a diverse range of methodologies encompassing both qualitative and quantitative approaches. Consequently, there are some methodological issues to consider.

Mixed methods

Combining qualitative and quantitative methods can be viewed from two main perspectives. One perspective is that the two different approaches are incompatible on an epistemological level and/or because they represent different paradigms (Bryman, 2001). The other perspective argues that combining qualitative and quantitative methods will enable a more comprehensive approach to the research problem (Morgan, 1998). The results from the qualitative study (I) laid the foundation for the development of a tool for measuring loyalty within the military (Study II). Results from Study I also identified possible predictors of loyalty that were tested in Study III. In my view, this combination of methods in the thesis enabled a thorough and completing understanding of the nature and conceptualization of loyalty within the military.

Qualitative methods

Study I was conducted using the qualitative method of Interpretative Phenomological Analysis (IPA; Smith et al., 2009). IPA focuses on participants meaning making of a certain experience – in this case experiences of loyalty. The results from Study I were based on a homogeneous sample in terms of their positions within the organization, possibly delimiting the perspectives to those positions. However, the use of a homogeneous sample also enables the capture of a specific phenomenon within that group of people (Smith & Eatough, 2016). Fidelity of subject (Levitt et al., 2017) in the data collection could be argued to be good as participants had a broad experience from both the profession and the organization. However, further research into experiences of loyalty with samples representing all levels of the organization could give other perspectives on loyalty and add to a broader perspective of
employee loyalty (Levitt et al., 2017) within the population of military personnel.

Furthermore, the participant-researcher relationship could cause biased answers. In Study I, the interviewer could be seen as a subordinate officer, hence risking a social desirability bias (e.g., Roller & Lavrakas, 2015) among the participants. The participants could also have felt an obligation to represent the organization rather than giving their individual perspective (e.g., Bernadi & Guptill, 2008). On the other hand, the military background of the researcher is likely to bring an inhouse reflexive perspective (e.g., Smith & Eatough, 2016) that enables a relevant analysis of the data due to familiarity with the military context. The interviewer’s awareness regarding possible bias – both in data collection as well as in the analysis – should give a solid base for further subject fidelity (Levitt et al., 2017). The use of semi-structured interviews, which allowed participants to elaborate and follow up on their own thoughts, gave a broad collection of data which also enabled a broad analysis of data and useful insights (Levitt et al., 2017). Focus of the interviews were on the participants’ personal experiences with the purpose of creating a depth to the analysis (Nizza et al., 2021). Although the participants’ perspectives of loyalty experiences varied to some extent (e.g., a personal focus or a more professional focus), the comparison between data enabled a compelling narrative to be built (Nizza et al., 2021), containing different perspectives. However, there is a need for more perspectives considering age, gender, civilian employees or minority issues, to create a more comprehensive narrative regarding loyalty within the military context.

Quantitative methods

Because loyalty as a phenomenon is conceptualized in many ways it could also be perceived in different ways by the studies’ participant (e.g., possible problems for the participants to separate between other possible variables in the nomological network, such as duty, obedience, or commitment from loyalty. Thus, future research should examine the relation between loyalty and commitment and possibly between loyalty and obedience.

In both quantitative studies the sample sizes were relatively small and homogeneous, particularly in Study II. This may constrain the generalizability of results to the broader SAF population. The relatively small sample sizes in Study II could potentially have influenced the results of the factor analyses and reliability estimates (e.g., Mundfrom & Shaw, 2005). However, the replication of results from the exploratory test in Study 1 (Sample 1: N=63) in two confirmatory samples in Study 2 (Sample 2: N=87; Sample 3: N=157) suggests that the sample sizes were not a major problem. Although sample sizes exceeding 300–400 participants have been recommended for scale validation (Goretzko & Pham, 2021), it has also been argued that for tests involving 20 items or fewer, as in this study, smaller sample sizes could be adequate (DeVellis, 2012). Additionally, the subject-to-item ratio was at an
acceptable level (Costello & Osborne, 2005). The tests for measurement invariance of the four-factor model in Study 2 generally showed support for configural invariance between samples 2 and 3. This indicates a similar understanding of loyalty with four dimensions across rank, and in the two different contexts (Cheung & Rensvold, 2002).

