

The Effect of Narrative Journalism on Risk Perception of War:

News on the Russia-Ukraine War

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Abstract

This study investigates the communication effectiveness of three news formats: "traditional news reporting," "narrative news reporting," and "viewing only news photos" on the risk perception of participants. Research participants were selected from the 66th Brigade, 3rd Battalion of the Marine Corps ($N = 149$). The key findings are as follows: First, subjects exposed to war news (narrative news, traditional news, or only news photos) perceived war risk ($N = 118$, $M = 5.45$, $SD 0.73$) as not significantly different from the control group ($N = 31$, $M = 5.34$, $SD 0.59$). However, their overall risk perception, although not reaching a significantly different level, is possibly due to an already high baseline. Second, Linear regression revealed a significant positive correlation between risk perception and Support for national defense policies. However, a higher war risk perception did not significantly affect their judgment of whether the military could defend Taiwan or their willingness to defend the country. Third, Participants who read traditional news reports showed a significant increase in Support for national defense policies.

In contrast, those who read "narrative news" or viewed "only news photos" exhibited a slight decrease in "risk acceptance," "defense policies support," and "behavioral tendencies." This study supports the current "Military News Reporting Practice Manual," which advises against reporting "the number and names of military and civilian casualties" and "interviewing, photographing injured, mentally ill, or cruel military scenes" during wartime.

INTRODUCTION

At the end of February 2022, with the outbreak of artillery fire in Ukraine, Russia's invasion of Ukraine commenced, significantly reshaping the global strategic landscape. The ongoing conflict has drawn widespread attention to the relationship across the Taiwan Strait and Taiwan's defense capabilities, becoming a focus of concern both in Taiwan and internationally. On the very day the war began, AFP contributor Michael Schuman highlighted in an article titled "Is Taiwan Next" that Russia's actions in Ukraine have rendered the once remote possibility of China forcibly taking control of Taiwan increasingly plausible. Additionally, on February 25, 2022, Taiwan's Central News Agency reported in an article titled "Chiu Kuo-cheng: The Nation Must Defend Itself, Closely Monitoring the Russia-Ukraine Situation and Cross-Strait Dynamics" that Taiwan's Minister of National Defense, Chiu Kuo-cheng, had announced the formation of a task force within the Ministry of National Defense to closely observe any coordinated military actions by China in response to the situation in Ukraine. He also issued orders preventing the simultaneous absence of both senior officers from their posts. Despite the vast geographical distance between Taiwan and Ukraine and their distinct languages and cultures, scholars and journalists have frequently drawn parallels. This comparison stems from the fact that, aside from both being democratic nations, they each face threats from more extensive, better-armed neighboring countries that seek their annexation based on both emotional and geopolitical motivations. Consequently, some

scholars argue that the Chinese Communist Party is studying the Russia-Ukraine war as a strategic reference point for a potential future military campaign against democratic Taiwan (Yau, 2022). Numerous media coverage and scholarly academic journals argue whether Taiwan might become the next target of aggression (Guo, 2022; Schuman, 2022; Zhao, 2023).

Given the widespread recognition by experts and scholars, both in Taiwan and internationally, of the parallels between Taiwan and Ukraine, coupled with the Chinese Communist Party's increasing pressure and threats to Taiwan's national security, it is essential to consider how Taiwanese people perceive Russia's invasion of Ukraine.

According to a survey conducted by the Taiwan Public Opinion Foundation (TPOF) one month after the invasion in 2022, approximately 73% of Taiwanese adults viewed Russia's military action against Ukraine as unjustifiable, with 38.9% firmly asserting that Russia's actions lacked legitimacy. Nevertheless, 10.4% of respondents considered Russia's invasion justified. Despite this, 87.2% of the Taiwanese public sympathized with Ukraine's struggle. The phrase "Today's Ukraine, Tomorrow's Taiwan" has resonated widely in Taiwanese society. The same survey found that 59.7% of Taiwanese are concerned that Taiwan might one day face a similar situation, having to confront a Chinese military invasion alone (You, 2022).

