

## Self- and Other-Perceptions of Military Performance of Men and Women in the Bundeswehr

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### **ABSTRACT**

*The paper first sketches the history of women's participation in the German armed forces up to. In a second step, empirical findings from previous studies on the integration of women into the Bundeswehr are presented, which leads the way to the analysis of self- and other-perceptions of service performance perceptions as such perceptions may very well influence the social interaction in combat situations. This analysis finds the most skepticism about the performance of women soldiers among combat and ground soldiers who may accordingly be made the special target of gender trainings.*

### **1.0 INTRODUCTION**

The Bundeswehr is a military that is fully open to women which means that women may serve in any function or capacity. However, so far, German female soldiers have experienced close and kinetic combat situations in very, very limited numbers only. From these few cases it is very difficult to infer general propositions this symposium is aiming for.

Nevertheless, we think that we can – to a certain extent – contribute to this debate because in our studies on the integration of women into the German Armed Forces we found considerable reservations and even resistance against the inclusion of women among male soldiers. These attitudes were most pronounced among younger soldiers, among rank and file and non-commissioned officers, among army soldiers and among soldiers serving in combat functions which implies that female soldiers in combat settings are generally confronted with more-than-average male reservations and resistance against them which may in turn negatively impact on their combat performance.

Our paper aims to shed some more light on this by looking at different forms of explicit performance perceptions in the German armed forces. The data come from the last integration climate study on the Bundeswehr that generally had the objective to identify difficulties and problems in the process of integrating women in the military in order to find appropriate ways and means to improve the situation. The items on performance perceptions were included in the survey in an exploratory way only. The underlying general hypothesis of the study is that attitudes, opinions and perceptions of male and female soldiers influence the social interactions in the military. Performance perceptions, then, may help us to better understand social interactions in combat situations which are the focus of this symposium. In an ideal world, the paper may therefore provide some insight into what to do to improve interactions of soldiers in combat.

The present article first sketches the history of women's participation in the German armed forces up to now as this might not be familiar to the participants (Sections 1 and 2). In a second step, empirical findings from previous studies on the integration of women into the Bundeswehr are presented (Section 3), which leads the

way to the analysis of performance perceptions (Section 4). A discussion of the findings and some thoughts on the road ahead will close the article (Section 5).

## **2.0 THE HISTORY OF THE INCLUSION OF WOMEN INTO THE BUNDESWEHR**

Women have long been involved in German war efforts. During World War I women worked in the German armaments' industries and were recruited for medical, administrative and combat support functions. Towards the end of the war, 500 of them were trained for service in the field of communication. In World War II, the inclusion of females in the war went even further despite the pre-modern gender role conceptions of the National Socialists. A very substantial number of women, about 450,000, were recruited for the Wehrmacht Assistance Corps (*Wehrmachthelferinnenkorps*) and tens of thousands of them were even assigned combat functions. However, this was not officially acknowledged since their service was interpreted in terms of assistance only. (Seidler 1998)

The recognition of women as official and regular soldiers had to wait until the Bundeswehr came into being. The creation of German armed forces, to be sure, was by no means something 'natural' in the decade following the Second World War. In the end, it was the Cold War-turbulences in international relations in the late 1940s and early 1950s that persuaded the Western powers to view the rearmament of West Germany in a different light. As a result, in the mid-1950s the Bundeswehr was established.

At the time, few considered female soldiers to be an issue. Yet, the Bundeswehr soon employed thousands of women as civilian employees in the Federal Armed Forces Administration, i.e. in functions which in many militaries of the world would be done by people in uniform. It took another decade until the issue of women as regular soldiers began to be discussed in society and in politics due to wide-ranging democratization processes and significant socio-cultural and politico-cultural changes. Starting with the so called student movement, various parts of German society began to support important social movements that called for political and societal participation. Among them were various women's groups that criticized the patriarchal structure of German society and sought emancipation and gender equality as laid out in various UN documents. Accordingly, some parts of them also demanded equal access and participation to professions that had hitherto been exclusively male domains. Very soon the male-dominated soldierly profession and the Bundeswehr faced pressure from society that soon translated into the political sphere and put the issue of women in the military on the agenda. (Kraake 1992; Albrecht-Heide/Bujewski-Crawford 1991; Fischer 1997)

In late 1973, the German government, at that time a coalition of the Social-Democratic Party of Germany (SPD) and the Liberal Party (FDP), responded to these societal pressures by establishing the enquête-commission *Women and Society*. As a result, the Minister of Defense, Georg Leber (SPD), implemented the opening of the Bundeswehr for women. Thus, in autumn 1975, the year the UN had declared *Year of the Woman*, the first five women entered the Bundeswehr, soon to be followed by others. However, they served in the medical service only, where, the German armed forces had been confronted with substantial recruitment problems since the early 1970s resulting in a gap of 1,300 long-term service volunteers in the officer careers (Seidler 1998: 223, 225).

After some time, the access of women to military functions and capacities was extended to military bands also because of the legal connection between the medical service and military bands, i.e., in the case of an emergency the soldiers of the military bands are to be transferred to the medical service.

The discussion about extending female participation to new functions was to gain new momentum in the early 1980s. In 1981, an independent *Long-Term-Commission* had analyzed the shifts and the trends in demography of West German with an eye toward satisfying the Bundeswehr's personnel needs. One year

later, the Commission submitted its report that in one paragraph recommended considering extending voluntary service of women in the armed forces to additional non-combat functions. However, throughout the 1980s, no such political move was initiated. Nevertheless the issue remained on the agenda of societal and political debate and soon further steps were taken to enlarge the representation of women in the armed forces. Since the beginning of 1991 all the careers of the medical and military musical service were made accessible to women (see also the findings of Anker/Lippert/Welcker 1993; Klein/Kriesel 1993; Schaffer 1994); in 1994, Verena von Weymar became Surgeon General, the first female general in German military history (Seidler 1998: 227).

In the late 1990s, female soldiers made up for 1.2 percent of all German soldiers. The number of women came close to 60 in the military bands and to 4,350 in the medical service, i.e. approximately 400 medical officers, 700 medical officer candidates, 2,300 non-commissioned officers, 200 non-commissioned officer candidates and 100 in private ranks (German Ministry of Defense 1999). In addition to that, close to 50,000 women worked as civilian employees either in the armed forces or in the Federal Armed Forces Administration.

This means that towards the end of the millennium women in the Bundeswehr were still confined to non-combat roles, whereas in other countries the integration of women had made significantly more progress (Lippert/Rössler 1980; Soeters/Meulen 1999; Kümmel 2002; Carreiras 2006). Although female soldiers were trained in the use of weapons, their utilization – except for cases of self-defense – was forbidden by Article 12a of the Basic Law (*Grundgesetz*).