Although Study III found that both social identity fusion and developmental leadership were positively related to loyalty, these predictors explained limited amounts of variance in all of the loyalty dimensions (in the three investigated domains of loyalty). This suggests the presence of other factors that also play a role in predicting loyalty. For instance, factors such as trust (Kleinig, 2014), adherence to professional core values (Hurley, 2000; Oh et al., 2018), personality dimensions (Panaccio & Vandenberghe, 2012), and levels of reciprocity experienced between the employer and the employee (Connor et al., 2019; Gouldner, 1960) are likely to be related to loyalty, hence suitable for investigation in future research. The cross-sectional nature of the studies prevents any conclusions regarding causal relationships (Wilkinson, 1999) between social identity, leadership, and loyalty (Study III). However, the results, along with previous research, imply a relationship which should be examined further in future studies using longitudinal designs and cross-lag analysis.

Another consideration to be addressed is that samples were drawn from only one country, thus making generalizability to military organizations in other countries uncertain. This is because national and organizational identity probably also influence the perceptions of certain national and organizational values and loyalties (Curren & Kotzee, 2014). Hence, for further validation purposes, it is advisable to test SMiLS on other samples, preferably using larger sample sizes and possibly testing the SMiLS on military units from countries other than Sweden. Furthermore, future research using SMiLS should examine its generalizability to other professions (Foust, 2018; Kallin, 2010; Olsthoorn, 2011) operating in risky, emergency, and disrupted environments (Hällgren et al., 2018), such as in medicine (Olsthoorn et al., 2011) or in professions involving extreme action, such as the police (Foust, 2018).

A final consideration concerns the denotation of levels of loyal acts. Whether a loyal sacrifice or a loyal action is moderate or extreme depends on societal norms and the context at hand. Using, or threatening to use, violence in the line of work would be seen as a relatively moderate act (compared to kill someone which would be extreme) in the military or the police, while the same behavior in social work would be seen as extreme (and probably extremely inappropriate). Because the context of this thesis is the military organization, I choose to use the denotation on acts as moderate unless matters of severe injury or death were involved.
Theoretical implications

Loyalty is a central concept within the military (e.g., Huntington, 1967; Shalit, 1988) and has been regularly addressed in previous research (e.g., Coleman, 2009). However, research into its conceptualization and expressions is scarce (e.g., Olsthoorn, 2011). Thus, while loyalty is a central concept in the military doctrine (e.g., Swedish Armed Forces, 2016; US Army, 2022), it has rarely been clearly conceptualized, and its meaning in this context has remained evasive. Despite some possible limitations, this thesis can contribute to further the development of knowledge about loyalty in the military context, across the three areas investigated: the nature of loyalty in a military organization (Study I), measuring loyalty in military organizations (Study II), and predicting loyalty in military organizations (Study III).

The nature of loyalty

The results of Study I showed that loyalty within the military profession was considered to be a central part of the professional identity, dependent on professional socialization concerning norms and values – often expressed through the leadership of the organization. While some previous research suggests loyalty in organizations to be a passive behavior (e.g., Allen & Meyer, 1990; Hagedoorn et al., 1999; Hirschman, 1970), the results from this thesis suggest that loyalty can be expressed as acts of loyalty. These acts are either sacrificial or overt action and aim to benefit the domain of loyalty. However, extreme pro-group behavior, such as using lethal force or risking your life, could be part of the duties expected from military personnel (e.g., Coleman, 2009), hence also applicable to the construct of duty.

Although previous research suggests that an individual can hold many loyalties (e.g., Kleinig, 2014), results from this thesis show the dilemmatic nature of multiple loyalties. Study I showed that balancing between loyalties related to different domains of loyalty was perceived to be the most challenging aspect of the nature of loyalty. Loyalty dilemmas, including the dilemma between performing your duty or being loyal to personal values or close ingroups, indicated as a possible factor behind moral stress among the participants of study I. Although previous research on work-life balance has shown dilemmatic situations between work and family (e.g., Segal, 1986), the result of this thesis indicates a broader array of possible competing loyalties that the individual need to handle.