Yang & Hsiao (2023) also pointed out that Ukraine's struggle against Russia, without direct foreign military intervention, reminded some Taiwanese citizens of Taiwan's challenges and threats. These include prolonged unilateral international marginalization and oppression

by China, as well as persistent and escalating military pressure. These concerns reflect two major anxieties within Taiwanese society: that China has never ruled out the use of force to invade Taiwan and that Beijing's military pressure on Taiwan has intensified in recent years. Moreover, Taiwan's need for more explicit international support to ensure its security has become increasingly apparent. This concern has led Taiwanese society to closely monitor how Ukraine defends its sovereignty and how its people protect their security and national safety, as they may face similar challenges in the future.

Furthermore, Overholt (2022) argued in his article "Ukraine Offers No Easy Lessons for Taiwan" that one of the critical lessons the U.S. government learned from the Vietnam and Afghanistan wars is that the United States cannot defend a government that does not fully commit to defending itself. He criticized Taiwan's four-month mandatory military service as "absurdly short" compared to the 18-month terms in South Korea and Singapore. Taiwan's defense budget, accounting for 2.5% of its GDP, is also relatively low compared to Israel, Singapore, and South Korea, where defense spending represents 4.8%, 3-4%, and 3% of GDP, respectively (Lin, 2023). Therefore, Taiwan must organize itself to bolster its defense, increase its military budget, and implement more rigorous conscription training, preparing for a prolonged conflict like Ukraine's. If Taiwan does so, it would make any attempt by China to conquer Taiwan prohibitively costly, thus preventing the nightmare of war from becoming a reality. Indeed, the Taiwanese have heeded these warnings. On December 27, 2022, President

Tsai Ing-wen officially announced the extension of mandatory military service to one year, applicable to conscripts born on or after January 1, 2005 (Liberty Times, 2022). A March 2023 survey on national defense and security conducted by the Election Study Center at National Chengchi University found that approximately 85% of the public supports extending the mandatory military service period to one year, with about 63% expressing vigorous support and 22% somewhat supporting the extension. Although opinions vary slightly across different age groups and political affiliations, the consensus is that the public overwhelmingly supports restoring the one-year mandatory military service period (You, 2023).

In summary, the experience of the Ukraine-Russia war has not only garnered significant scholarly attention but also heightened awareness and vigilance among the Taiwanese public. The outbreak of this war has made the Taiwanese acutely aware that "war can indeed erupt in this era," and the brutal images of conflict disseminated via the internet have starkly reminded us of "how devastating war can be." However, most surveys focused on the general Taiwanese public, who, while potentially at risk of war, are not the frontline personnel actively engaged in combat.

As a result, this research is mainly concerned with understanding whether exposure to war-related information (especially about casualty news) heightens the sense of urgency among our military personnel. Additionally, we want to know what type of messaging (about what subject, with what format) should be communicated to military personnel to reduce their

anxiety about war, enhance their confidence, and increase their Support for relevant policies.

We will explore these topics in greater detail in the following section.

War, News, and Public Opinion

Communication scholar Lasswell (1934) observed, "During wartime, people gradually realize that mobilizing the populace alone is insufficient; Leaders must also mobilize public opinion. Power overrides public opinion, superseding life and wealth, and the government ultimately controls these." Scholars Toffler and Toffler (1993) also noted that in a democratic society, the military can't achieve victory without widespread public Support and unified opinions on the home front. Referring to Fang Peng-cheng's (2011) definition of the propaganda war in *Propaganda and War: From 'Propaganda War' to 'Public Relations War,'* propaganda is defined as the activities undertaken by a state or militarized organization to rally its solidarity, strength, and fighting spirit while demoralizing the enemy's populace. Fang argues that for any country, war involves not only the battlefield but also the front of public opinion and psychological warfare. This secondary front is essential for boosting morale, weakening the enemy's resolve, and securing Support from domestic and international public opinion and allies, which are crucial for victory.

Hu Guang-xia (2007) pointed out that before the advent of modern mass media, humans primarily relied on oral and written narratives to recount the "stories" of war. The emergence of modern newspapers marked the beginning of professional war correspondents reporting on

conflicts. During World War II, the public relied on newspapers and radio as their primary sources of war news, though they could not directly witness battlefield scenes. The advent of television and communication satellites fundamentally changed how the public perceived war. The Vietnam War, the first "television war," was not broadcast live; footage filmed by television reporters was sent to the United States for editing and broadcast, with delays ranging from a few hours to several days.

