A study of the predictive validity of the big five personality traits in a longitudinal perspective, and of personality saturation in the leader selection interview -

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- A study of the predictive validity of the big five personality traits in a longitudinal perspective, and of personality saturation in the leader selection interview -

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Summary

Personality has long been of interest to researchers, and has been shown to be an important predictor of leadership. The non-commissioned officer school (NCOS) select, train and develop men and women to become military leaders to serve in the Norwegian Armed Forces (NAF). Currently, this thesis aims to investigate the role of the big five personality traits in NCOS in two ways. The first question is focused on the selection interview. Here we seek to clarify the question of the degree to which there is personality saturation in a selection interview where the aim is to evaluate NCO candidate’s leadership potential. The current literature on the topic is sparse, and seems to be inconsistent. A study by Salgado & Moscoco (2002) found a relation between personality and interviews, while a later study by Roth et al. (2005), found the amount of personality saturation in interviews to be low. Since research has found personality to be an important predictor of leadership. An investigation of personality saturation in a leadership context could therefore be of value, in order to increase our understanding of what constructs leader selections interviews capture. The second question is whether the big five personality traits have predictive validity in a longitudinal perspective. If the findings of this thesis coincides with the research findings on personality saturation in selection interviews, will personality traits still be a predictor of performance in the same context?
Introduction

The non-commissioned officer training school (NCOS) select, train and develop men and women to become military leaders to serve in the Norwegian Armed Forces (NAF). During springtime, young Norwegians aspiring to become leaders in the Norwegian Army attends the non-commissioned officer selection process – NAF’s selection program for the NCOS. Those who are admitted, embark on a two-year long education. The first year entails training and education, while the second year primarily consists of practice, where each of the officer candidates take the role as leaders for their own team of conscripts.

Leaders of high quality is important in order to maintain a military of high quality, in a world of increasing political uncertainty. Vast amounts of resources are therefore spent in order to produce the best possible leaders for the NAF. The Officer Candidate School is the starting point of a career as a military leader. Since ensuring that the most suited candidates are admitted is of great importance, FOS entails a thorough selection process. One of several elements in this selection process is the completion of a selection interview. In this interview, experienced officers conduct a semi-structured interview with the potential officer candidates in order to assess their leadership potential. Much research has been conducted on the topic of leadership and selection. A central topic of this research is the role personality plays in predicting the outcome of such interviews. Furthermore, much research has been conducted on the role of personality in predicting leader performance. The aim of this thesis will be twofold, where the first will be to investigate the degree of personality saturation in the officer candidate selection interview, in order to clarify what is actually measured in the selection interview. Secondly, we will investigate the predictive validity of personality traits in a longitudinal perspective. More specifically, whether certain personality traits are beneficial in order to perform as an officer candidate. Increased insight into the relation between officer candidates’ personality and their performance in the context of selection and training can improve the ability of NCOS to select the candidates that are best suited for becoming military leaders in the Norwegian Armed Forces. The problem formulation of this thesis is therefore as follows:
Is there personality saturation in interviews evaluating leadership potential, and do the personality traits of Officer Candidates have predictive validity in a longitudinal perspective?

Personality

Personality traits can be defined as “dimensions of individual differences in tendencies towards consistent patterns of thought, emotions and actions” (Costa & McCrae, 2003). Trait theory assumes that personality is relatively stable, that behavior is to some extent determined by characteristics of the individual, not just the situation at hand (Cooper 2010, p. 44). The relation between personality traits and leadership has been studied extensively, during the last decades. Furthermore, the introduction of the five-factor model of personality has provided researchers with a valuable taxonomy for studying personality (Judge 2002, p. 765).