The theme “to oppose or to comply” (to question authority or to disobey orders), from study I, indicates that opposing authority can be seen as a loyal behavior although raising your voice in an undesired way could be seen as a breach of loyalty (Gagnon & Perron, 2019). This claim can be understood as presupposing that the purpose of the opposition is to be loyal to the overarching goals of the organization (or society), which legitimizes “blowing the whistle” to be an act of loyalty (e.g., Varelius, 2009). However, not being
loyal to given orders within the military is normally seen as misconduct (e.g., Coleman, 2009).

The observation in Study I that a strong identification with professional norms could be transfer professional norms to the individual’s personal (civilian) life, thus potentially inflicting the work-life balance by always prioritizing work, is also a finding adding new and potentially important knowledge in the area. The observation that identity dependent norms could be transferred into context where not suitable (e.g., when norms applicable for war time is transferred to peace-keeping operations or to peacetime everyday life), contributes to the knowledge about how strong professional identity can influence the individual’s behavior in situations outside of work.

Measuring loyalty

Although there are scales that measure loyalty, most of them focus on consumer behavior (e.g., Becker & Nobre, 2013), family relations (e.g., Hargrave et al., 1991), or certain organizational behaviors (e.g., Hagedoorn, 1999). However, there are no scales that explicitly measure loyalty in the military, focusing on different levels of sacrifice or action in different domains of loyalty. Previous research describes loyalty as either being part of another construct (e.g., Allen & Meyer, 1990), or as a construct of its own. Previous research defines loyalty as either one-dimensional (e.g., Gallagher & Strauss, 1991) or two-dimensional (e.g., Beer & Watson, 2009; Hagedoorn et al., 1999; Kao et al., 2012). The Swedish Military Loyalty Scale (SMiLS), developed in Study II, contributes to research with a scale that measures loyalty in four dimensions based on sacrifice or overt action. Loyal sacrifice is sectioned in moderate respectively extreme sacrifice. Likewise, loyal action is sectioned in moderate and extreme action.

Furthermore, the thesis results suggest that the SMiLS is applicable on several different domains of loyalty (such as personal values, the closest workgroup, the unit mission, family, and the nation), hence enabling a possibility to measure loyalty across domains.

Although there are limitations with the SMiLS, future research should investigate the possibilities of developing the scale further and validating it with larger sample sizes to increase validity. It would also be valuable for the development of SMiLS to test it in other contexts (e.g., other countries, other professions) to examine its generalizability across other contexts. Furthermore, it would be relevant to examine the validity of the SMiLS on additional domains of loyalty (e.g., hierarchies, allied forces, local population) in order to be able to examine possible competing domains.

Predicting loyalty

The individual strive to belong to a group is strong among humans (e.g., Haidt & Joseph, 2007) and the ambition to belong to a certain group (become part
of a social identity) can cause the individual to either abandon previous loyalties or affiliations (e.g., Belle et al., 2016; Rones & Brundtland Steder, 2018) or to take pro-group actions in order to get accepted by the group in question (e.g., Leonardelli et al., 2010). Also, the risk of being excluded from a desired ingroup seems to predict increased levels of loyal behavior to the ingroup, manifested in extreme pro-group behavior (Gómez et al., 2011). Although there are several suggestions for predictors of loyalty, such as trust (e.g., Beard, 2014), reciprocal exchange (e.g., Fitriyani, 2018; Olsthoorn, 2011), and group cohesion and personality (e.g., Kleinig, 2014), few of them have been tested against a loyalty measure. Study I and previous research (e.g., Kleinig, 2014; Shalit, 1988) indicate that identity and leadership – in their roles as organizational tools – are likely predictors of loyalty. Although previous research has suggested that social identity fusion (SIF) may enhance extreme pro-group behavior, no study has examined the relation between SIF and loyalty per se. Nor has research examined the relationship between developmental leadership (the recommended leadership style in the Swedish Armed Forces) and loyalty. The results of Study III showed that both social identity fusion (Swann et al., 2010) and developmental leadership (Larsson et al, 2006) predict loyalty.

Practical implications

The importance of loyal employees is stressed by many organizations, especially those acting in extreme environmental contexts, such as the military (e.g., Olsthoorn, 2011; Robinson, 2008). Thus, knowledge about the nature of loyalty, how to measure it, as well as how to predict it, has practical implications that may facilitate enhanced loyalty among employees.