On the other hand, a pivotal war that has drawn considerable attention in communication studies, particularly since the Vietnam War, is the 1991 Gulf War. This conflict is significant because it was the first to be broadcast live via satellite, with real-time footage of the war reaching audiences around the globe. This development marked a new era in war journalism, fundamentally altering how war news is reported (Allen, Loughlin, Jasperson & Sullivan, 1994; Bennett & Paletz, 1994; Kaid, Harville, Ballotti, & Wawrzyniak, 1993).

In past academic frameworks, Sharkey (1991) and Pinsdorf (1994) suggested that wartime reporting should limit coverage of civilian casualties and avoid extensive discussion of enemy losses to reduce public opposition to war. The way to achieve that is to control the visual narrative and "sanitize the image of war," emphasizing avoiding graphic depictions of corpses. Xu Pei and Zhou Dan (2016) discovered in their study of war narratives in late Qing and early Republican pictorials that *Liangyou Pictorial* (良友), founded in 1926, adopted a poetic and emotionally charged reporting style during the Second Sino-Japanese War. The

intention was to evoke a deep sense of patriotism among the Chinese, urging them to unite in the national cause. Rather than providing detailed information, these narratives and images aimed to blend text and visuals to create a sense of unwavering commitment and national solidarity, inspiring young people to answer the call of "responsibility" and "mission" by joining the resistance against Japan.

The above research seems to suggest that, in theory, ethics, and practice, strategies that avoid showing images of casualties have been commonly employed in the East and the West. However, with the advent of the internet and smartphones, as seen in the 2022 Russia-Ukraine war or the Israel-Palestine conflict in October 2023, the public has become increasingly exposed to real-time war coverage. This shift makes it urgent to explore how war news reporting affects audiences' "Acceptance of war risks," "support for national defense policies," and "behavioral tendencies." One of the critical motivations of this study is to examine whether reporting and conveying information about war casualties during national-level crises strengthens or weakens military Support for national defense policies, behavioral tendencies, and the continuation of war.

As a previous quote: You (2022), 87.2% of the Taiwanese public sympathized with Ukraine's struggle. The phrase "Today's Ukraine, Tomorrow's Taiwan" has resonated widely in Taiwanese society. The same survey found that 59.7% of Taiwanese are concerned that Taiwan might face a similar situation, having to confront a Chinese military invasion alone.

Consequently, we expected that:

H1: Compared to the control group that did not read war news reports, participants who read war news reports (narrative news reports/traditional news reports/news photos only) will perceive higher risk perceptions of war.

On the other hand, we asked:

RQ1: If any, do higher risk perceptions of war influence attitudes about the Acceptance of war risks, Support for national defense policies, and the behavioral tendencies of military personnel?

After we answer the above question, The next question is: "Which news format should we adopt when reporting war news?".

Narrative News Format

According to Van Krieken (2019), literary, long-form, and narrative journalism are journalistic styles that employ narrative techniques to report real-world events and situations. These storytelling techniques, derived from literary fiction, include point-of-view writing, dialogue, representation of thought, symbolic details, and chronological structures rather than the traditional inverted pyramid format. While such articles resemble literary fiction in style and structure, they differ in that their content is factual.

In Lin Dong-tai's book *Narrative Journalism and Digital Narrative* (2015), he highlights the difference between Taiwan's long-standing adherence to the 5W1H inverted pyramid

writing style in news reporting and the rise of non-fiction novels and "new journalism" in the U.S. during the 1960s and 1970s. American academia places importance on narrative journalism, exemplified by Harvard University's establishment of the Nieman Program on Narrative Journalism in 2001 to develop narrative techniques in reporting. Lin emphasizes in-depth reporting, using internal focalization to explore the inner world of subjects or victims, bringing the audience closer to the news event and those involved. He outlines six critical differences between narrative journalism and traditional reporting: (1) Traditional journalism focuses on information, while narrative journalism emphasizes storytelling; (2) Traditional journalism prioritizes speed, whereas narrative journalism does not focus on timeliness; (3) Traditional journalism values objectivity, while narrative journalism also incorporates the aesthetics of non-fiction; (4) Traditional journalism provides simple, practical information, whereas narrative journalism focuses on detailed, in-depth reporting; (5) Traditional journalists act as objective outsiders, while narrative journalists immerse themselves in the narrative of the event; and (6) Traditional journalism emphasizes objectivity, but narrative journalism often uses first-person or third-person storytelling techniques to immerse readers in the event, creating a sense of presence and deeper emotional engagement with the story.