### **3.0 THE CASE OF TANJA KREIL AND ITS CONSEQUENCES**

This situation changed fundamentally at the turn of the century due to a woman named Tanja Kreil who has been described by the media as embodying the – foremost male – “nightmare of a woman with a gun in her hand” (Kipphoff 2000: 39) and as indicating the end of the “rule of men” (Zielke 2000: 14). The story goes like this: In 1996, the 19-year old trained electrician Tanja Kreil applied for voluntary service in the Bundeswehr in the area of maintenance, i.e. in a combat support function. Her application, however, was declined by the Bundeswehr with reference to the above-mentioned Article 12a of the Basic Law: women serving in combat functions and with weapons in their hands were against the law. Tanja Kreil went to the courts and argued that her application was illegally rejected because the Bundeswehr resorted to her sex and used a gender-specific argument by saying that men were allowed to enter positions involving the use of arms while women were not. Eventually, her case was transferred to the European Court of Justice (ECJ) in Luxemburg which, in its ruling of January 2000, followed Tanja Kreil’s argument (European Court of Justice 2000) Hence, the ECJ overruled the arguments of national sovereignty put forward by the German government. This means that the steps to open the Bundeswehr to women did not stem from genuinely political initiatives as one may have thought, but from a court ruling that required the political sphere to take some action (see also Stelzenmüller 2000: 6).

The ECJ’s ruling was quite vague because it only demanded from Germany to open more functions and capacities than before without defining the scope and extent of this broader inclusion in detail. Therefore, one of the main issues discussed was the depth or the degree of the integration and thus the question whether certain areas, functions and capacities should be denied to women or whether the Bundeswehr should be completely open. In order to tackle this question in particular and to implement integration in practice in general, the Ministry of Defense established an intra-ministerial steering group and asked its inhouse research institute, the Bundeswehr Institute of Social Sciences (*Sozialwissenschaftliches Institut der Bundeswehr, SOWI*), to scientifically aid and support this process.

In mid-February 2000, the researchers turned against the idea of defining off-limits areas and instead advocated a principally unrestricted access of women to the military. The Ministry of Defense eventually

agreed to this option and, thus, the organization and implementation of this political decision began. Further on, according to the group of researchers, integration was to be based on the *principle of voluntariness*, i.e. women would enter the military services voluntarily and would not be subject to conscription as was the case for men at that time. Also, integration was not to be based on the idea of affirmative action, but on the *principle of equality of treatment*. Thus, there was to be a gender-free or gender-neutral assessment of those who applied for military service, i.e. everyone would have to pass the criteria for the position they requested irrespective of their sex. Lastly, the researchers recommended the introduction of a gender or integration training program. (Kümmel/Klein/Lohmann 2000; see also Kümmel/Biehl 2001)

The Bundeswehr Center of Innere Führung (*Zentrum Innere Führung*) in Koblenz was tasked to devise some sort of a curriculum for such a program which went into practice in November 2000 already, namely in courses for military leaders and trainers coming from those military units in which the military education and training of the servicewoman was to start in January 2001. The objectives of the curriculum were defined as: (a) improving the men's acceptance of women; (b) developing an atmosphere of mutual trust, tolerance and comradeship between men and women; (c) bringing to the men's knowledge relevant legal provisions; and (d) building and strengthening the men's security in behavior towards women. This was thought to be achieved by following the principle of multiplication, i.e. these courses were organized centrally for a core group of soldiers that were deemed multipliers who would pass their newly gained knowledge on to the various subordinate military levels and soldiers. In other words, the integration training operated with the notion of a trickle-down or cascade effect. (Zentrum Innere Führung 2000a; 2000b).

In the summer of 2000, the first job interviews and aptitude tests were conducted with female applicants. Simultaneously were taken to revise the German constitution. At the end of October and in early December 2000, the German parliamentary bodies, the *Bundestag* and the *Bundesrat*, voted with two-thirds majorities for the revision of the above-mentioned Article 12a of the Basic Law (*Grundgesetz*), respectively. Following this, and starting with January 2001, women became eligible to enter all functions and capacities.

In the following years, the Bundeswehr's personnel composition was to change quite dramatically, because the number of women soldiers in the Bundeswehr increased from about 2 percent by the end of the 1990s to 12 percent as of November 2018. Currently, 21,938 female soldiers are working for the German Armed Forces (Army: 4,028; Air Force: 2,287; Navy: 1,613; Medical Branch: 8,194; Cyber: 1,209; Armed Forces Base: 2,737; Department of Defense: 1,870). Regarding their rank, 5,583 of them are officers, 11,276 are non-commissioned officers, and 5,079 are rank and file. Most of them are shorter- and longer service volunteers (18,868); the number of female career servicemembers is 3,252).<sup>1</sup>

#### **4.0. PREVIOUS RESEARCH**

The process of integrating women into the Bundeswehr was accompanied by ongoing social scientific research of the SOWI and, later on, the Center of Military History and Social Sciences of the Bundeswehr (*Zentrum der Bundeswehr für Militärgeschichte und Sozialwissenschaften, ZMSBw*). In these studies (Kümmel/Biehl 2001; Kümmel/Werkner 2003; Kümmel 2008), there were hints at mixed feelings and ambivalence among male soldiers against their female comrades. According to these data and depending on the respective item, we found quite a few soldiers who showed some reservations and sometimes even strong resistance against the inclusion of women in the military. These attitudes and opinions could be traced back to persisting classical or traditional images concerning the role of women in society and vis-à-vis men, to biologically based perceptions and gender stereotypes and to modern sexism, i.e. the impression of men that, in an era of increasing workplace competition from women, they are the ones who are victims of discrimination.

<sup>1</sup> [https://www.bundeswehr.de/portal/a/bwde/start/streitkraefte/truppe/frauen/staerke!/ut/p/z1/04\\_Sj9CPykssy0xPLMnMz0vMAfIjo8zizSxNPN2Ngg18LZy83Awcjd3CQoOMHQ0MTEz0wwkpiAJKG-AAjgb6wSmp-pFAM8xxm2GsH6wfpR-ViViWWKFXkF9UkpNaopeYDHKhfmRGYI5KTmpAfrIjRKAgn6LcoNxREQDvzFFE/dz/d5/L2dBISevZ0FBIS9nQSEh/#Z7\\_694IG2S0M8BJFOA3FVUR3A0043](https://www.bundeswehr.de/portal/a/bwde/start/streitkraefte/truppe/frauen/staerke!/ut/p/z1/04_Sj9CPykssy0xPLMnMz0vMAfIjo8zizSxNPN2Ngg18LZy83Awcjd3CQoOMHQ0MTEz0wwkpiAJKG-AAjgb6wSmp-pFAM8xxm2GsH6wfpR-ViViWWKFXkF9UkpNaopeYDHKhfmRGYI5KTmpAfrIjRKAgn6LcoNxREQDvzFFE/dz/d5/L2dBISevZ0FBIS9nQSEh/#Z7_694IG2S0M8BJFOA3FVUR3A0043)

A number of these items dealt with combat-relevant and combat-related issues. For example, in the early 2000s, almost every third male soldier deemed women not to be suited for the challenging life in the field and more than two fifths thought that women are not suited for tasks that demand high levels of physical fitness. 15 percent of the male soldiers were strictly opposed to any measures and policies aiming to include women in the military. The traditional gender-role ascription that the man is the protector and the woman is the protected was widely shared; almost 45 percent could not imagine themselves being defended by armed female soldiers and one fourth perceived women as being in need of protection. We also found that men in the army had more reservations against women than those in the navy or the air force. The same applies to members of the combat forces compared to those in non-combat areas. Officers showed less reservations than non-commissioned officers and rank and file soldiers. The younger men up to 29 years of age were less supportive of the integration of women than the men aged 30 and older. Also, shorter- and longer-service volunteers displayed more skepticism than career servicemembers. (Kümmel/Biehl 2001)

