

Theoretical and Practical Aspects of Self-Efficacy in Military Cadets

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Abstract. Within the military profession the will to succeed and to strive for results that go beyond what is expected, is the difference between success and failure. The demands of war can be extreme and a crucial factor for the will to succeed is the education of and training on self-efficacy. Self-efficacy can be obtained either through theory or through practice. The purpose of the present study was to investigate whether officer cadets at the Norwegian Military Academy felt that there was a correlation between theory and practice when it came to Bandura's four factors of how to increase self-efficacy. The four factors were enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and mental states. Method: A self-developed questionnaire with 14 questions was used in order to investigate the research question. 10 questions related to theoretical and practical aspects of self-efficacy was developed. The last question was intended to find out which of the four factors that had the largest impact upon self-efficacy, and respondents were forced to choose one of the four factors. 50 officer cadets at the Norwegian Military Academy participated in the study. Results: A correlation between Bandura's theory and the practice was found. The factors enactive mastery experiences and vicarious experience were found to have a high correlation between theory and practice. The highest correlation between theory and practice was found for the factor verbal persuasion. The lowest correlation between theory and practice was found for the factor physiological and mental states. However, when forced to choose which factor that in total had the largest impact upon self-efficacy, a clear majority of respondents indicated the factor enactive mastery experiences.

Keywords: self-efficacy; enactive mastery experiences; vicarious experiences; verbal persuasion; physiological and mental states; military officers; theory; practice; education

Introduction

High standards are required for professionals and it should be obvious that you need a strong self-efficacy to deal with the countless scenarios you may find yourself in as a soldier and officer. Self-efficacy can be defined as; "... [The] beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). This is not about the abilities and skills one possesses, but about what one considers attainable with the skills one possesses (Bandura, 1986). Believing in one's own capacities, skills and abilities has been found to be important for Norwegian military officers within diverse subjects such as increasing the will to kill (Boe & Johannessen, 2015), learning aggression and aggression control (Boe & Ingdahl, 2017), preparing for a parachute jump (Boe & Hagen, 2015), and enhancing leadership communication skills (Boe & Holth, 2017; Holth & Boe, 2017).

Bandura writes that self-efficacy is a very important factor for people in order to perform (Bandura, 1997). Perceived competence is seen as a major factor in all types of educational processes, and prior research in a military context have found satisfactory concordance between self-reported military competence and demonstration of effort and expertise in military personal (Adler, Thomas, & Castro, 2005). Studying an American Stryker brigade, Hammermeister et al. (2010) found that soldiers with well-developed psychological skills performed better on physical tests than soldiers with less-developed psychological skills. Similarly, in a study of a very physically demanding selection program in the U.S. Special Forces, self-efficacy was found to have a significant impact as to whether the soldiers completed the hard physical selection or not (Gruber, Kilcullen, & Iso-Ahola, 2009). These studies lends support to the notion that psychological skills are important for soldiers and officers. In addition, several meta-analyses have suggested a positive relationship between self-efficacy and performance (Gully et al., 2002; Moritz et al., 2000; Multon, Brown & Lent, 1991; Sadri and Robertson, 1993; Stajkovic & Luthans, 1998). On the other hand, a study by Buch, Säfvenbom, and Boe (2015) found that self-efficacy seemed less important for an increased perception of military competence in cadets who revealed a higher intrinsic motivation. The picture regarding self-efficacy in the military context is thus not clear-cut.

"The rigors in combat can be extreme. In our profession, the will to succeed and to strive towards results that exceed the expected, is the difference between success and failure" (Forsvarsstaben, 2007. p. 160, our translation). The quotation is taken from the Norwegian Armed Forces Joint Operational Doctrine and gives a good picture of why soldiers and officers need a strong self-efficacy when conducting their professional practice. Norwegian soldiers and officers have been participating in several operations in different countries with an increasingly difficult operational environment (Boe, Kjørstad, & Werner-Hagen, 2012). After a conventional "cold war" scenario where the Norwegian soldiers only guarded its own borders, recent international conflicts are of a much higher complexity. The conflicts that the Norwegian Armed Forces have participated in the recent decades has evolved from regular combat operations through stabilization operations to complex peace operations (Forsvarsstaben, 2014).

Military leadership requires a robustness in order to think clearly and effectively, and to master one's own emotions in the face of complex situations (Forsvarsstaben, 2012). An important factor in the education of soldiers and officers will be to create a high degree of belief in their own abilities (Eid & Johnsen, 2006). The U.S. Army's field manual 6-22 on Army leadership emphasize the self-development process of military leader. This includes strengths and developmental needs as well as determination and goal setting (U.S. Department of the Army, 2015). To educate soldiers and officer with faith in themselves and their skills is crucial so that different missions can be solved both at home and abroad. The Norwegian Military Academy (NMA) also emphasizes the development of self-efficacy in its cadets. For instance, the combat fatigue course that the cadets have to participate in during their three-year education at the NMA is an arena aimed at improving the cadet's ability to cope and to develop good and appropriate coping strategies (Krigsskolen, 2010; 2016). By constantly exposing the soldiers to more challenging tasks, it is possible to increase the individual soldier's psychological as well as physical fitness skills. This will increase the possibility to respond effectively when facing a dangerous situation (Matthews, 2014).