The nature of loyalty

The aim of Study I was to examine how loyalty was experienced within a military organization, in this thesis the Swedish Armed Forces (SAF). As military organizations – including the SAF – stress the importance of loyalty (Swedish Armed Forces, 2016), it seems important that members of the organization share a common view of what it actually means.

This thesis has shown that loyalty is a complex construct, containing both competing and counteracting domains of loyalty. This may put the individual in dilemmatic situations where the outcome is not necessarily for the best of the organization (or the individual). In practical terms, this means that the military organization needs strategies and methods to assist personnel in managing competing or even counteracting loyalties in their work and in their personal life. One obvious first step should be to create awareness about the nature of loyalty, different loyalty domains and how to prioritize between them depending on the context.
Another step is to address what kind of loyal behavior is requested. The findings of Study I and Study II indicated that loyalty could be expressed in terms of loyal sacrifice and loyal action on different levels. This suggests that the military organization needs to clarify what kinds of loyal behavior are desired and when they are justifiable (e.g., can lying be right, and if so, under what circumstances; when is it more important to prioritize personal or societal values prior to obeying an order?).

Measuring loyalty
The aim of Study II was to develop a psychometric scale (the SMiLS) for measuring loyalty in a military context, based on the findings of Study I. Given the complex and varying nature of loyalty and dealing with different domains of loyalty in the military, the scale was developed to consider several domains for an individual’s loyalty. The practical use of the SMiLS could possibly be in three areas. First, the SMiLS could be used to identify the array of loyalty domains within an individual. This could be used as part of the work in helping the individual to manage the balance of loyalties, hence possibly decreasing moral stress. Secondly, the SMiLS could be used in recruitment and selection processes as well as within the work of regular security screening among the personnel, where competing loyalties could be a security issue. Thirdly, the SMiLS could be used for measuring levels of loyalty on group levels, helping management to discover possible loyalty issues within a unit in order to address these issues accordingly.

Predicting loyalty
The aim of Study III was to examine how individuals’ willingness to act loyally to certain domains (the closest workgroup, the unit, and the unit mission) can be predicted by social identity fusion and developmental leadership. The results suggested that social identity fusion mainly predicts loyal sacrifice (both moderate and extreme), while leadership predicts both loyal sacrifice and loyal action (both moderate and extreme).

Identifying loyalty issues is one of the parameters investigated when doing security clearance management within the military (Gelles, 2016). Thus, one practical use for being able to predict loyalty is within security and consequently also personnel management, such as recruiting personnel, retaining employees and ending the employment of an individual. Indicators such as strong social identity fusion with domains such as the nation or organizational values, could be used in recruitment and selection processes to get indications of levels of loyalty. Likewise, it could also be used in promotion processes where officers on lower levels are reviewed for positions on higher levels or in positions were demands of loyalty (related to higher demands on security clearance) are a prerequisite.
The knowledge that developmental leadership levels relate to levels of loyalty stresses the need for enhancing this particular leadership style within the organization. Furthermore, by observing dissatisfaction about the leadership within the unit or low levels of social identity fusion, indicates that loyalty issues could arise.

With a broader knowledge about more predictors of loyalty, the organization can take measures to influence loyalty levels in more ways than through social identity fusion and/or developmental leadership.

Future research

The nature of loyalty

The qualitative examination of the nature of loyalty was done with a rather homogeneous sample consisting of high-ranked military officers. In order to further expand the knowledge about the nature of loyalty within the military, studies with samples consisting of other ranks, age and experience should be done. Results from such studies could deepen the understanding about the identified themes (Study I) and possibly also indicate different views or emphasis on which loyalties that are prioritized.

The results of Study I indicated that balancing between different domains of loyalty was by far the most challenging aspect of the nature of loyalty, indicating a need for future research on loyalty dilemmas. Furthermore, it should examine possible relationships between loyalty dilemmas and moral stress.

Finally, the issue of obedience versus loyalty was something that the participants seemed to be ambivalent about. This matter is addressed by Coleman (2009) and should be further investigated.

Measuring loyalty

The development and validation of the SMiLS was done with relatively small samples. Thus, there is a need for further research using larger samples from different organizational and national contexts to examine the generalizability of the present findings.