In the 1930’s, researchers Allport and Odbert started their work on the so-called “lexical hypothesis” which suggests that analyzing language would help us understand the concept of personality (Digman, 1990, p. 418). More specifically, the assumption was that all significant and meaningful descriptions of individual’s characteristics would sooner or later become integrated in language, and would therefore be found in the dictionary. During the subsequent decades, several independent researchers continued this work, with the goal of understanding the content and structure of personality. The result of these researchers’ work indicated that personality could be structured into five broad constructs, or factors, even though there was some disagreement regarding how to label them (Digman 1990 p. 420). In the 1960’s, researchers Smith (1967, in Digman 1990, p. 420) and Wiggins et al. (1969, in Digman 1990, p. 420) demonstrated the usefulness of these personality traits by conducting studies showing their strong ability to
predict educational achievement for students. Interest in the concept of the five-factor model of personality has gradually increased over the years, and increased has also the view on the robustness of this model (Digman 1990, p. 421). As Goldberg (1981, p. 159, in Digman 1990, p. 421) stated: “it should be possible to argue the case that any model for structuring individual differences will have to encompass – at some level – something like these “big five” dimensions”. Even though there is a fairly good agreement on the number of dimensions needed to capture most of the variance in personality, there is less agreement with respect to the meaning of these five factors (Digman 1990, p. 420). Several words have been used to describe the content of the five broad personality traits. To exemplify, one of the factors has been labeled surgency, assertiveness, power and social activity, among other things (Digman 1990, p. 423), and the same goes for the other factors. However, this thesis will from now on use the terms applied in the NEO-PI, which is a personality inventory specifically tailored along the lines of the five-factor model (Digman 1990, p. 422). This inventory was developed in 1985 by researchers Costa and McCrae (Digman 1990, p. 422), and has been revised and refined several times since then. In the NEO-PI, the five factors are termed: neuroticism, extraversion, openness, agreeableness and conscientiousness. Individuals scoring high on the five factors could be described using the following adjectives (Cooper, 2010, p. 51):

- **Neuroticism**: Anxious, angry, hostile, depressed, self-conscious, impulsive, vulnerable
- **Extraversion**: Warm, gregarious, assertive, active, excitement seeker, positive emotions
- **Openness**: Imaginative, moved by art, emotionally sensitive, novelty seeker, tolerant
- **Agreeableness**: Trusting, straightforward, altruistic, cooperative, modest, tender minded
- **Conscientiousness**: Competent, orderly, dutiful, motivated to achieve, self-disciplined, thinks before acting
As previously mentioned, personality traits are viewed as relatively stable behavioral tendencies (Cooper 2010, p. 44). Among the studies supporting this view, is a study by Costa and McCrae (1988, in Digman 1990, p. 434), that followed a group of people over a six-year period. The findings showed a test-retest reliability of the traits neuroticism, extraversion and openness, in the .80’s. In other words, the findings indicate that the personality of individuals, and therefore their behavior, is to some degree given, and could therefore be important to consider, in order to select the leaders that are most likely to be effective.

The concept of personality traits, and the research on it, is not without its critics. Early examples are the studies of Darley & Latane (1968, in Digman 1990, p. 421) and Milgram (1963, in Digman 1990, p. 420), that seemed to demonstrate how dependent behavior is upon the situation at hand, which they and several others argued that the personality trait research had failed to give sufficient attention. Several studies on the relation between personality and the situation has been conducted since then, e.g. by Judge and Zapata (2015), among others. Their study investigated the degree to which the situation at hand affected the predictive validity of personality traits (Judge & Zapata 2015, p. 1149). Their findings indicated that all the big five personality traits were more predictive of performance in situations that could be characterized as weak. Examples of such situations when the individual has autonomy to make his or her own decisions, and situations where work is characterized by being unstructured (Judge & Zapata 2015, 1149). Furthermore, many of the traits showed increased predictive validity in situations that activated specific traits. For example, jobs requiring social skills seemed to increase the predictive validity of the trait extraversion (Judge & Zapata 2015, p. 1149). Most researchers in the field of psychology and organizational behavior today would argue that behaviors’ dependability upon the situation is obvious (Judge & Zapata 2015, p. 1149). However, the study of Judge & Zapata arguably brought more clarity to how this interaction plays out. Since the importance and role of various personality traits is dependent on the context, a review of the research on the relation between personality and leadership would be in its place. The next section will review the literature on the relationship between personality and leadership, in order to identify the potential implications.
of officer candidate’s personality to their performance in a selection and training context.