Bandura (1997) believes there are four factors if one wants to achieve a better subjective self-efficacy. The four factors are enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and mental states. By understanding and using these, we can perform at our best. As a soldier and officer, being able to perform at your best could be the difference between life and death. It is therefore essential that when the urgency is the greatest, the military professional manages to perform at his or her best.

Self-efficacy is not just about controlling your actions and surroundings, but also about being able to control your own thought process, motivation and physiological emotions (Bandura, 1997). Kaufmann and Kaufmann reinforced this impression when they wrote: "research shows that this subjectively experienced self-efficacy capability can often be just as crucial to a person's achievement as the objective problem-solving abilities" (Kaufmann & Kaufmann, 1998, p. 30, our translation). This means that two individuals with the same skill level can perform very differently, because the cognitive factor of self-efficacy play an important role in the performance of the two individuals. Therefore, it is rational to assume that individuals with high self-efficacy will perform better than individuals with low self-efficacy (Wormnes & Manger, 2005). It is further logical to imagine that individuals with a high self-efficacy will be more apt to believe that they can meet labour challenges although various stressors are present (Jex, Bliese, Buzzell, & Primeau, 2001). Much previously conducted research has shown that certain psychological skills are critical in order for experts to perform at their maximum in a variety of tasks and contexts (see for instance Ericsson & Kintsch, 1995; Ericsson & Smith, 1991; Janelle & Hillman, 2003; Williams & Ericsson, 2005).

On the other hand, it has been pointed out that the belief in one's self-efficacy is not necessarily a reflection of reality or the physical capacities that one possesses, because of the tendency to subjectively judge one's abilities (Bandura, 1997). This means that having a high degree of self-efficacy will not solve all problems. The level of self-efficacy belief varies widely from person to person,

yet there are some characteristics that are more pronounced in both those with good and those with poor self-efficacy. People with poor self-efficacy more easily give up or lower their expectations and efforts in the activity where they will perform the behaviour (Bandura, 1997). In addition, people with low self-efficacy largely wish to refrain from taking part in the activity, and to call attention to the possible consequences and disasters. Those with a strong self-efficacy, however, will see challenges as solvable tasks. Instead of seeing the challenge as a menacing obstacle, they see how it most effectively can be passed (Bandura, 1997). Thus, the four factors may affect our self-efficacy both positively and negatively, depending on how one interprets and relates to them.

The following sections will go into detail on each of the four factors in order to give a deeper explanation of what they entail. Four factors are needed in order to increase self-efficacy according to Bandura. He points out that there are four factors that contribute. These are respectively: Enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states.

Enactive mastery experiences

Enactive mastery experiences are the factor that influences self-efficacy the most (Bandura, 1997). An explanation for this is that the actions you have mastered before, give a pretty good picture of whether you will be able to solve similar tasks (Bandura, 1986). The successful, but also unsuccessful, coping experience will be stored in your memory, so they later may affect your self-efficacy belief. Stated differently, repeated success will build self-efficacy while repeated failure will weaken it. Doss (2007) also places great emphasis on enactive mastery experiences in order to build belief in oneself and one's abilities. He explains that this way to build self-efficacy is one of the most effective ways to boost your confidence and increase faith in your abilities. Doss thus supports Bandura's (1997) thinking and emphasizes that it is important for both soldiers and instructors to understand that success comes from being confident in your skills.

However, performing very simple tasks over time may result in small defeats creating cracks in one's self-efficacy (Bandura, 1997). Therefore, it is important to find a balance between difficult and easy tasks. As an example of what this means, we can envision a cadet who has been a company commander on an infantry exercise. He or she has mastered this role in a satisfactory manner and has experienced success with the goals he or she had decided upon. In the next exercise, the cadet is a platoon leader. The cadet has a good previous experience from being in a leadership role and therefore feels confident in his or her abilities as a platoon leader. At this point the cadet used the good enactive mastery experiences from the company commander role, and therefore became better suited to solve the platoon leader role. A positive experience such as this one will allow the cadets to acquire more faith in themselves and in their abilities when they know that they have mastered a similar role before.

Vicarious experiences

The second factor regarding how to increase self-efficacy is vicarious experiences. Seeing others succeed is also an important factor in order to achieve a better self-efficacy (Bandura, 1997). The person who looks on will then be able to persuade him- or herself to believe that he or she is capable of doing the same or of performing even better (Bandura, 1986). In addition, if one is able to identify with the person performing, this will provide an even greater impact in achieving a better self-efficacy (Bandura 1997). Doss (2007) also emphasizes observing others as a factor to improve faith in oneself and one's skills. He writes that observing others can be a good strategy, especially if you can identify with the person you are looking at. On the other hand, this way to build self-efficacy is not thought to be as powerful as enactive mastery experiences (Doss, 2007).

As an example of how this factor works in practice, we can imagine a cadet who is about to have his or her exam in close combat. In the beginning, the cadet is looking at other cadets going through the exam situation. The cadet sees one of his or her fellow cadets who performs in an outstanding manner throughout the whole exam. The cadet may think that he or she is as good as the other cadet in all the other things they do, and convince him- or herself that he or she can achieve the same result. In this way, the cadet gained a better self-efficacy, because of convincing him- or herself that it is possible to pass the examination just as the other cadet did.