This study reviewed related literature and found that many studies focusing on narrative effects emphasize its persuasive power. For example, Oliver et al. (2012), in a survey on issues related to immigrants, prisoners, and elderly individuals in healthcare, compared

narrative and non-narrative news reports to evaluate which format more effectively influenced readers' empathy and led to more favorable evaluations of stigmatized groups. The study found that readers of narrative stories expressed greater empathy toward individuals featured in the story, exhibited more favorable attitudes, stronger behavioral intentions, and an increased tendency to seek further information about the group. Similarly, Wald, Johnston, Wellman, & Harlow (2021) found that narrative news stories about droughts, compared to non-narrative reports, led to heightened cognitive and emotional responses in audiences, such as perceived suffering, narrative engagement, empathy, and even the intention to donate to drought-affected farmers.

Research across various fields has also examined the differing effects of narrative strategies compared to other communication approaches. For instance, in the health domain, Betsch, Ulshöfer, Renkewitz, & Betsch (2011) investigated the increasing prevalence of online health information and its influence on patients' health decisions, including vaccination. They compared the effects of narrative presentations versus statistical data on public perceptions of vaccine risks and vaccination intentions. Their findings revealed a negative correlation between the number of adverse events described narratively and vaccination intentions, mediated by perceived vaccine risk. Additionally, the study showed that narrative presentations had a more significant influence than statistical risk information, suggesting that narrative formats may play a more substantial role in shaping public risk

assessments.

In conclusion, despite variations in how demographic factors such as age, gender, ethnicity, and topic interest affect communication outcomes, the evidence consistently supports the effectiveness of narrative storytelling. Narrative formats help communication professionals better convey their intended messages to audiences. For instance, Green (2006) showed that narrative messages are more easily understood and found to be more engaging than traditional scientific communication. Narrative stories are not just appropriate when communicating with a lay audience—they are essential for successful engagement.

Compared to non-narrative reports, Van Krieken & Sanders (2021) demonstrated that narrative accounts of shocking events elicited a greater sense of "presence" and identification with the witnesses involved. Narrative news readers experienced stronger emotions and more empathy than those reading traditional short-form reports. The narrative and extended journalism evoke empathy, likely due to their focus on human experiences and emotional depth. This observation raises an important question: When applied to military news reporting, can narrative journalism outperform traditional journalism in attracting cognitive and emotional attention, ultimately garnering more support for national issues? In line with theory and previous findings, we anticipated similar results. Specifically:

H2: News stories about the Russia-Ukraine War will be more effective at raising "Risk perceptions of war" when presented in a narrative instead of a non-narrative format.

While much of the literature has focused on narrative vs. traditional journalism, the impact of visual elements in news reporting is also crucial. For instance, Garcia & Stark (1991) argued that images in the news are more attention-grabbing than text, with eye-tracking studies showing that images are often the first element readers focus on in a newspaper, suggesting that images amplify psychological engagement. Similarly, Powell, Boomgaarden, De Swert, & De Vreese (2015) compared three groups: one exposed only to photos, one exposed only to text, and one exposed to text accompanied by photos. The results showed that participants who viewed only photos experienced significantly higher stimulation than those exposed to both text and pictures, while the text-photo group showed greater engagement than the text-only group. This result confirms that visual stimuli might be more captivating than text alone. In a related study, Pfau et al. (2006) examined the effects of war casualty photos from the Iraq War on readers' emotions and attitudes toward U.S. military presence. They found that photos with captions portraying war casualties led to more robust negative emotional responses than text-only or full-text reports with photos. Conversely, text-only reports appeared to bolster positive emotions toward the continuation of U.S. military presence in Iraq, compared to reports that included images. Thus, to explore the differences in communication effects across various reporting methods, the following research question is proposed:

RQ2: How do different reporting formats (narrative news reports/traditional news

reports/news photos only) influence attitudes about the Acceptance of war risks, Support for national defense policies, and the behavioral tendencies of military personnel?

