

Autonomous Weapons and Soldier Morale: Historical Lessons, Contemporary Challenges, and Future Implications.

<u>Author:</u> André Korsmo Berntsen, Master of Philosophy in Organisational Leadership at the University of Oslo. He is a researcher in the interdisciplinary "MEMCOD" (Mission Command, Military Ethics, Organisational Design) team of the leadership and communication chair at the Military Academy at ETH Zurich. He also has previous training as a logistics NCO for the Norwegian Army. He is currently pursuing a PhD focusing on the cascade of cognitive styles at the University of bergen.

1LT Cyrill Kischel commands a military police staff company on a deputy basis. He is also pursuing a bachelor's degree at the Military Academy at ETH Zurich to become a career officer in the Swiss Armed Forces. His study interests are military sociology, psychology and law. As a future career officer, he will mainly be involved in coaching and teaching reservists of the Swiss Armed Forces.

2LT Nick Husmann commands a mechanized infantry platoon. He is also pursuing a bachelor's degree at the Military Academy at ETH Zurich to become a career officer in the Swiss Armed Forces. His study interests are military sociology and psychology. As a future career officer, he will mainly be involved in coaching and teaching reservists of the Swiss Armed Forces.

Abstract:

Autonomous weapons are changing warfare, bringing new challenges for soldier morale. This paper examines their impact on motivation, enlistment, and retention, focusing on drone warfare in Ukraine. By comparing historical military innovations and Swiss crisis responses, we assess patterns in morale shifts. Using historical analysis and case studies, we explore whether autonomous systems create similar effects. Understanding these dynamics is key to maintaining military effectiveness and long-term recruitment stability.

Bottom-line-up-front:

This paper analyzes the effect of autonomous weapons through Ukraine's drone warfare, historical parallels, and Swiss crisis responses to assess implications for recruitment.

Problem statement:

How do autonomous weapons influence soldier morale in extreme situations? This paper examines whether their use affects motivation to enlist, remain in service, or participate in combat. Can historical patterns of technological change explain potential morale challenges today?



<u>So what?</u>: Military leaders and policymakers must assess the long-term impact of autonomous weapons on soldier morale and recruitment. Proactive strategies are needed to maintain motivation, adapt training, and ensure operational effectiveness in future conflicts.

Abstract (250 words incl. endnotes according to template)

Development of new weapons systems always shape the nature of battlefields, from Phillip of Macedonia's phalanxes to the pivotal role aircraft carriers had in the Pacific theatre. Today we are on the cusp of another revolution. Technology has progressed to a point where autonomous weapons are a viable option.¹ In this paper, we aim to look at the effect such systems might have on the morale of troops during combat.

Our conceptual paper explores the effect use of autonomous drones has had in Ukraine, analyzing how the presence of autonomous systems affects soldiers' motivation to enlist, and stay enlisted.² The psychological dimensions of drone warfare has been widely discussed, particularly the detachment experienced by operators and its potential consequences on the battlefield.³ By drawing on existing research,⁴ we evaluate whether similar upheavals in the status quo contribute to a decline in morale and potential recruitment challenges.⁵ We compare these findings to Swiss crisis-responses, such as the one seen under the COVID-pandemic and peacekeeping operations abroad.⁶ Before finally using case studies from the Russian invasion of Ukraine to test if the use of autonomous drones exhibit similar damages to morale as previous technologies.⁷

Understanding the effects of emerging technologies on motivation is crucial for maintaining operational readiness.⁸ We argue that increased reliance on autonomous weapons lead to a reduction in soldiers' willingness to deploy, resulting in long-term personnel shortages. Addressing these concerns proactively is essential in maintaining Switzerland's strategic role in European security.¹

^{1. &}lt;sup>1</sup>Santoni de Sio and van den Hoven, "Meaningful Human Control," 2018.

^{2.} Kunertova, "Ukraine Drone Effect," 2022.

^{3.} Hijazi et al., "Psychological Dimensions of Drone Warfare," 2019.

^{4.} Hälterlein et al., "KI und Autonomie in Waffen," 2024.

^{5.} Pawiński and Chami, "Why They Fight?" 2019.

^{6.} Biehl, "Kampfmoral und Einsatzmotivation," 2006.

^{7.} Kunertova, "Game-Changing Effect of Drones," 2023.

^{8.} Walker, "Mental Health Consequences of Combat," 2010.

^{9.} Wells et al., "Mental Health Impact of Conflicts," 2011.



Endnotes

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