Verbal persuasion

The third factor dealing with how to increase self-efficacy is verbal persuasion. To hear praise or encouraging comments is then the third factor that affects self-efficacy. Support from others has been identified as a key element in the NMAs leadership development program (Boe & Hjortmo, 2017). Verbal encouragement is partly used to convince people that they possess skills that will enable them to achieve what they set themselves as goals (Bandura, 1986). Bandura (1997) explains that positive feedback at work or during an ongoing task will encourage people to make a greater effort if the encouragement is realistic. In order for the encouragement to be felt as real, the feedback must be within the limits of what is feasible for the person. Experiencing failure because you were encouraged to take on more responsibility than you yourself thought was realistic could on the contrary have a negative impact on your self-efficacy. Negative comments will also weaken your self-efficacy (Cox, 2007). For example, an instructor or supervisor should avoid commenting on negative behaviour, or refrain from giving negative feedback. On the other hand, there should be room to give feedback that is not positive, but with the intention to help the person to develop. Meanwhile, correct feedback and encouragement causes the focus to be turned away from the difficult and over to how you should do your best to resolve the challenges (Bandura, 1997).

An example in this context can be an instructor who encourage a cadet to take on a task with more responsibility. The instructor explains that the cadet is loyal, fair and full of effort and should therefore take on the task. Here the instructor encourages the cadet and explains why he or she believes that the cadet is fit to take on this task. The cadet experiences that the instructor has

credibility and therefore this will increase the belief that he or she can cope with such a task if he or she takes on the responsibility. Here the positive and encouraging words may improve the cadet's self-efficacy so that he or she will take on the task.

Physiological and affective states

The fourth factor dealing with how to increase self-efficacy is physiological and affective states. When people judge themselves and their skills, they often consider information that comes from cognitive and emotional impulses (Bandura 1986). This can be anything from feelings such as stress and anxiety, or other characteristics such as butterflies in the stomach, a positive mood or increased pulse. These cognitive and emotional impulses may over time evolve so much that you will have difficulty functioning in a normal way, or that these impulses will improve the way we function. Feelings and thoughts can therefore contribute to either strengthening or weakening our self-efficacy (Bandura, 1997).

An example of this is that a platoon leader who is highly stressed before a mission can develop a weak self-efficacy for his or her abilities to solve the mission, and for similar situations, where he or she repeatedly has failed to control himself or herself. The feeling of stress will return in similar situations affecting the platoon leader in a negative way, because he or she recognizes the negative feelings. If the platoon leader repeatedly experiences this without being able to control himself or herself or the situation, this may weaken the self-efficacy (Bandura 1997). On the other hand, the development of personal coping strategies and techniques can be very effective in order to win back control and achieve a better self-efficacy (Yanilov & Boe, in press). For example, practicing mindfulness for two weeks before their first parachute jump resulted in a higher self-confidence in a group of cadets as compared to a group that did not practice mindfulness before the first parachute jump (Boe & Hagen, 2015). In this study, a conclusion was drawn that practicing mindfulness helped to reduce the perception of stress in an acute stressful situation.

The purpose of the study

Our purpose in this study was to identify any relationships that existed between theory and practice when it comes to Bandura's four factors to increase self-efficacy. The following research question was asked: To what degree does NMA cadets feel that there is a correlation between theory and practice when it comes to Bandura's four factors to increase self-efficacy?

Method

To answer the abovementioned research question, a quantitative method was used. This was done in order to find a pattern or a tendency among the population (Kvarv, 2010). A questionnaire was given to 50 cadets at the NMA taking part as respondents in the study.

Participants

The population in the present study consisted of cadets from the NMA. The total number of cadets at the NMA is classified information and will therefore not be revealed in this article. Our sample consisted of 50 respondents. When the sample size was evaluated, it was assumed that the population was homogeneous and that the number should not be less than 30 respondents in accordance with the guidelines provided by Johannessen, Tufte, and Christoffersen (2010). Subsequently, a randomized selection procedure resulted in five female cadets and 45 male cadets, which was quite representative of the total population of the NMA cadets consisting of around ten percent women.

Procedure

The respondents filled out the questionnaire at the NMA. The respondents were asked to consider their own experiences and perceptions and then to indicate by putting a cross in a box how much they agreed or disagreed with the statements in the questionnaire. The questionnaires were then collected by one of the authors. As six of the respondents were not present when the questionnaire was to be filled out, they were given permission to give their responses via e-mail to one of the authors.

Materials

Our starting point for the study was first to interpret Bandura's theory (1997). Based on our interpretation of Bandura's theory we then developed a questionnaire. The questionnaire dealt with how much one would agree or disagree that there were any correlations between theory and practice when it came to Bandura's four factors of increasing self-efficacy.