This study draws on the research variables proposed by Fu Wen-cheng and Chen Jing-jun (2017), including war risk perceptions, Acceptance of war risks, Support for national defense policies, and behavioral tendencies, as key observation indicators. The experiment manipulates three groups—narrative news, traditional news, and news photos from the Russo-Ukrainian war—and uses active-duty military personnel as participants. A risk communication model is applied to measure the relationships between these variables, aiming to understand changes in soldiers' war risk perceptions and how these changes influence their behavioral tendencies. The research framework is Figure 1.

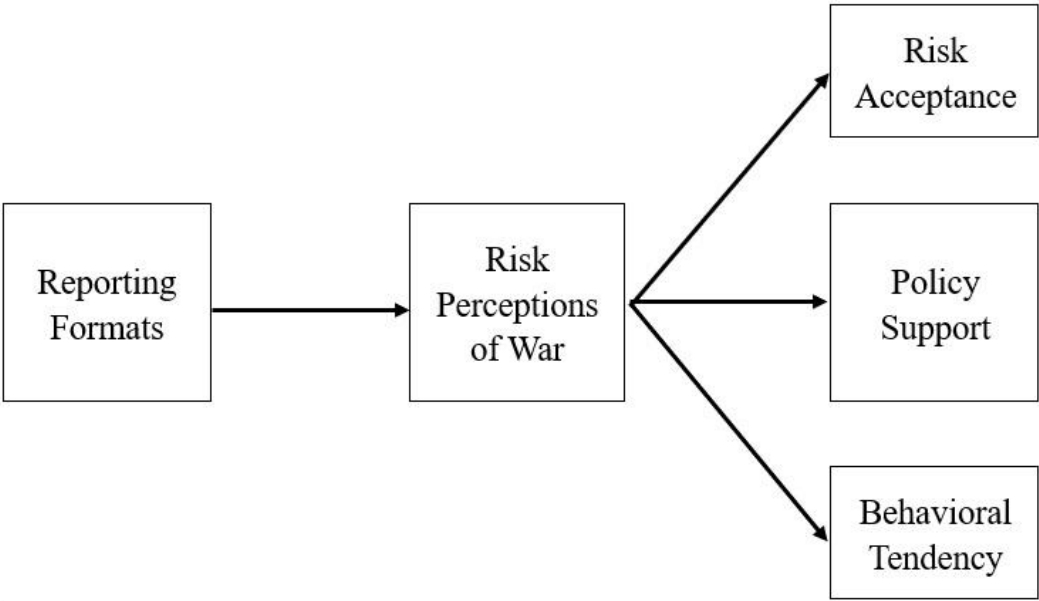


Figure 1. Experimental Framework (developed by the researcher).

Method

Participants

This study examines the relationship between exposure to war-related news and the combat morale of military personnel. According to Zhang Zhi-ming (2016), the Marine Corps has consistently played a pivotal role in various military exercises and training and is renowned for its robust combat strength and elite teams. The Marine Corps is celebrated as the "heroes among heroes," a reputation respected domestically and internationally. Given this, the study selected soldiers and officers from the 3rd Battalion of the 66th Brigade of the Marine Corps as the experimental subjects. The testing was conducted on March 7, 2024, after a political education session at the Marine Corps cafeteria. To enhance motivation, each participant received a chicken fillet valued at NT\$75 as a small incentive.

Considering the cohesive nature of military units, it was impractical to differentiate between individuals for this study. Both voluntary and non-voluntary personnel were included, reflecting typical educational activities at the basic unit level. No controls were placed regarding prior exposure to Russia-Ukraine war footage or voluntary participation, as the researchers aimed for the findings to apply to various basic military units. A total of 176 participants were recruited, and after excluding those who failed attention checks or provided invalid responses, 149 valid questionnaires were collected. Of these, 136 were male and 13 were female. The participants' ranks included 12 officers, 62 non-commissioned officers, and

75 soldiers, with an average age of 25.97 years ($SD = 5.75$).

Procedures and Design

This study employs the posttest-only control group design as described by Guo Liangwen et al. (2022) to prevent participants from guessing the purpose of the research and potentially skewing the results. This method omits the pre-test phase typically included in the traditional "pretest-posttest-control group design." While the posttest-only design lacks a pre-test for baseline comparison between the groups, the proper random assignment should ensure that the experimental and control groups do not differ significantly in their characteristics before the treatment.