Further on, we found that every fifth male soldier had some reservations when it comes to women in leadership functions. Again, there were 43 percent of the male soldiers who deemed women not suited for physically demanding functions and capabilities. More than 60 percent of the men even anticipated some negative effects of female integration on military combat capabilities. (Kümmel/Werkner 2003)

In addition, we found that men and women differed in basic attitudes and norms. For instance, compared to female soldiers, the male soldiers adhered to a more negative general image of human beings and showed more patriotism. What is more important in a combat perspective is that men were more inclined to advocate an active foreign policy for Germany and to use military means and military force in international relations than women. About 28 percent of male soldiers explicitly viewed the performance of women soldiers as worse than that of men, and between a fifth and a fourth of men stated not to have confidence in female soldiers when it comes to military missions abroad. (Kümmel 2008)

The findings from these analyses point to a rather widespread understanding that combat and actual fighting is a male business and that women somehow negatively affect military readiness and military effectiveness. We found such skepticism the strongest among younger men, among rank and file and among non-commissioned officers, among army soldiers and among soldiers serving in combat functions.

This left us wanting to dig deeper into this issue. We then decided to look into self- and other-perceptions of actual active duty performances because these items are explicitly based on comparisons. Such comparisons may provide a more accurate picture than the above-mentioned items, may help to better understand what goes on in combat settings and may even help finding appropriate tools to improve the social interactions in mixed-gender combat groups. The survey for the following integration climate study of the year 2011 (Kümmel 2014) thus included a set of items on self- and other-performance perceptions in order to get a first impression of the usefulness of these items and to decide whether it is worthwhile to explore this thematic field more thoroughly.

## **5.0 ANALYSIS**

### **5.1. Sample**

The present analysis is based on data generated through a paper and pencil survey of active German military personnel, which was conducted in September and October 2011. The survey covered a wide range of topics, including attitudes towards the integration of women into the armed forces, sexual harassment, and gender stereotypes. A total of 14,500 copies of the survey were distributed in all branches of the German armed forces. Every second service woman received a copy of the survey (8,500) and 6,000 copies were distributed to a random sample of men. The final sample size is N=4,835 (women = 3,058; men = 1,777), resulting in a return rate of 33.3 percent. Importantly, the sample is not representative of the active service personnel of the

German armed forces due to the overrepresentation of women. The characteristics of the sample are detailed in Table 1 below.

**Table 1: Sample Characteristics**

	<b>ALL</b>	<b>MEN</b>	<b>WOMEN</b>
<b>Age</b>			
17-30	58.5	38.9	69.8
31-40	27.7	29.8	26.4
41-50	9.9	22.1	2.9
51-60	3.9	9.1	0.8
<b>Education</b>			
Basic (8 yrs.)	6.9	11.6	4.2
Middle (10 yrs.)	47.2	44.7	48.6
High (13 yrs.)	26.7	24.3	28.1
Tertiary degree	19.2	19.4	19.1
<b>Children</b>			
Yes	32.7	43.8	26.3
No	67.3	56.2	73.7
<b>Rank</b>			
Soldier	10.8	13.4	9.2
Non-commissioned Officer	60.7	52.5	65.4
Commissioned Officer	17.2	16.9	17.5
Staff Officer	11.4	17.2	7.9
<b>Branch</b>			
Army	29.7	41.9	22.7
Air Force	13.0	12.8	13.0
Navy	11.3	12.9	10.3
SKB (Support)	20.5	25.5	17.6
Medical Corps	25.5	6.9	36.4
<b>Role</b>			
Combat	4.9	10.7	1.5
Combat Support	8.6	13.3	5.8
Technical Support	20.9	23.8	19.2
Staff	29.6	29.9	29.4
Staff Support	14.8	18.3	12.6
Medical Support	21.2	4.0	31.5
<b>Career Status</b>			
Career Servicemembers	67.5	41.7	82.4
Shorter-/Longer Service Volunteers	32.5	58.3	17.6
<b>Years in Service</b>			
1 to 4	18.9	7.4	25.5
5 to 10	41.0	28.6	48.2
10 to 15	18.7	19.2	18.5
More than 15	21.5	44.7	7.9

Source: Bundeswehr Center of Military History and Social Sciences, Bundeswehr Survey 2011.

Note: Reported figures are percentages. Percentages may not add up to 100 due to rounding.

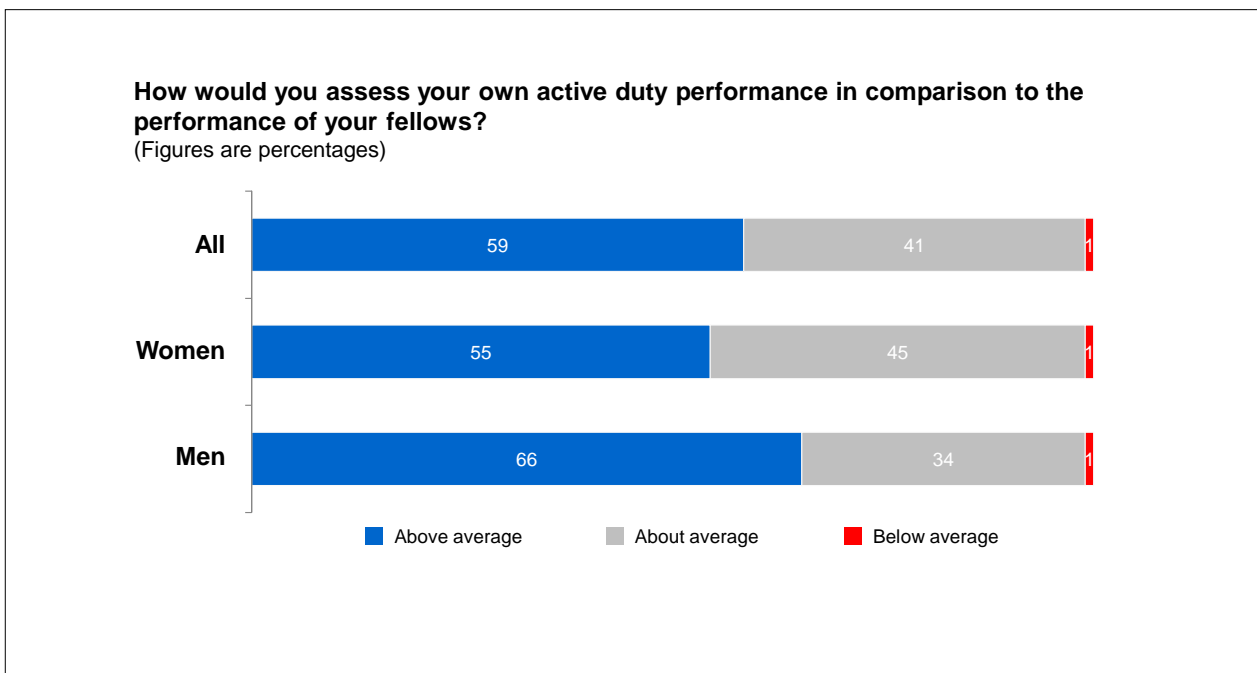
It should be noted that, on average, the female respondents are younger, slightly higher educated, have fewer children, occupy more junior ranks, and have served fewer years than the male respondents. Clearly, age (younger), rank (lower) and years in service (less) are related and all owe to the fact that service in the

German armed forces was fully opened to women only in 2001. Also, women are more likely to serve in the medical corps and to be shorter- and longer-service volunteers, and they are less likely to perform combat related functions than men.