The questionnaire was designed in a structured way with the main emphasis on pre-coded response options. A structured questionnaire contains pre-coded answer alternatives (Johannessen, Tufte, & Christoffersen, 2010). The questionnaire was designed with five categories. The five categories were enactive mastery experiences, vicarious experiences, verbal persuasion, physiological and mental states, and a general category related to self-efficacy. The first four categories each had two questions, where one question had a theoretical context and the other question a practical context. The aim was to see whether respondents believed that Bandura's four factors were equally important in theory as in practice, i.e. that theory and practice correlated. The last category had one question more than the other categories and was intended to capture the factor that our respondents believed had the greatest impact on their self-efficacy. Finally, a last question about which factor would be the most important for self-efficacy was included in the questionnaire. Table 1 below gives an overview of the questions included in the questionnaire.

The self-developed questionnaire thus consisted of a total of 14 questions. They were structured as follows: Three initial questions were asked about the respondent: First they were asked to indicate their gender, followed by indicating which unit they belonged to at the NMA. In the third question, they were asked to indicate if they had a good understanding of Bandura's (1997) self-efficacy theory. Here the answer categories were either yes or no. The purpose of this question was to find out if the knowledge of Bandura's self-

efficacy theory would affect the remaining answers in the questionnaire. The next eight questions (questions 4-11) dealt with the four factors of self-efficacy. For each of the four factors the respondents were asked to ponder upon a theoretical and a practical question. Finally, there were three general questions (questions 12-14) related to self-efficacy. Question 14 was intended to identify the most important factor contributing to self-efficacy. Here the respondents were asked to choose one of five possible options that they thought had the most impact upon their self-efficacy.

To measure the relationship between theory and practice, a five-point Likert-scale was used in questions 4 to 13. Here, the respondents had the opportunity to choose between a neutral answer category or two positive or two negative answers. The five answer categories were: totally disagree, partially disagree, neither agree nor disagree, partially agree, and totally agree. The use of these five answer categories was based on the suggestion that five alternative answers would give a respondent an opportunity to respond in a way that was nuanced enough (Johannessen, Tufte, & Christoffersen, 2010). The answers that were obtained from question 4 to 13 were converted to numbers ranging from 1 (totally disagree) to 5 (totally agree). In question 14 the respondents could indicate which one of five options they thought had the biggest impact on their self-efficacy. They could only indicate one answer of the following five options: 1. Past experiences (example: I have mastered a similar task before), 2. The achievements of others (example: Seeing that a fellow cadet succeeds with a task), 3. Verbal encouragement from others (example: Positive feedback on my own performance), 4. Physiological and mental states (example: Have a strategy to cope with stress, negative thoughts, etc. so I feel calm and relaxed), and 5. Other (meaning something else).

Table 1. An overview of questions given to the respondents.

General questions

Question 1. Indicate your gender

Question 2. Indicate which unit at NMA you belong to

Question 3. I have a good understanding of Bandura's self-efficacy theory

Questions related to enactive mastery experiences

Question 4. Previous success has a positive impact on my own skills. Previous success means tasks or actions I have succeeded in completing in an earlier stage in life¹

Question 5. A well-executed platoon leader role gives me an increased confidence that I will succeed in a similar role after the NMA²

Questions related to vicarious experiences

Question 6. When I see others succeed with their performances, I experience an increased self-efficacy belief in myself¹

Question 7. When I see a fellow cadet, I identify with shooting excellently on a shooting test, this increases the belief that I too will succeed²

Questions related to verbal persuasion

Question 8. Positive feedback on my performances gives me greater self-efficacy¹

Question 9. When competent instructors give me encouraging feedback on my leadership role, I become more confident in my own skills²

Questions related to physiological and mental states and a general category

Question 10. When I get control of my physiological and mental body reactions, I experience an increased belief that I will succeed in the present situation. (Examples of such reactions may include: palpitations, increased heart rate, stress, anxiety, butterflies in the stomach, nervousness, etc.)¹

Question 11. Good coping strategies give me greater self-efficacy when I am about to give a speech in front of the entire NMA²

Questions related more generally to self-efficacy

Question 12. Self-efficacy is important for an officer to succeed in his or her profession¹

Question 13. A well-developed self-efficacy has a great significance for my achievements²

Question intended to identify the most important factor in self-efficacy

Question 14. Which of these five options do you think has the largest impact on your self-efficacy: (You can only indicate one answer).

1. Past experiences (example: I have mastered a similar task before)
2. The achievements of others (example: Seeing that a fellow cadet succeed with a task)
3. Verbal encouragement from others (example: Positive feedback on my own performance)
4. Physiological and mental states (example: Have a strategy to cope with stress, negative thoughts, etc. so I feel calm and relaxed)
5. Other (meaning something else)

¹Theoretical question, ²Practical question. Answers to question 1 was either male or female. Answers to question 2 was either 1, 2, or 3. Answers to question 3 was either yes or no. Answers to questions 4-13 was on a scale ranging from 1 (totally disagree) to 5 (totally agree). Answers to question 14 was either 1, 2, 3, 4, or 5.

The results from the questionnaire were based on the subjective opinions of our respondents. To increase the validity of data three elements were emphasized: (1) use of plain language. (2) Formulation of questions so that respondents could intuitively understand what information they had to recall in order to answer. (3) Giving the respondents a benchmark they could relate to when they should respond. In the introduction to the questionnaire it was emphasized that the questionnaire was anonymous. The idea behind this was to influence the respondents to answer as honestly as possible.