Furthermore, future research using SMiLS should examine its generalizability to other professions (Foust, 2018; Kallin, 2010; Olsthoorn, 2011) operating in risky, emergency, and disrupted environments (Hällgren et al., 2018), such as in medicine (Olsthoorn et al., 2011) or in professions involving extreme action, such as the police (Foust, 2018).

The studies in this thesis examined the willingness to act loyally and not actual behavior. Hence, future research should further examine the relation between the dimensions of the SMiLS and actual behavior.
Predicting loyalty

The results from Study I indicated that social identity fusion and leadership may be likely candidates for predicting loyalty – something that was supported in Study III. However, the results of Study I, together with previous research on loyalty, also indicate other possible predictors, such as duty (e.g., Coleman, 2009), professional norms, group cohesion (e.g., Haidt & Joseph, 2007), commitment (e.g., Allen & Meyer, 1990), obedience (e.g., Da Costa, et al., 2021), trust (e.g., Kleinig, 2014), personality dimensions (e.g., Panaccio & Vandenberghe, 2012), and levels of reciprocity experienced between the employer and the employee (e.g., Connor et al., 2019; Gouldner, 1960).

Furthermore, the results from Study III vaguely indicated possible differences regarding loyalty related to variables such as marital status and parenthood. Considering previous research on work-life balance (e.g., Segal, 1986) the impact of such variables is something that could be examined further.

Finally, study III indicated a gender difference regarding loyalty, were women reported a lower willingness to perform loyal actions (both moderate and extreme) as well as less willing to perform loyal sacrifice in the mission domain, than men did. However, the sample size was very small making it irrelevant to discuss without further examination, a matter for future research.

Conclusions

The overall aim of this thesis was to broaden the understanding of the concept of loyalty in a military context, by focusing on how the nature of loyalty is experienced, how it can be measured and how it can be predicted. To achieve this, the thesis was structured into three interrelated studies, which aimed, initially, to examine the content of loyalty within the Swedish Armed Forces (SAF), then to develop and validate a measurement scale of loyalty, and, finally, to examine possible predictors of loyalty. More specifically, the aim of Study I was to examine how loyalty is experienced within the SAF. The aim of Study II was to develop a psychometric scale for measuring loyalty in a military context, based on the findings of Study I. Study III aimed to examine how individuals’ willingness to act loyally to certain domains (the closest workgroup, the unit, and the unit mission) can be predicted by developmental leadership and social identity fusion.

The results of Study I (interviews with high-ranking military officers) indicate that the nature of loyalty within the military is characterized by strong norms that often seem to be contradictory or dilemmatic in the everyday life of military personnel. Balancing between different domains of loyalty was seen as part of the profession, which in turn requires a well thought through moral foundation to use as the basis for loyalty decisions in dilemmatic situations. In summary, loyalty seems to be a strong and important
organizational norm, which – when explored – reveals many facets that are experienced as complex to handle. Therefore, the organization and its leaders should have a clear and well-thought-out normative base concerning expected loyalty behavior.

Measuring loyalty is a prerequisite to enable a quantitative examination of levels of loyalty within an organization. Despite some potential methodological limitations associated with the instrument, as discussed above, the SMiLS introduces a psychometrically validated scale measuring loyalty in the military context. The four-dimensional representation of loyalty in SMiLS showed that loyalty can be expressed in terms of moderate loyal sacrifice (e.g., risking assets or social status), extreme loyal sacrifice (e.g., risking health and life), moderate loyal action (e.g., lying or committing crime), and extreme loyal action (e.g., using lethal force). Furthermore, the results of Study II indicate that the SMiLS also appears to be applicable to several domains of loyalty, hence enabling possible comparisons of loyalties across domains.

The examination of predictors of loyalty in Study III showed that developmental leadership was positively associated with all four dimensions of loyalty, while social identity fusion generally had positive associations only with moderate and extreme loyal sacrifice. However, there is yet more work to be done and there are several factors that may influence individuals’ loyalties, depending on specific domains. However, this thesis has shown that both social identity fusion and developmental leadership relate to loyalty.

In summary, the theoretical implications of this thesis contribute to a broader understanding of loyalty within a military organization. However, it is possible that the understanding of loyalty as well as the measure of it (the SMiLS) could also be used in other professions operating in extreme environments and/or handling sensitive information, such as the police, fire services or within the Swedish civil defense structure.
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