**Personality and leadership**

According to Stogdill (1974, p. 256), there are almost as many definitions of leadership as persons who have tried to define it. However, most definitions of leadership “reflect the assumption that it involves a process whereby intentional influence is exerted by one person over other people to guide, structure, and facilitate activities and relationships in a group or organization” (Yukl 2006, p. 3). Arguably, leadership is among the most researched topics in history. However, scientific research on this phenomenon first started in the twentieth century. Since then, research has focused on various approaches in its pursuit of understanding the concept of leadership. One of the topics that has received much attention is what determines effective leadership (Yukl 2006, p. 2). Among the earliest approaches to this research was the trait approach, which not only includes personality traits, but also other individual attributes and their ability to predict leader effectiveness (Yukl 2006, p. 180). The assumption in trait theory is that leadership is dependent on the personal qualities of the leader (Judge 2002, p. 765). Before proceeding, a few words on the term “leader effectiveness” is in its place. Deciding how to evaluate leadership effectiveness, and which approach is the most appropriate is difficult, since this choice depends on the values and objective of the person making the evaluation (Yukl, 2006, p. 11). However, as a general definition, leader effectiveness refers to the “consequences of the leader’s actions for followers and other organizational stakeholders” (Yukl 2006, p. 9). A more specific definition can be that it “refers to a leader’s performance in influencing and guiding the activities of his or her unit toward achievement of its goals” (Stogdill 1950, in Judge et al. 2002, p. 767). Furthermore, the more commonly used method of measuring leader effectiveness is through ratings made by the leader’s peer, supervisors and/or subordinate (Judge et al. 2002, p. 767). Leader effectiveness is distinguished from leadership emergence, which is a field of study focusing on identifying factors associated with being perceived as leaderlike (Hogan et al. 1994, p. 496, in Judge et al. 2002, p. 767).
In a study by DeRue et al. (2011), the authors investigated the validity of trait- and behavioral theories of leadership, the latter including transformational leadership behavior, among others. Their findings indicated that leader traits and behavior combined, explained 31% of the variance in leadership effectiveness. Furthermore, their findings indicated that leader behaviors accounted for more of the variance than traits (DeRue et al. 2011, p. 7).

Nevertheless, the current literature on the relation between personality and leadership indicates that personality is an important predictor of leadership. In a meta-analysis by Judge et al. (2002), the five-factor model and leadership was found to have an overall correlation of .48 (Judge et al. 2002, p.765). In the same study, findings from both a business and government/military settings were presented, with correlations as visualized below.

<table>
<thead>
<tr>
<th>Personality trait</th>
<th>Business</th>
<th>Government/military</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>-.15</td>
<td>-.23</td>
</tr>
<tr>
<td>Extraversion</td>
<td>.25</td>
<td>.16</td>
</tr>
<tr>
<td>Openness</td>
<td>.23</td>
<td>.06</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>-.04</td>
<td>-.04</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.05</td>
<td>.17</td>
</tr>
</tbody>
</table>

*Correlations between personality traits and leadership (Judge et al. 2002, p. 773).*

The findings indicates that having a tendency towards being sociable, active and energetic (Judge et al. 2002, p. 767), is beneficial as a leader in both the business- and military context. However, whereas extraversion was found to have the highest correlation with leadership in a business context, neuroticism was the factor with the highest correlation in the military setting, with -.23 (Judge et al. p. 773). This indicates that having a tendency to exhibit poor emotional adjustment, such as being insecure, anxious and hostile (Judge et al. 2002, p. 767), which are among the characteristics of neurotic individuals, reduces the effectiveness of leaders military context. As shown in the model above, the findings of Judge and colleagues (2002), indicate that personality traits are important for both military and civilian leadership. However, the factors does not seem to be of equal importance in both contexts. A closer look on the military context may therefore be appropriate.
**Personality and Military Leadership Potential**

A closer look at the relationship between personality and military leadership potential is relevant, as this thesis will be conducted in a military setting. A review by Vickers (1995) study, which was limited to the military leadership setting, also support the relationship between personality and leadership. However, the precise pattern of the relationship turned out to be vague (Vickers 1995, p. 11). Among the reasons for this was that both positive and negative indicators of leadership could be found within a single personality domain (Vickers 1995, p. 1). Based on findings in the review, Vickers (1995, p. 19) outlines a tentative personality profile for military leadership including critical elements from the neuroticism, conscientiousness, agreeableness, and extraversion domain. Due to the small amount of data available on the openness to experience domain, this factor was not included (Vickers 1995, p. 18). An overview of the central components of military leadership, according to the findings of Vickers (1995, p. 19), is visualized below.