Results

The data obtained from the respondents' questionnaires were coded into the statistical program IBM SPSS 23.0. Regarding question 1: "Indicate your gender", five respondents indicated female and 45 indicated male, as expected. Question 2: "Indicate which unit at NMA you belong to" had three answer options. The answers given by the respondents to these two questions were not used in the data analyses simply because the sample of 50 respondents was so small that it did not make any sense to conduct data analyses based upon groups. The 50 cadets were thus treated as one group. The third question: "I have a good understanding of Bandura's self-efficacy theory" was intended to rule out any respondents that had a good understanding of Bandura's self-efficacy theory as this might have affected the answers. However, this question can be interpreted in an ambiguous way. Some of the respondents may have thought that the question was directed towards their understanding of the definition of self-efficacy, while the original idea was that this question should

act as a filter question. Those with a good understanding of Bandura's self-efficacy theory were to be excluded from the study to avoid the influence of any pre-understanding of the theory. Based upon this insecurity we chose not to use this question as a filter question, and we did not conduct any data analyses based upon this question.

Enactive mastery experiences

Two of the questions were related to the factor enactive mastery experiences. Question 4, the theoretical question, was: "Previous success has a positive impact on my own skills. Previous success means tasks or actions I have succeeded in completing in an earlier stage in life." Here, 70 % of the respondents answered that they totally agreed, while 30 % answered that they partially agreed. The practical question 5 was: "A well-executed platoon leader role gives me an increased confidence that I will succeed in a similar role after graduating from the NMA". Here 42 % of the respondents answered that they totally agreed, 52 % that they partially agreed, 2 % replied that they neither agreed nor disagreed, while 4 % answered that they partially disagreed.

In general, we found that there was a tendency for the respondents to agree more with the theoretical question than the practical question. Furthermore, the greatest difference of response options, 70 % indicating "totally agree" in the theoretical question, and 42 %, in the practical question, corresponds to a difference of 28 %.

Questions 4 and 5 both refer to enactive mastery experience based upon Bandura's theory. In general, the results of both questions indicated that respondents agreed that this factor had an influence on their self-efficacy. Probably, the found consensus between the two questions was a result of this, and according to Bandura this factor has the strongest influence on our self-efficacy (Bandura, 1997). On the other hand, a closer look at the results showed that there was a difference between the theoretical and practical question. The difference may be an indication that the respondents do not recognize themselves in the practical question (question 5). Another reason may be that many of the respondents have experienced repeated failures in the role as a platoon leader, which may have led to a weakened self-efficacy. One successful completion as platoon leader will therefore not be sufficient to affect the self-efficacy belief enough. Bandura (1986) also points out that repeated negative experiences will weaken one's self-efficacy belief.

Respondents think that enactive mastery experiences are an important factor in order to improve self-efficacy. To carry out activities such as combat fatigue courses and stress management exercises can make soldiers and officers better able to believe in their own skills in similar conflict environments. With repeated success in training, they can develop a mental confidence in themselves and their skills, which likely will affect performance (Doss, 2007).

In summary, the respondents believed that enactive mastery experiences were an important source for increasing their own skills. The mean score for the theoretical question (question 4) was 4.70, and for the practical question (question 5), the mean score was 4.32. The difference between the two averages (0.38) nevertheless showed that there was a high correlation between theory and practice.

Vicarious experiences

Two questions were related to the factor vicarious experiences. Question 6 was the theoretical question related to vicarious experiences. Question 6 was: "When I see others succeed with their performances, I experience an increased self-efficacy belief in myself". 4 % of the respondents answered that they totally agreed, 40 % said they partially agreed, 34 % replied that they neither agreed nor disagreed, 20 % said they partially disagreed, while 2 % responded that they totally disagreed with the question.

Question 7 was the practical question related to vicarious experiences. This question was: "When I see a fellow cadet I identify with shooting excellently on a shooting test, this increases the belief that I will succeed too". Here 16 % of the respondents answered that they totally agreed, 50 % said they partially agreed, 22 % replied that they neither agreed nor disagreed, while 12 % answered that they partially disagreed.

In general, we can say that there was a tendency that respondents agreed more on the practical question than on the theoretical question. The mean value of the theoretical question (question 6) was 3.24 and the mean value for the practical question (question 7) was 3.70. The difference between the two average values at 0.46 suggest a somewhat larger difference than the one we found on the first factor, enactive mastery experiences. The difference was also in the opposite direction from enactive mastery experiences, with vicarious experiences having the highest mean for the practical question (M=3.70). For enactive mastery experiences, the theoretical question scored the highest (M=4.70).

Questions 6 and 7 both refer to vicarious experiences in Bandura's (1997) theory. In general, the results of both questions suggest that there were very different opinions about the factors contribution to increasing the respondent's self-efficacy. The answers range from "totally disagree" to "totally agree". Nevertheless, the averages of the two questions that respondents answered were more agree than disagree in that others' success had an impact on their self-efficacy. Bandura (1986) and Doss (2007) point to an explanation of why the difference is so great. Bandura and Doss both state that the factor vicarious experiences will have a greater impact and influence if one can identify with the person one is observing.