## 5.2 Descriptive Analysis

### 4.2.1. Self-Perception of One’s Performance

We begin our analysis by looking at the respondents’ self-assessment of their active duty performance in comparison to their peers. It is important to note that only a minority of 1 percent of the respondents (both male and female) assess their own active duty performance negatively (“below average”) in comparison to their fellows (see Figure 1). Consequently, the crucial distinction for analytical purposes is between those who consider their own performance to be “about average” and those who consider it to be “above average.” On the whole, fewer women rate their own performance to be “above average” (55 percent) than men (66 percent). Hence, it appears that men display a greater level of confidence regarding their work performance.



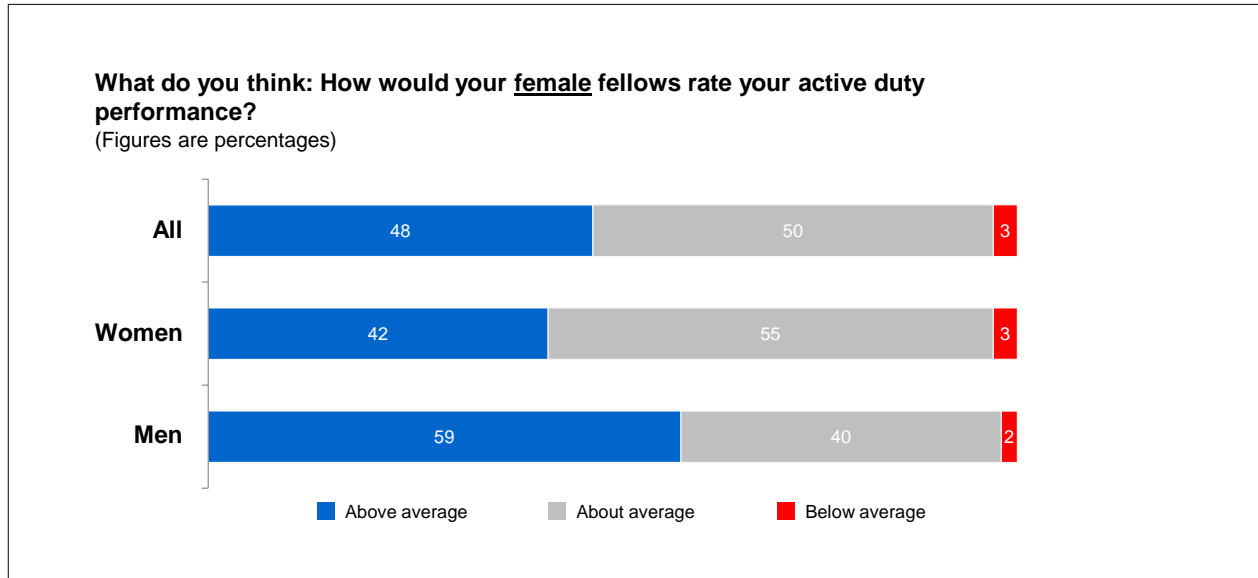
Source: Bundeswehr Center of Military History and Social Sciences, Bundeswehr Survey 2011.

**Figure 1: Comparative Assessment of the Personal Active Duty Performance**

### 4.2.2. Perception of One’s Performance by Others

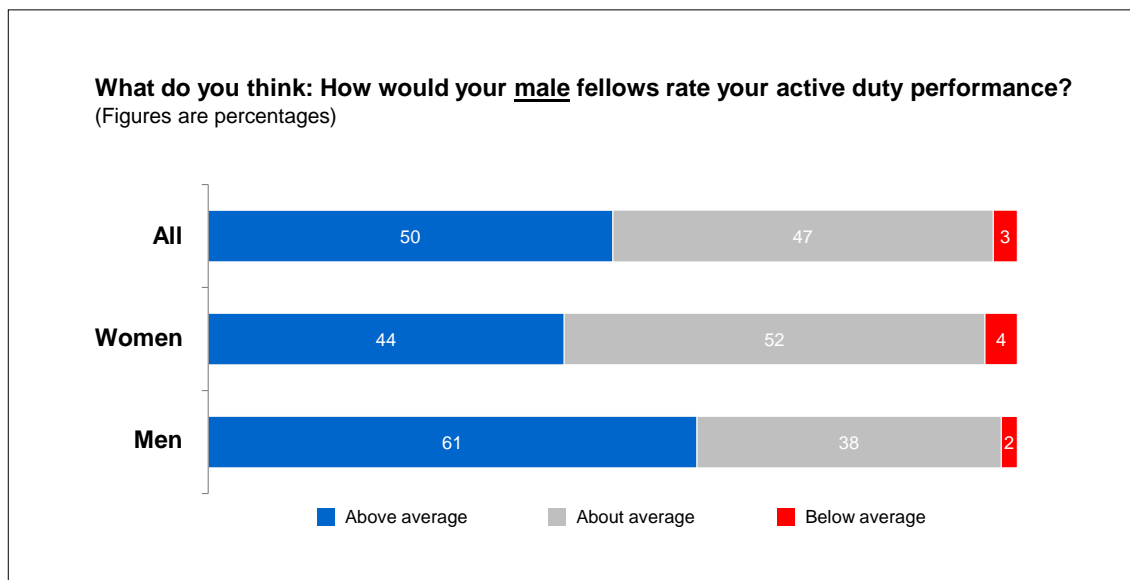
Moving from self-perception to the perception by others (see Figures 2 and 3), it is again notable that only a minority of 1 to 4 percent of the respondents believes that others (both male and female fellows) assess their active duty performance as being “below average.” So, the crucial analytical distinction is once again between those who believe that they are seen as “outperformers” and those who feel that their performance is rated as being about average. Fewer women believe that their fellows (both male and female) assess their personal performance as being “above average” than men. In fact, the majority of female respondents believes that their personal active duty performance is perceived as being “about average,” whereas the majority of male respondents believes that others rate their performance as being “above average” – regardless of the gender of the “other.” So, once again, men display more self-esteem regarding their active

duty performance than women. Interestingly, the perception by female fellows is more critical for both male and female respondents than the perception by male peers. However, the difference is only marginal (2 percentage points).



Source: Bundeswehr Center of Military History and Social Sciences, Bundeswehr Survey 2011.

**Figure 2: Assessment of the Personal Active Duty Performance by Female Fellows**



Source: Bundeswehr Center of Military History and Social Sciences, Bundeswehr Survey 2011.