<table>
<thead>
<tr>
<th>Personality trait</th>
<th>Component’s correlation with leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>Depression, stress, vulnerability, pessimism</td>
</tr>
<tr>
<td>Extraversion</td>
<td>Sociable, show-off, Assertiveness, aggressive</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>Kind, generous, Frank, trusting</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>Competence, effort, achievement, striving, self-discipline</td>
</tr>
</tbody>
</table>

*Central components for leadership (Vickers 1995, p. 19).*

In his review, Vickers’ stress the importance of analyzing personality at the facet level (1995, p. 18), since “detail is important when predicting leadership” (Vickers, 1995, p. 14). Furthermore, he argues that even though it seems possible to establish a military leadership selection profile based on personality, the literatures inconsistent coverage of the personality domains is challenge (Vickers 1995, p. 19).
Leadership Potential in NCOS

The Norwegian Armed Forces have stated what they look for when conducting the selection process for NCOS. According to their webpages (forsvaret.no, 2016, 13.01), the characteristics of a good leader, used to assess their leader candidates, is comprised of five domains: *Being a role-model, ability to tackle objectives, mental robustness, cooperation and development*. Each of these five domains are accompanied by descriptions of behaviors and characteristics that explain what the five domains entail (forsvaret.no, 2016, 13.01). As an example, one of their descriptions under the domain “mental robustness” is emotional stability and the ability to think clearly in situations of high physical and psychological demands. Arguably, these descriptions show similarities with the definition of the big five factor neuroticism (Cooper 2010, p. 51). Furthermore, the domain “ability to tackle objectives” entails, among other things, to complete commenced tasks and being able to work systematically. These descriptions arguably shows similarities with the factor conscientiousness (Cooper 2010, p. 51). The other domains and their associated descriptions also have similarities with the factors and facets of the big five. We will consider using NAF’s definition of leadership potential, combined with the findings of Vickers (1995, p. 19) in order to generate hypotheses on the facet level of the big five personality factors. However, at this point, we present the following hypotheses, based on the findings of Judge and colleagues’ (2002) meta-analysis:

*H1: The big five personality traits are related to officer candidate performance*

*H2: Neuroticism is negatively correlated with officer candidate performance*

*H3: Extraversion is positively correlated with officer candidate performance*

*H4: Openness is positively correlated with officer candidate performance*

*H5: Agreeableness is negatively correlated with officer candidate performance*

*H6: Conscientiousness is positively correlated with officer candidate performance*

Personality saturation in selection interviews

Selection can be defined as the process of choosing the individual that is best suited for a particular position in an organization, from a group of applicants (Mondy et al. 2002, p. 158). There are several procedures that can be applied in a
selection process. However, the selection interview seems to have an intuitive appeal for hiring managers, and is one of the most frequently used procedures (McDaniel et al. 1994, 599). The goal of the interview is to predict future job performance on the basis of candidate's' oral responses to oral inquiries (McDaniel et al. 1994, 599).

Interviews can be differentiated based on their degree of standardization, according to McDaniel et al. (1994, p. 601). Those that gather information in a less systematic manner are called *unstructured* interviews. On the other side of the standardization continuum, is the *structured* interview (McDaniel et al. 1994, p. 602). This type utilizes a printed form containing specific items to be covered, has a uniform method of recording and rating the oral responses of the interviewee (McDaniel et al. 1994, p. 602). Several meta-analyses have investigated the validity of employment interviews, one of them by Schmidt and Hunter (1998). The results showed that structured interviews have a predictive validity of .51, similar to tests of general mental ability. In the same study, the unstructured interview was found to have a predictive validity of .38 (Schmidt & Hunter 1998, p. 265). Employment interviews have also proven to be reliable in meta-analytic studies (e.g. in McDaniel et al. 1994, p. 604). By dividing the structured and unstructured interviews, they found an average reliability of .84 in structured and .64 in unstructured. In other words, interviews, and especially the structured interview, are valuable predictors of job performance.