Taking a closer look at the results, we find an interesting discovery, namely the relationship between factors enactive mastery experiences and vicarious experiences. Doss (2007) explains that observing others' success and then modelling this is not as effective and powerful as the success with one's own performance. This could be a possible explanation for why enactive mastery experiences have been perceived as more significant than vicarious experiences. This in turn is supported by Bandura (1997), who claims that the enactive mastery experience factor is the strongest and most significant factor in achieving an improved self-efficacy

The results show that the average respondent had the belief that other people's success had an impact on their self-efficacy. For example, we can imagine an infantry squad from the Norwegian infantry battalion heading out on an assignment in Afghanistan. For this infantry squad to increase their belief

that they will succeed, the other infantry squads' performances can be an important factor that affects the soldiers' self-efficacy. If the other infantry squads in the platoon had previously failed to carry out their operations, this would probably have influenced the self-efficacy beliefs of most soldiers in a negative direction. The opposite would probably have been the case if the other infantry squads had achieved success time after time. It is therefore important to get a grasp on the success of others.

In summary, the respondents seemed to agree more than disagree that others' success was important for their self-efficacy, despite large variations in responses. The average difference between the theoretical and the practical question (0.46) although in favour of the practical question, showed that there was a relatively good agreement between theory and practice.

Verbal persuasion

Another two questions were related to the factor verbal persuasion. Questions 8 and 9 refer to verbal persuasion within Bandura's (1997) self-efficacy theory. Question 8: "Positive feedback on my performances gives me greater self-efficacy" was the theoretical question, whereas question 9: "When competent instructors give me encouraging feedback on my leadership role, I become more confident in my own skills", was the practical question. For the theoretical question (question 8), 74 % of the respondents answered that they totally agreed, 22 % answered that they partially agreed and 4 % replied that they neither agreed nor disagreed on the issue. Regarding the practical question (question 9), 72 % of the respondents answered that they totally agreed, while 28 % answered that they partially agreed. In general, the results indicated that there was a broad agreement that this factor affected the respondents' self-efficacy. The reason for the high score of totally agree in both questions can be the focus the NMA puts on feedback and feedback culture. The NMA attaches great importance to establishing a good feedback culture to promote personality and leadership growth (Andersson et al., 2009). For example, after the different exercises, time is set aside to give and receive feedback. This culture may have influenced the respondents while they were answering the questionnaire, and may therefore be a cause of the high degree of correlation of the two questions.

On the other hand, the high score could also be attributed to the respondents' need for their opinions to be of importance and to be recognized. Verbal persuasion is a factor that cannot be controlled by the respondents, unlike the other three factors. For most of us it is important to get feedback, because it gives us a sense of being valued or seen. The significance of this is of course subjective, but probably it is important for most of us. As a cadet, it is desirable to be recognized, just to get a confirmation on that matter, and this may be one reason why this factor was so highly correlated on both questions. The tendency among respondents showed that this factor was important for their self-efficacy and it therefore supports Bandura's (1997) self-efficacy theory.

Furthermore, another interesting finding can be seen by comparing the mean values of enactive mastery experiences and verbal persuasion. The mean values were 4.70 for the theoretical question and 4.32 for the practical question related to enactive mastery experiences, and 4.70 for the theoretical question and 4.72 for the practical question related to verbal persuasion. When we put the two

the mean values up against each other, we see that the factor verbal persuasion has a higher degree of unity between the theoretical and practical questions than the factor enactive mastery experiences. In Bandura's (1997) self-efficacy theory this has not always been found, as Bandura thinks enactive mastery experiences is the one factor that aids in the strongest growth of self-efficacy. One possible reason for this finding may be the poor wording of the practical question related to enactive mastery experience (question 5), which could have caused the respondents to give a lower mean score to enactive mastery experience in total.

The significance of the factor verbal persuasion in practice is not hard to understand. In a combat situation with little food and water, positive feedback could be a "boost" for one's self-efficacy belief and accomplishments. In moments where you are exhausted, this form of self-efficacy could help to provide an extra motivation to carry on and do your best.

In summary, the respondents highly agreed that verbal persuasion was important for their self-efficacy. The mean score on the theoretical question related to verbal persuasion was 4.70, and the mean score on the practical question was 4.72. The difference between the two questions in average (0.02) shows that there was a very high correlation between theory and practice regarding the importance of the factor verbal persuasion.

Physiological and affective states

Two questions were related to the factor physiological and affective states. Questions 10 and 11 dealt with the physiological and mental states within Bandura's (1997) self-efficacy theory. Question 10 was the theoretical question. The question was: "When I get control of my physiological and mental body reactions, I experience an increased belief that I will succeed in the present situation. (Examples of such reactions may include: palpitations, increased heart rate, stress, anxiety, butterflies in the stomach, nervousness, etc.). Question 11 was the practical question. The question was: "Good coping strategies gives me greater self-efficacy when I am about to give a speech in front of the entire NMA". Regarding question 10 (the theoretical question) 46 % of the respondents answered that they totally agreed, 44 % replied that they partially agreed, while 10 % responded that they neither agreed nor disagreed with the question. Question 11 was the practical question. To this question, 8 % of the respondents answered that they totally agreed, 34 % replied that they partially agreed, 46 % replied that they neither agreed nor disagreed, 10 % replied that they partially disagreed, and 2 % said they totally disagreed with the question.