**Figure 3: Assessment of the Personal Active Duty Performance by Male Fellows**

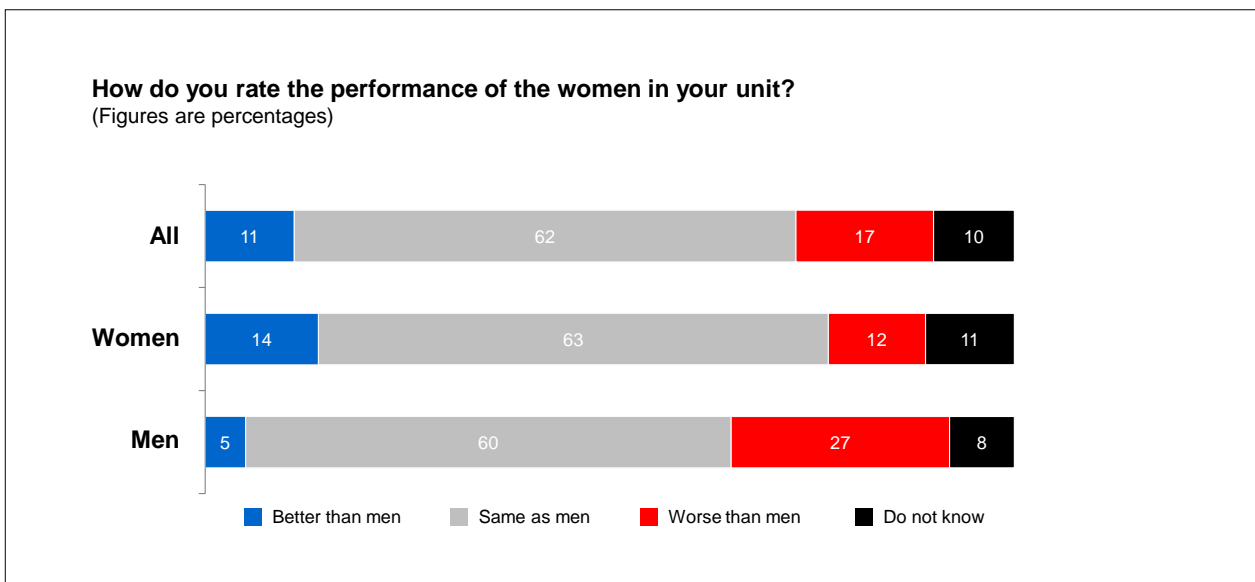
#### 4.2.3. Perception of the Performance of Women in One’s Unit

Finally, the respondents were asked to assess the active duty performance of women in their military unit (see Figure 4). Overall, only a minority of respondents (both male and female) thinks that the women in their



unit outperform men. Nonetheless, more female respondents believe that women outperform men (14 percent) than male respondents (5 percent). The majority of both male (60 percent) and female (63 percent) respondents rates the performance of women as being the “same as men.” However, more than a quarter of male respondents believes that the performance of women is “worse than men” (27 percent). By comparison, only 12 percent of female respondents share this critical assessment. It should also be noted that 8 percent of the male respondents and 11 percent of the female respondents answered with “do not know,” which indicates either an unwillingness to answer the question or a genuine inability to do so.

At this point, it is worth highlighting that the respondents’ assessment of their personal active duty performance (both in terms of their perception of their performance by themselves as well as their perception of their performance by others) is considerably more favorable than the assessment of the performance of the women in their military unit – irrespective of the respondent’s gender.



Source: Bundeswehr Center of Military History and Social Sciences, Bundeswehr Survey 2011.

**Figure 4: Assessment of the Active Duty Performance of Female Fellows**

### 4.3. Bivariate Analysis

Having described the overall differences between the male and female respondents regarding their perception of their performance by themselves and by others as well as the assessment of the performance of women in one’s military unit, we now disaggregate the group of respondents not only by gender, but also by age, education, rank, career status, years in service etc.. Importantly, in addition to a detailed description of the between-group differences in the outcome measures, we will test whether these differences are statistically significant (i.e., they did not just occur by chance).

#### 4.3.1. Self-Perception of One’s Performance

We begin our analysis by looking at the self-assessment of the respondent’s personal active duty performance in comparison to the peer group (Table 2).<sup>2</sup> The first thing to note is that the difference between men and women is statistically significant, i.e., men evaluate their personal performance significantly more

<sup>2</sup> In some instances, less than 5 respondents chose the option “below average,” which is why the Chi<sup>2</sup>-test compares the differences between the specified groups regarding the responses “above average” and “about average.”

favorably (“above average”) than women. Beyond gender, the self-assessment of one’s active duty performance becomes significantly more positive with higher age, education and rank as well as more years in service – this observation holds for both men and women. In addition, the self-assessment of women becomes significantly more positive as the number of deployments increases. In short, the respondents’ assessment of their active duty performance becomes more positive with experience and achievement. Also, the self-assessment of career servicemembers (both men and women) is significantly more favorable compared to shorter- and longer-service volunteers.

Interestingly, while men with children assess their own performance significantly more positively than men without children, the difference is not significant for women. Also, while the difference in the self-assessment is significant for both men and women living with a partner compared to those living without a partner, the difference is more pronounced with men. So, “family guys” assess their own performance significantly more favorably than “lone wolves.”<sup>3</sup>

Finally, there are also significant differences between the various branches of the military and the different roles performed by the soldiers. For instance, men in the navy are significantly more modest in their self-assessment than men in other branches of the military, and women in the medical corps assess their own performance significantly more positively than women in other branches. Also, it is worth noting that women in staff or staff support roles report significantly more positive self-assessments than women in other capacities.

**Table 2: How would you assess your own active duty performance in comparison to the performance of your fellows: above average (+), about average (0) or below average (-)?**

	ALL			MEN			WOMEN		
	+	0	-	+	0	-	+	0	-
<b>Total***</b>	59	41	1	66	34	1	55	45	1
<b>Age</b>		***			***			***	
17-30	51	48	1	59	40	1	49	51	1
31-40	68	32	0	69	31	1	67	33	0
41-50	73	27	1	73	26	1	70	29	1
51-60	68	31	1	64	34	1	88	13	0
<b>Education</b>		***			***			***	
Basic (8 yrs.)	50	48	2	53	44	3	44	56	1
Middle (10 yrs.)	56	42	1	65	35	1	54	45	1
High (13 yrs.)	58	42	1	70	29	1	51	48	0
Tertiary degree	66	34	0	71	29	0	62	37	0
<b>Children</b>		***			**			n.s.	
Yes	62	37	1	69	31	1	55	44	0
No	57	43	3	63	36	1	54	46	1
<b>Living with Partner</b>		***			***			**	
Yes	61	39	1	68	21	1	56	43	0
No	52	47	1	56	42	2	50	49	1
<b>Rank</b>		***			***			***	
Soldier	45	54	4	53	46	1	39	61	1
Non-commissioned Officer	58	41	1	66	33	1	55	45	0
Commissioned Officer	59	41	1	66	33	1	55	45	0

<sup>3</sup> However, it is probably safe to assume that, on average, “family guys” tend to be more senior (both in terms of age and rank) than men without families. So, the “family effect” may actually be driven by the respondent’s “seniority.”