*Few conclusions have been more widely supported than the idea that structuring the interview enhances reliability and validity* (Campion et al., 1997, p. 665).

However, there are several things researcher should be aware of in regards to an employment interview. When evaluating an interview, the interviewers should rate each single answer with a scale to be as structured as possible, according to Campion et al. (1997). Another possibility, which may give slightly more flexibility during the interview, is to have several ratings in the end of the interview, but it wouldn’t be that directly linked to each question (Campion et al., 1997). Campion et al. (1997) also stresses the importance using detailed anchored rating scales, helping the raters to have realistic expectations when assessing answers provided from the candidates.
In employment interviews, multiple interviewers might be beneficial as they could reduce individual biases in the evaluation process (Campion et al., 1997). In addition, it could be easier for several interviewers to remember important information from the answers given from the candidate (Stasser & Titus, 1987; in Campion et al., 1997). Campion et al. (1997, p. 681) also states that the reliability of interview ratings should be higher when there are several raters. Using the same interviewers would also be advantageous, because one will reduce the candidate rating variance that is among interviewers from the actual score variance (Campion et al., 1997). This is based on findings from Dreher, Ash, and Hancock (1988; in Campion et al., 1997), which shows that interviewers have rating tendencies and a differentiation between their validities. Findings by Campion et al. (1994; in Campion et al., 1997, p. 683) show that by using highly structured interviews, which gave an inter-rater reliability of .97, different interviewers didn’t matter. This is an interesting finding in our context with a high number of candidates to NAF, which could make it more difficult to use the same interviewers.

Even though interviews are found to be both reliable (Conway et al. 1995, in Roth et al. 2005, p. 261), and valid predictors of job performance (Schmidt & Hunter 1998), far less is known about what constructs the interview actually capture (Roth et al. 2005, p. 262). There is a substantial interest among both managers and researchers in this topic, and one of the questions posed is how much personality saturation there is in interview ratings (Roth et al. 2005, p. 261). Personality saturation in interviews refers to the degree to which measures of personality is related to interview ratings (Roth et al. 2005, p. 261). According to a study by Roth and colleagues (2005, p. 271), the authors state that the current literature has found that personality saturation in structured interviews is low. However, they also note that both the amount of studies on the subject is sparse, and that these studies have focused on just a few types of jobs. It may therefore be that other types of jobs may be more saturated with personality than the current research has found (Roth et al. 2005, p. 270). It is important to understand personality saturation in selection interviews, because one may recognize which constructs actually being measured in our predictions of job performance (Hough 2001, cited
in Roth et al., 2015, p. 261). Knowing what the selection interview measures could give interviewers valuable insight when assessing candidates for different positions. According to Barrick & Mount (1996, in Roth et al. 2005, p. 261), turnover and absenteeism (Judge, Martocchio & Thoreson, 1997, in Roth et al. 2005, p. 261) are two of several criterias that could be predicted by personality. This means that if the personality saturation in an interview is high, the interview could potentially predict other criteria, in addition to job performance, such as e.g. absenteeism and turnover.

In a meta-analysis of construct validity of the employment interview, by Salgado and Moscoco (2002), the researchers did find a relationship between interviews and personality. In their study, they grouped the interviews into two different categories: conventional interviews and behavioral interviews (Salgado & Moscoco, 2002). What they found was that the conventional interview to some degree assessed the Big Five personality dimensions (Salgado & Moscoco, 2002), contrary to the findings of Roth and colleagues (2005). Among the five personality factors, emotional stability had the strongest correlation (.38), with extraversion (.34) and openness (.30) following as the second and third strongest correlations (Salgado & Moscoco, 2002, p. 310). Conscientiousness and agreeableness had a respective correlation of .28 and .26. Behavioral interviews, on the other hand, was not found to assess personality. However, they seemed to assess social skills, job knowledge, job experience, and situational judgment, according to Salgado & Moscoco (2002).