In general, we can say that there were wide variations in how the respondents answered the two questions. Averages showed that the respondents agreed more than disagreed, in that this factor had a positive effect on their own skills. Probably the low scores result from what Bandura (1986) wrote that "people rely partly on information from their physiological state in judging their capabilities" (p. 401). This quote can be interpreted so that the factor physiological and mental states can be seen as less meaningful than the other three factors, and that it therefore gets generally low scores from the respondents.

On the other hand, a closer look revealed that there was a big difference between the theoretical and the practical question, which may have affected the

overall impression of this factor. For the theoretical question related to the factor physiological and affective states (Question 10), 90 % of the respondents partially or totally agreed. If we look further on the practical question related to the factor physiological and affective states (Question 11), over 50 % of the respondents answered that they partially disagreed or neither agreed nor disagreed. These results showed a clear gap between theory and practice. Intuitively, one reason for this could be that the practical question was not very well developed so that the two questions were perceived to be unrelated. On the other hand, it may be that the respondents believed that coping strategies did not affect their performance. Another possibility may be that the respondents do not use coping strategies or know what this is. If the latter option is the case, this may have influenced the respondents to indicate neutral on this question.

In general, there were relatively large differences in the respondents' answers to the two questions. The largest difference is between the response option; totally agree. Here there was a difference of 38 %. Average scores for the theoretical question related to the factor physiological and affective states was 4.36 and 3.36 for the practical question. The difference between the two averages was 1.0 indicating that there was a large difference between theory and practice on this factor.

General questions related to self-efficacy

Three questions were more generally related to self-efficacy. Question 12 was: "Self-efficacy is important for an officer to succeed in his or her profession", and question 13 was: "A well-developed self-efficacy has a great significance for my achievements". Question 12 was the theoretical question, and 74 % of the respondents totally agreed, while 26 % answered that they partially agreed with the question. Question 13 was the practical question. 44 % of the respondents answered that they totally agreed, while 56 % answered that they partially agreed. Mean values for the two questions were respectively 4.74 and 4.40 with the theoretical question getting the highest mean scores. The difference in averages between the two questions was 0.34, which means there was a high correlation between the theoretical and the practical question.

The most important factor contributing to self-efficacy in military cadets

Question 14 consisted of the following: "Which of these five options do you think has the largest impact on your self-efficacy: 1. Past experiences (example: I have mastered a similar task before), 2. The achievements of others (example: Seeing that a fellow cadet succeeds with a task), 3. Verbal encouragement from others (example: Positive feedback on my own performance), 4. Physiological and mental states (example: Have a strategy to cope with stress, negative thoughts, etc. so I feel calm and relaxed) and 5. Other (meaning something else). To this question, 78 % of the respondents answered past experiences, 0 % answered the performance of others, 4 % answered verbal encouragement, 14 % answered physiological and mental states, while 4 % said other, indicating that something else had a great impact upon their self-efficacy. Most respondents answered alternative 1 (past experiences), which means that enactive mastery experiences were the factor that had the largest impact on self-

efficacy. This factor is known as the strongest of the four factors (Bandura, 1997) and explains the tendency we found. It is nonetheless interesting that the factor enactive mastery experiences did not receive the same weight as the factor verbal persuasion received when looking at the four different self-efficacy factors. Why most respondents chose the factor enactive mastery experiences as the most important factor in question 14, but not when they answered the other questions related to self-efficacy, may have several reasons. Despite this discrepancy, these results eliminate the argument that verbal persuasion is a larger and more important factor than enactive mastery experience.

A short overview of the results of the theoretical and practical questions related to self-efficacy

Table 2 below gives a short summary of the answers given to the questions related to the four factors of how to increase self-efficacy and to the two questions that were more generally related to self-efficacy (questions 4-13). For reasons of simplicity, the questions are not fully written out in the table (see table 1 for the full wording of the questions).

Table 2. Mean values (Mv) of answers given to the questions related to self-efficacy (n=50).

Questions	Mv
<i>Questions related to enactive mastery experiences</i>	
Question 4. Previous success has a positive impact on my own skills ¹	4.70
Question 5. A well-executed platoon leader role gives me an increased confidence that I will succeed in a similar role after the NMA ²	4.32
<i>Questions related to vicarious experiences</i>	
Question 6. When I see others succeed with their performances, I experience an increased self-efficacy belief in myself ¹	3.24
Question 7. When I see a fellow cadet, I identify with shooting excellently on a shooting test, this increases the belief that I will succeed too ²	3.70
<i>Questions related to verbal persuasion</i>	
Question 8. Positive feedback on my performances gives me greater self-efficacy ¹	4.70
Question 9. When competent instructors give me encouraging feedback on my leadership role, I become more confident in my own skills ²	4.72
<i>Questions related to physiological and mental states</i>	
Question 10. When I get control of my physiological and mental body reactions, I experience an increased belief that I will succeed in the present situation ¹	4.36
Question 11. Good coping strategies give me greater self-efficacy when I am about to give a speech in front of the entire NMA ²	3.36
<i>Questions related more generally to self-efficacy</i>	
Question 12. Self-efficacy is important for an officer to succeed in his or her profession ¹	4.74
Question 13. A well-developed self-efficacy has a great significance for my achievements ²	4.40

¹Theoretical question, ²Practical question.