Staff Officer	72	28	0	73	27	0	70	29	1
<b>Branch</b>		<b>n.s.</b>				<b>*</b>			
Army	60	39	2	65	34	1	55	45	0
Air Force	59	40	1	68	32	0	54	45	1
Navy	54	46	1	56	43	1	51	48	1
SKB (Support)	58	41	1	68	31	1	49	50	1
Medical Corps	59	41	0	68	32	0	58	42	0
<b>Role</b>		<b>***</b>				<b>n.s.</b>			
Combat	67	32	0	70	29	1	54	47	0
Combat Support	58	42	1	63	36	1	51	49	0
Technical Support	54	45	1	65	34	1	46	54	1
Staff	60	40	1	63	35	1	58	42	0
Staff Support	64	35	1	68	31	1	60	40	1
Medical Support	57	43	0	67	33	0	56	43	0
<b>Career Status</b>		<b>***</b>				<b>***</b>			
Career Servicemember	53	47	1	60	39	2	51	49	0
Shorter-/Longer Serv. V.	71	28	1	70	29	1	73	27	1
<b>Number of Deployments</b>		<b>***</b>				<b>n.s.</b>			
0	47	53	1	60	39	2	46	54	1
1	61	38	1	64	35	1	59	40	1
2	66	34	1	64	35	1	67	33	1
3	70	29	1	72	29	2	67	33	0
4+	68	32	1	69	32	1	70	30	1
		<b>ALL</b>				<b>MEN</b>			
	+	0	-	+	0	-	+	0	-
<b>Years in Service</b>		<b>***</b>				<b>***</b>			
1 to 4	48	61	1	46	51	3	37	63	1
5 to 10	59	41	0	61	39	1	58	42	0
10 to 15	66	33	1	70	29	2	64	36	1
More than 15	71	29	0	70	29	1	73	27	0

Source: Bundeswehr Center of Military History and Social Sciences, Bundeswehr Survey 2011.

Note: Reported figures are percentages. Percentages may not add up to 100 due to rounding.

Test: Chi<sup>2</sup>. Significance levels: \*\*\*p<.001; \*\*p<.01; \*p<.05.

#### 4.3.2. Perception of One's Performance by Others

Moving from self-perception to the perception of one's performance by others, Table 3 shows how the respondents' think that their *female* fellows would rate their personal active duty performance.<sup>4</sup> Similar to the self-assessment, men report a significantly more positive ("above average") assessment of their performance (59 percent) than women (42 percent). Also, the assessment by female fellows becomes more positive with higher age, education and rank as well as more years in service. The differences between the lowest groups and the highest groups are between 20 and 30 percentage points and statistically highly significant. So, once again, work-related self-esteem appears to grow with experience and achievement – regardless of the respondent's gender. Interestingly, female respondents in the oldest age group (51-60) "surpass" male respondents in assuming that female fellows would rate their personal active duty performance "above average" – this is the only instance in which the "self-esteem" of the female respondents tops that of the male respondents.

<sup>4</sup> In some instances, less than 5 respondents chose the option "below average," which is why the Chi<sup>2</sup>-test compares the differences between the specified groups regarding the responses "above average" and "about average."

Similar to the self-assessment reported in Table 2, the assessment by female fellows becomes significantly more positive (“above average”) for female respondents as the number of deployments increases. This is mere speculation, but perhaps deployments are seen by female soldiers as the ultimate opportunity to prove to their peers (both men and women) that they are “true soldiers” who can master the difficult challenges “in the field.” By comparison, the work-related self-esteem of men does not appear to be affected by the number of deployments (see Tables 2 and 3).

Furthermore, career servicemembers (both men and women) report significantly more positive assessments of their performance by female fellows. In which branch the soldiers are serving appears to make no difference, at least the between-group differences are not statistically significant (neither for men nor for women). It should be noted, however, that – similar to the self-assessment reported in Table 2 – the men and women in the navy stand out as the most modest, i.e., they report the lowest “above average” assessments of their performance by female peers. Interestingly, men with children and those living with a partner report once again significantly more positive assessments by female fellows. Hence, the initial impression that “family guys” are more self-confident than “lone wolves” receives additional support.<sup>5</sup> By comparison, the differences between women with and without families are not statistically significant.

**Table 3: What do you think, how would your female fellows rate your own active duty performance: above average (+), about average (0) or below average (-)?**

	ALL			MEN			WOMEN		
	+	0	-	+	0	-	+	0	-
<b>Total***</b>	48	50	3	59	40	2	42	55	3
<b>Age</b>		***			***			***	
17-30	39	58	3	47	50	3	37	60	3
31-40	57	41	2	65	34	2	52	46	2
41-50	69	30	1	70	30	1	69	30	1
51-60	68	33	0	65	35	0	82	18	0
<b>Education</b>		***			***			***	
Basic (8 yrs.)	40	56	4	44	53	3	33	62	5
Middle (10 yrs.)	45	52	3	55	43	2	39	57	4
High (13 yrs.)	49	49	2	65	34	1	42	56	3
Tertiary degree	58	42	1	68	31	1	52	48	1
<b>Children</b>		***			**			n.s.	
Yes	52	46	2	63	36	1	42	56	3
No	46	51	3	55	42	2	42	55	3
<b>Living with Partner</b>		***			***			*	
Yes	50	48	2	62	37	2	43	54	3
No	42	55	3	48	50	3	39	58	4
<b>Rank</b>		***			***			***	
Soldier	36	59	5	42	54	5	31	63	6
Non-commissioned Officer	46	52	3	56	42	2	41	56	3
Commissioned Officer	53	46	1	67	32	1	46	54	0
Staff Officer	66	33	1	73	28	0	59	40	2
<b>Branch</b>		n.s.			n.s.			n.s.	
Army	50	47	3	58	40	2	43	54	4
Air Force	49	50	1	60	39	1	43	56	1

<sup>5</sup> Please see footnote 3.

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	ALL			MEN			WOMEN		
	+	0	-	+	0	-	+	0	-
Navy	44	54	2	54	45	1	37	60	3
SKB (Support)	49	49	2	61	38	1	39	59	3
Medical Corps	46	52	3	59	37	4	44	53	3
<b>Role</b>		<b>***</b>			<b>n.s.</b>			<b>**</b>	
Combat	60	37	2	61	37	2	58	40	2
Combat Support	51	47	2	58	41	1	42	55	2
Technical Support	42	56	3	53	46	2	34	63	3
Staff	50	48	3	60	39	2	44	53	3
Staff Support	54	45	2	64	34	1	45	53	2
Medical Support	44	54	3	59	37	4	43	55	3
<b>Career Status</b>		<b>***</b>			<b>***</b>			<b>***</b>	
Career Servicemember	41	56	3	49	48	3	38	59	3
Shorter-/Longer Serv. V.	64	35	1	66	33	1	60	38	1
<b>Number of Deployments</b>		<b>***</b>			<b>n.s.</b>			<b>***</b>	
0	36	62	3	58	36	7	34	63	3
1	50	48	3	55	44	2	47	50	4
2	55	43	2	58	40	2	52	47	1
3	58	40	2	63	35	2	49	49	1
4+	62	36	2	63	36	1	60	37	3
<b>Years in Service</b>		<b>***</b>			<b>***</b>			<b>***</b>	
1 to 4	29	67	4	39	56	5	27	69	4
5 to 10	44	53	3	47	50	3	43	54	3
10 to 15	56	43	2	61	37	2	52	46	2
More than 15	68	32	1	69	31	1	64	35	1

Source: Bundeswehr Center of Military History and Social Sciences, Bundeswehr Survey 2011.