**Personality Saturation in the Leader Selection Interview**

Based on our review of Roth and colleagues (2005, p. 261) article, one should expect interviews to have little personality saturation. However, as Roth et al. argues, the amount of literature on the topic is sparse. Furthermore, Roth et al.’s study primarily focused on jobs related to customer service. Contrary to the findings of Roth et al. (2005), Salgado & Moscoco (2002) did find a relation between personality and interviews. If we combine these findings with the ones from our review of the literature on personality and leadership, who shows that personality is of significant importance to leadership, an investigation of the
degree of personality saturation in the selection interview would be in its place. More specifically, since personality seems to be of importance to leadership both in a military and civilian context, one could assume that measures of personality would be related to interview scores rating the leadership potential of interviewees. Furthermore, as previously mentioned, NAF’s criteria for selecting NCO candidates (forsvaret.no, 2016, 13.01) show similarities with the big five personality factors. An investigation of the degree of personality saturation in an interview aimed at identifying leadership potential would add to what we know about personality saturation in interviews by providing data and findings from a new setting. At this point, no hypotheses will be presented related to this topic.

Method

Sample and Procedure

The sample consists of 1200 applicants to the non-commissioned officer training school of the Royal Norwegian Armed Forces. The admission process is held yearly and is a common process for the navy, air, and ground forces and their respective NCO schools, according to Gimsø, Martinsen, and Arnulf (2011, in Gimsø, 2014, p. 40). To ensure full anonymity, we will not mention which year this specific NCO admission process took place. Selecting the best candidates with the highest potential for becoming an officer (leader) in the future is the overall goal with the admission process, according to Gimsø et al. (2011, in Gimsø, 2014). Applicants participating in the admission process had previously been screened and selected based on different measures, such as an examination of men and women liable for military service and grades from high school (Gimsø et al., 2011, in Gimsø, 2014). Every candidate in the admission process had to conduct psychological, physical, and medical examinations, and was excluded from the final part of the process if they did not perform better than the minimum requirements. In the final part of the process, candidates offered NCO admission were those judged to have better qualifications based on the physical tests, interview ratings, and the field exercise (Gimsø et al., 2011, in Gimsø, 2014). In May the following year, nearly a year after the NCO admission, other measures were collected within the same sample, including a military service statement.
Candidates were measured based on one’s performance since the admission. However, the sample size was reduced from the original amount to around 450.

The preliminary thesis was written before we received the dataset from the Royal Norwegian Armed Forces. Therefore, no detailed information about gender, age distribution, or selection ratio is included. However, previous studies (e.g. Gimsø, 2014, p. 40) from earlier NCO admission processes shows that there are a disproportionate number of men and the average age is approximately 20 years. Details will be included in the final thesis.

**Measures**

Data in the present study have been collected on two different points in time from the same sample - applicants to the non-commissioned officer training school of the Royal Norwegian Armed Forces. Thus, it can be characterized as a longitudinal research, which could be defined as *a research design in which data collected on a sample on at least two occasion* (Bryman & Bell, 2011, p. 715). The data collected allows us to investigate whether measures of personality in the selection process can predict performance almost one year later.

**NEO-PI-3**

Candidates in the NCO admission process completed a Norwegian version of the NEO-PI-3, which is a revised version of the well-used NEO-PI-R for measurement of the FFM of personality (Costa and McCrae, 1992). The inventory has revealed evidence of high validity (Costa and McCrae, 1992); the same goes for the Norwegian version of it (Martsen, Nordvik, Østbø, 2011). It includes 240 items and measure Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. The items in this study were scored on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

It is important to emphasize that personality measures is not without criticism. According to Hogan, Barrett, & Hogan (2007, p. 1270), there are especially two major points of criticisms when it comes to personality measures for employee selection. One of them is faking, named *impression management* by Hogan et al. (2007), and involves that you control your behavior to appear more in line with
the expectations. In other words, you answer in a way that is more socially desirable, which could be defined as “the tendency of some people to respond to items more as a result of their social acceptability than their true feelings” (Podsakoff et al., 2003, p. 82). When controlling the behavior during social interaction, which also includes responding to inventory items (Hogan et al., 2007), it is understandable that one could question studies based on personality inventories. However, a study conducted by Hough and Furnham (2003, in Hogan et al., 2007, p 1270) shows that “impression management has minimal impact on employment outcomes”. In addition, faking does not seem to be a major problem in job application processes, according to several studies (Hogan et al., 2007).