As can be seen from table 2, the highest correlation between the theoretical and the practical questions was found for the factor verbal persuasion (Mv=4.70 and Mv=4.72), followed by the factor enactive mastery experiences (Mv=4.70 and Mv=4.32). Regarding the correlation between the theoretical and the practical questions for the factor vicarious experiences, the correlation was high, but in the opposite direction of the three other factors (Mv=3.24 and 3.70).

The lowest correlation between the theoretical and the practical questions was found for the factor physiological and mental states (Mv=4.36 and 3.36). It was also found that the respondents to a very high degree agreed that self-efficacy was important for an officer in his or her profession (Mv=4.74), and that a well-developed self-efficacy had a great significance for their achievements (Mv=4.40). Also for these last two general questions (questions 12 and 13) related more generally to self-efficacy there was a high correlation between the theoretical and practical question.

Conclusions

This article had the following research question: To what degree do NMA cadets feel that there is a correlation between theory and practice when it comes to Bandura's four factors to increase self-efficacy? To answer this research question, we used a self-developed quantitative questionnaire and gave this to 50 respondents at the NMA. The answers from the respondents were analysed and then discussed against Bandura's (1997) self-efficacy theory.

In general, the results showed that there was a good correlation between theory and practice when it came to Bandura's four factors to increase self-efficacy, except for the factor physiological and mental states. In addition, there was also a variation between the level of correspondence between the different factors with regard to the theoretical and practical impact this had upon self-efficacy.. The most noteworthy differences we found were between the theoretical and practical questions for each of the four factors, with the exception of the factor verbal persuasion, where the mean values were almost the same for the theoretical and practical question. Respondents thus generally seemed to believe that the remaining three factors of how to increase self-efficacy were more important in theory than in practice. This may indicate a weakness in the formulation of the situations in the practical questions. On the other hand, these situations were constructed so that the respondents would be able to recognize the situations.

The largest difference between theory and practice was found for the factor physiological and mental states, while the smallest difference was found for the factor verbal persuasion. Probably, the diverging results for the factor physiological and mental states were large because of the uncertainty surrounding the use of coping strategies. Meanwhile, it could also be a result of the respondents struggling to recognize themselves in the situation. When looking at the factor verbal persuasion, the low difference between the theoretical and the practical question may simply be a result of the well-developed feedback culture that the respondents are accustomed to.

The factor enactive mastery experiences revealed that the respondents believed this factor to be of great significance in relation to their self-efficacy.

The average values were not very different between theory and practice, indicating that there was a relatively good correlation between theory and practice.

The factor vicarious experiences showed that the respondents agreed more than disagreed with how this factor affected their self-efficacy. Yet it turned out that the practical question had a greater score than the theoretical one. This may be because the respondents agreed more that the identification element had more to say for one's self-efficacy belief, as compared to observing a random person.

The factor verbal persuasion showed that respondents believed this factor had a great influence on their self-efficacy. This factor scored higher than enactive mastery experience when it came to the practical question, while the score on the theoretical question was equal to the score on the theoretical question for the factor enactive mastery experiences. The factor verbal persuasion thus revealed a very high correlation between theory and practice.

The factor physiological and mental states had large variations in the responses to the two questions. Nevertheless, respondents agreed more than they disagreed, in that this factor had an impact on their self-efficacy. Despite this, respondents agreed more to the theoretical question than to the practical question. The reason for this may probably be a poorly formulated practical question.

Regarding the questions that were more generally related to self-efficacy, the results here also showed a high degree of correlation between the theoretical and practical question. A clear majority of respondents totally agreed that self-efficacy was important for an officer to succeed in his or her profession (the theoretical question). For the practical question related to self-efficacy, stating that a well-developed self-efficacy had a great significance on their achievements, about half of the respondents totally agreed, and the remaining respondents partially agreed to this question.

When the respondents were asked to choose which of five options they thought had the largest impact on their self-efficacy, it was found that 78 % of the respondents answered past experiences. This indicates that enactive mastery experiences were the most important factor related to self-efficacy. However, although most respondents choose the factor enactive mastery experiences as the most important factor for this question, answering the other questions related to self-efficacy revealed that the strongest factor with the highest correlation between the theoretical and the practical question was verbal persuasion. We draw the conclusion that enactive mastery experience in total was the most important factor for increased self-efficacy. The reason for this is that when forced to choose among the different factors it was very clear that the factor enactive mastery experience had the largest impact upon the respondents' self-efficacy.

In summary, our findings illustrates that there is a connection between theory and practice when it comes to Banduras (1997) four factors to increase self-efficacy.

As this article has mapped the correlations between theory and practice of Banduras (1997) four factors to increased self-efficacy, it could in turn be interesting to make a qualitative study on the same subject. This might bring out

the underlying thinking in the respondents and thus create a deeper understanding of why they respond as they do. This would also at the same time give a deeper understanding which factors increase self-efficacy and why this is important for military officers.

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