Note: Reported figures are percentages. Percentages may not add up to 100 due to rounding.

Test: Chi<sup>2</sup>. Significance levels: \*\*\*p<.001; \*\*p<.01; \*p<.05.

**Table 4: What do you think, how would your male fellows rate your own active duty performance: above average (+), about average (0) or below average (-)?**

	ALL			MEN			WOMEN		
	+	0	-	+	0	-	+	0	-
<b>Total***</b>	50	47	3	61	38	2	44	52	4
<b>Age</b>		<b>***</b>			<b>***</b>			<b>***</b>	
17-30	43	53	4	53	45	3	39	56	5
31-40	57	40	3	64	35	1	53	44	4
41-50	70	29	1	71	29	1	66	30	4
51-60	65	35	0	64	36	0	68	32	0
<b>Education</b>		<b>***</b>			<b>***</b>			<b>*</b>	
Basic (8 yrs.)	45	53	3	48	47	4	39	61	1
Middle (10 yrs.)	48	49	4	57	42	1	43	53	5
High (13 yrs.)	51	45	4	68	30	1	43	52	5
Tertiary degree	57	41	2	69	30	1	50	47	3
<b>Children</b>		<b>*</b>			<b>n.s.</b>			<b>n.s.</b>	
Yes	53	44	4	63	35	1	42	52	6
No	49	48	3	59	39	1	44	52	4
<b>Living with Partner</b>		<b>***</b>			<b>***</b>			<b>*</b>	
Yes	52	45	3	63	36	1	45	51	4
No	44	52	4	53	45	3	40	55	5

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	ALL			MEN			WOMEN		
	+	0	-	+	0	-	+	0	-
<b>Rank</b>		***			***			***	
Soldier	41	55	4	50	46	4	33	63	4
Non-commissioned Officer	48	48	3	58	41	1	44	52	4
Commissioned Officer									
Staff Officer	51	46	4	65	33	1	43	52	5
Staff Officer	67	32	1	75	25	0	58	40	3
<b>Branch</b>		n.s.			n.s.			***	
Army	51	45	4	60	38	2	42	53	5
Air Force	51	45	4	63	37	1	45	50	6
Navy	48	49	3	56	42	2	42	55	3
SKB (Support)	49	48	4	64	35	2	37	57	6
Medical Corps	50	48	2	61	38	1	49	49	3
<b>Role</b>		***			*			***	
Combat	61	38	1	67	32	1	35	63	2
Combat Support	51	47	3	58	41	1	42	54	4
Technical Support	43	52	5	55	43	2	35	58	7
Staff	52	45	3	62	37	2	46	50	4
Staff Support	56	41	4	65	34	1	47	48	6
Medical Support	49	49	2	64	35	2	48	50	3
<b>Career Status</b>		***			***			***	
Career Servicemember	44	52	4	54	44	2	41	55	5
Shorter-/Longer Serv. V.	64	35	2	67	33	1	59	38	3
<b>Number of Deployments</b>		***			n.s.			***	
0	39	56	5	60	33	6	38	57	5
1	50	47	3	57	41	2	45	51	4
2	57	41	2	61	39	1	53	45	3
3	62	36	2	65	34	1	56	41	3
4+	64	34	2	65	33	2	61	38	1
<b>Years in Service</b>		***			***			***	
1 to 4	33	61	6	45	51	4	32	63	6
5 to 10	47	50	3	53	45	2	45	51	4
10 to 15	56	41	3	63	35	2	52	45	3
More than 15	66	32	2	68	31	1	58	39	4

Source: Bundeswehr Center of Military History and Social Sciences, Bundeswehr Survey 2011.

Note: Reported figures are percentages. Percentages may not add up to 100 due to rounding.

Test: Chi<sup>2</sup>. Significance levels: \*\*\*p<.001; \*\*p<.01; \*p<.05.

Finally, it is interesting to note that women in a combat role report the most positive assessment of their performance by female fellows, whereas in the case of men it is those who perform a staff support role. This pattern is diametrically opposed to the one observed for the reported self-assessment of the personal active duty performance (see Table 2). However, the between-group differences for men are not statistically significant. As far as the women are concerned, it appears that performing a typically male role (combat) boosts the work-related self-esteem of women vis-à-vis their female fellows, perhaps because they believe that by performing that very “male role” they demonstrate to other female soldiers that women can in fact perform *any* role within the military – hyperbolically speaking, the female “fighters” derive professional self-esteem from showing the “secretaries” that anything is possible. Such statements remain mere speculation at this point, but this observation certainly warrants further empirical analysis.

The discussion of the respondents' performance assessment by *male* fellows (see Table 4) can be kept brief, for the patterns observed are similar, if not identical, to the performance assessment by *female* fellows (see Table 3).<sup>6</sup> The primary difference between those two perceptions is the fact that both male and female respondents appear to believe that women are more critical of the respondent's active duty performance, which manifests itself in slightly lower performance ratings across the board. In addition, it should be noted that male respondents performing a combat role report the most positive ratings of their performance by fellow male soldiers. By contrast, female respondents performing a combat or a technical support role report the lowest ratings of their performance by fellow male soldiers, whereas those females performing a staff, staff support or medical support role report the highest performance assessments by male fellows. In essence, it appears that male "fighters" feel the most appreciated by other males, whereas women who perform typically female duties (staff and medical support) feel that their performance is respected the most by male fellows. Yet, when women perform duties that are (stereo)typically "male domains" – combat and technical support – they feel that male fellows rate their performance less positively. Put differently, both male and female soldiers are more likely to feel that their performance is rated "above average" by male fellows when they perform roles that are (stereo)typical for their respective gender: men fight (and build), women care (and organize).

#### 4.3.3. Perception of the Performance of Women in One's Unit

Finally, we move to the respondents' assessment of the performance of women in their military units (see Table 5). To begin with, the difference between the (more critical) assessment of the women's performance by the male respondents and the (more positive) assessment by the female respondents is statistically significant. Beyond this significant gender difference, we can observe the familiar pattern, i.e., the performance assessment becomes more positive with higher age, education and rank as well as with more years in service – regardless of the respondent's gender. Also, career servicemembers rate the performance of women significantly more positively than shorter- and longer-service volunteers – this observation is true for both male and female respondents. Furthermore, it appears that the experience of deployments elevates not only the self-perception of female soldiers (see Tables 2, 3 and 4), but to a lesser degree also their assessment of the performance of female peers. Additional notable observations are that both men and women serving in the army rate women's performance significantly lower than men and women in other branches of the military, and both men and women in combat and combat support roles rate women's performance significantly lower than men and women performing other duties, which suggests that combat (ground) troops have a negative bias regarding the perception of women's active duty performance, regardless of their gender.