Selection Interview

As mentioned, candidates had to go through a selection interview in the NCO admission process. According to Gimsø et al. (2011, in Gimsø, 2014), the interviews lasted approximately 60 minutes and were held by trained and experienced officers. Two interviewers are usually present during these interviews, which intend to measure leadership potential, according to Gimsø et al. (2011, in Gimsø, 2014). He also identified five main criteria especially relevant in the assessment: maturity/motivation, values/attitudes, activities/interests, leadership qualities, and articulation/communication (Gimsø et al., 2011, in Gimsø, 2014, p. 41). The interviews follow a standard template, but the interviewers had the opportunity to go into things they considered appropriate for each candidate, according to Gimsø (2014), thereby characterizing the interviews as semi-structured. They assumed that the reliability of the interview were closer to meta-analytic findings for structured interviews, which were .84 (McDaniel et al., 1994; in Gimsø, 2014, p. 42), than for unstructured interviews, which were .68, because they could not estimate the reliability or the validity of the present selection interview. Since we have not received the interview questions, or the data from the interview, we cannot present further details about the selection interview in our current thesis.

Evaluation of NCO Candidate's Leadership Potential

Those serving in the NAF shall annually have service statement and appraisal, according to NAF’s personnel handbook (Simonsen, 2014, 08.01). In the present
study, data from around 450 non-commissioned officers were gathered, almost a year after their NCO admission. The service statement is written by their superior and shall judge non-commissioned officers qualifications, skills, and potential in the service.

**Common Method Bias**

In the late 1950s, researchers (e.g. Campbell & Fiske, 1959, in Podsakoff et al., 2003) began to look into the possibility that common method variance could have a potential impact on a relationship between two constructs. Today, it is widely agreed upon that it is in fact one of the main sources of measurement error (Podsakoff et al., 2003). According to Podsakoff et al. (2003, p. 879), common method variance could be explained as “the variance that is attributable to the measurement method rather than to the constructs the measures represent”. This can lead to a differentiation between true and observed correlation, either by increasing or decreasing the relationship between constructs (Podsakoff et al., 2003). Thus, there is a risk for either Type I or Type II errors.

As a personality inventory is used to measure the candidate’s personality, and an interview is used to rate leadership potential in the present study, one would likely reduce the probability of a systematic effect since it don’t share common methods. However, other common method biases could influence the measurement, like *Context induced mood* (Podsakoff et al., 2003). Candidates responding to the personality inventory would probably “standardize” the variance in the following responses of the questionnaire with their first answers, according to Podsakoff et al. (2003).

Another aspect that is worth mentioning is the possibility that some of the candidates took the questionnaires before the selection interview, and others in reverse order. This was the case when Gimsø (2014) conducted a study within the same context some years ago, risking a priming effect (Salancik and Pfeffer (1977, in Podsakoff et al., 2003). Those who responded at the questionnaire before the interview would probably answer the interview questions in a way that is related to their response on the inventory. Gimsø et al. (2011, in Gimsø, 2014, p. 41) state that there were no lists of which candidates conducted the selection.
interview before the questionnaire, but that it probably would have a counterbalancing effect.
References


Simonsen, T. (2014, 08.01). Forsvarets personellhåndbok - Del B Forvaltning av befall. Obtained from: http://www.nof.no/images/Marketing/lover%20og%20avtaler/saeravtaler%20for%20forsvaret/Personalh%C3%A5ndbok/FPH%20del%20B%20%201.%20aug%202014.pdf