**Table 5: How do you rate the performance of the women in your unit: better than that of men (+), same as that of men (0), worse than that of men (-) or do not know (DK)?**

	ALL				MEN				WOMEN			
	+	0	-	DK	+	0	-	DK	+	0	-	DK
<b>Total***</b>	11	62	17	10	5	60	27	8	14	63	12	11
<b>Age</b>	***				***				***			
17-30	10	58	20	12	3	46	42	9	13	61	14	13
31-40	12	67	13	8	4	68	21	7	17	66	8	9
41-50	11	71	11	8	9	71	12	8	21	70	3	6
51-60	9	74	10	8	8	72	12	8	14	82	0	5
<b>Education</b>	***				***				***			
Basic (8 yrs.)	7	50	26	18	3	48	32	17	12	52	16	19

<sup>6</sup> In some instances, less than 5 respondents chose the option "below average," which is why the Chi<sup>2</sup>-test compares the differences between the specified groups regarding the responses "above average" and "about average."

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Middle (10 yrs.)	10	60	20	10	4	57	31	8	13	62	14	11
High (13 yrs.)	12	61	16	11	6	61	25	8	14	61	12	13
Tertiary degree	14	72	8	6	7	74	14	5	18	71	6	6
<b>Children</b>			*				***				**	
Yes	11	65	15	9	5	67	21	7	17	63	10	10
No	10	61	18	11	4	55	31	9	13	63	12	12
<b>Living with Partner</b>			n.s.				*				n.s.	
Yes	11	63	17	10	5	62	26	8	14	64	12	11
No	11	59	18	12	5	53	32	11	13	61	13	12
<b>Rank</b>			***				***				***	
Soldier	7	52	28	13	3	37	49	11	10	64	11	15
Non-commissioned Officer	11	60	19	11	4	58	30	8	14	61	14	12
Commissioned Officer	12	68	11	9	5	71	14	10	16	66	9	9
Staff Officer	12	76	7	5	9	75	11	5	16	77	3	4
<b>Branch</b>			***				***				***	
Army	8	55	25	11	4	54	34	9	12	57	17	13
Air Force	12	64	12	11	7	66	18	10	15	64	9	12
Navy	13	65	15	8	5	66	23	6	18	65	8	8
SKB (Support)	7	62	20	11	5	62	26	8	9	63	16	13
Medical Corps	15	66	10	10	3	66	20	11	16	65	9	10
		<b>ALL</b>				<b>MEN</b>				<b>WOMEN</b>		
	+	0	-	DK	+	0	-	DK	+	0	-	DK
<b>Role</b>			***				***				***	
Combat	4	52	41	4	1	52	44	3	12	51	29	7
Combat Support	7	54	31	8	5	50	38	7	8	60	22	10
Technical Support	9	55	24	12	3	52	33	12	12	58	17	12
Staff	11	67	11	11	6	72	13	10	14	64	10	12
Staff Support	9	63	18	10	7	62	25	7	11	64	13	13
Medical Support	16	66	9	9	7	68	21	4	17	66	8	9
<b>Career Status</b>			***				***				**	
Career Servicemember	11	59	19	11	2	47	42	9	14	62	13	12
Shorter-/Longer Serv. V.	10	70	13	8	7	70	15	8	15	69	8	9
<b>Number of Deploym.</b>			n.s.				n.s.				*	
0	13	61	13	13	7	67	21	5	13	61	12	14
1	10	61	19	10	4	58	28	10	14	63	13	10
2	9	63	21	8	4	60	27	8	15	65	14	7
3	11	61	20	8	7	59	27	7	18	65	8	9
4+	9	65	18	8	6	62	25	8	14	73	5	8
<b>Years in Service</b>			***				***				***	
1 to 4	10	57	19	14	4	45	38	13	11	59	15	15
5 to 10	11	58	21	11	2	44	46	8	14	62	13	11
10 to 15	12	66	14	8	5	65	23	8	15	67	9	8
More than 15	10	71	11	8	7	72	13	8	19	69	4	8

Source: Bundeswehr Center of Military History and Social Sciences, Bundeswehr Survey 2011.

Note: Reported figures are percentages. Percentages may not add up to 100 due to rounding.

Test: Chi<sup>2</sup>, for response options "better than men," "same as men," and "worse than men."

Significance levels: \*\*\*p<.001; \*\*p<.01; \*p<.05.



## 5.0 DISCUSSION

Earlier studies on the inclusion of women into the Bundeswehr have revealed that male soldiers harbor certain reservations about women's fitness for military service. These findings justified the present analysis, which focused on the analysis of self- and other-perceptions of the active service performance of women in the Bundeswehr. Although the inclusion of the set of items on performance perceptions in our study on the integration climate in the German armed forces was done in an exploratory perspective so far, we think the findings to be quite promising as they with an eye on the more concrete notion of 'performance' confirm the findings of our previous studies. Our analysis of self- and other-perceptions showed that more than a quarter of male respondents believed that the performance of women is "worse than men" (27 percent). We also found that younger soldiers, rank and file and non-commissioned officers, army soldiers and combat soldiers rated the performance of women soldiers the most negatively. It may very well be that combat and ground-oriented functions represent something like the last bastion of traditional masculinity. At the same time, we saw that female soldiers in combat roles reported the lowest ratings of their performance by their male comrades which indicates that the women clearly perceive the reservations and negative attitudes of their male comrades.

These findings are somewhat preliminary as further research on performance perceptions is surely needed. Nevertheless, they may already be relevant in both a practical and a research perspective.

In a research perspective the exploratory research avenue of self- and other-perceptions proved to be fruitful. Thus we will use the respective items in our further integration climate studies. The empirical findings also point to some theoretical constructs which may be used in subsequent studies to come up with a theoretically inspired model that can then be tested empirically. For instance, the observation that the respondents' assessment of their personal active duty performance (both in terms of their perception of their performance by themselves as well as their perception of their performance by others) is considerably more favorable than the assessment of the performance of the women in their military unit – irrespective of the respondent's gender can be interpreted as empirical evidence in support of the phenomenon known as self-enhancement (Taylor/Brown 1988): self-perception tends to be more favorable than the (comparative) perception of others.<sup>7</sup> That both male and female soldiers are more likely to think that their performance is rated "above average" by male fellows when they perform roles that are (stereo)typical for their respective gender – men fight (and build), women care (and organize) – is in line with gender role theory (Eckes 1997; Segal 1999). The data also point to Kanter's tokenism theory in that quite a few women tend not to present themselves as outperformers in order not to be seen as a token. Also Kanter's phenomena of „women-prejudiced-against-women“ (Kanter 1977b: 980; see also Heintz et al. 1997: 44), i.e. female soldiers take over the reservations and the stereotypes of male soldiers towards women in the military, can be detected in the data.

In a practical perspective, the relevance of our analysis for the present symposium may lie in the expectation that the identification of the relevant factors influencing performance perceptions may in the long run help identify appropriate tools to improve the social interactions in mixed-gender combat groups. Our findings indicate that gender trainings are still needed and that such training should foremost be addressed to the groups of soldiers displaying the strongest skepticism and reservations as identified in this study.

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<sup>7</sup> See also Festinger's (1954) Social Comparison Theory. For more recent conceptual and empirical approaches to self-enhancement, see Kwan et al. (2004) and Kwan et al. (2008).

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