This study employed a fully between-subjects experimental design with four conditions: narrative news reports, traditional news reports, viewing only news photos, and a control group. After personally providing instructions and confirming the participants' understanding, the researcher, via Qualtrics' randomization feature, randomly assigned participants to one of the conditions. Communication and movement among participants were restricted during the experiment, and the researcher addressed participant questions one-on-one, ensuring participants remained unaware of their assigned group. Each participant was given a fried chicken cutlet worth NT\$75 before the session to incentivize participation.

The experiment took place in a quiet, isolated space to minimize distractions. Upon arrival, the researcher gave the participants instructions and began the questionnaire after

confirming their understanding. The first page outlined the study details and participants' rights; only those who voluntarily agreed proceeded to the next stage. Participants were then randomly assigned to one of the conditions via Qualtrics' randomization feature. The sequence of tasks was as follows: (1) read a neutral article with open-ended questions to obscure the study's purpose and settle their mental state; (2) read the war report on the Bucha Massacre in the form assigned to their group or read a neutral article in the control group; (3) complete an emotional response scale; (4) complete the cross-strait war risk perception scale; (5) complete scales on risk acceptance, policy support, and behavioral tendencies; and (6) provide demographic information. After the experiment, participants were debriefed on the study's true purpose.

Stimulus materials

The stimulus for the narrative news group was drawn from a report published by the New York Times Chinese edition on April 12, 2022, titled "Ukraine Bucha: A Month Shrouded in Terror." This article uses a narrative journalism style to provide an in-depth exploration of the survivors' stories and emotions from the Bucha massacre. For the traditional news group, two articles from Taiwan's Central News Agency, published on April 4, 2022, served as the basis: "Civilians in Bucha Town Massacred by Russian Forces, Zelensky Accuses of Genocide" and "An Overview of the Current Situation in Bucha, Ukraine: More than 300 Civilians Massacred, Shocking the World." These articles were

revised based on Dahlstrom's (2014) framework of causality, temporality, and character roles in narrative communication, along with insights from Lin Dong-tai's (2015) work *Narrative Journalism and Digital Narrative*. The length and level of detail were determined using guidelines from Wald, Johnston, Wellman, & Harlow's (2021) research on personalized news in the context of droughts. The final versions of these articles were further refined based on suggestions from a communications PhD and a former deputy editor of Taiwan's *Shin Sheng Daily News*.

The focus of the two scenarios differs. The narrative news report includes (1) identifiable survivors of the Bucha massacre, with personal details such as names; (2) direct quotes from survivors recounting their experiences; and (3) descriptions of survivors' economic and personal suffering, including the loss of loved ones. In contrast, the traditional news report highlights the concerns of international experts and leaders regarding the Russia-Ukraine war, offering paraphrased accounts of global condemnation of Russia's actions in Bucha and ongoing international sanctions discussions. However, traditional news articles do not include direct quotes from civilians or emotional accounts of their experiences during the conflict. Full details of the stimulus articles can be found in the Appendices.

The control group read an article from *CommonWealth Magazine*, published on November 15, 2022, titled "A Hidden Scenic Spot in Aowanda! The Healing Pine Needle Trail by the Maple Leaf Hometown You Can't Find Online." This article was chosen to

minimize emotional reactions or associations with international or war-related topics. The revised article is detailed in the Appendix.

For the news photo-only group, the stimulus consisted of a selection of photos from the Associated Press, published on May 9, 2022, titled "War Crimes Watch: A Devastating Walk through Bucha's Horror." This photo series was awarded the 2023 Pulitzer Prize for Breaking News Photography. Detailed information about the photos can be found in the Appendix.

Measures

The complete questionnaire used in this study can be found in the Appendix. The following section explains the content of each measurement tool.

Risk perceptions of war

Based on a literature review, Risk perceptions of war are divided into two dimensions: perceived severity and perceived susceptibility. This study draws from Ning et al. (2020), who explored the impact of knowledge, risk perception, emotions, and information on protective behaviors among Chinese citizens during the COVID-19 outbreak, and from Li Wan-ting (2018), who designed a risk communication questionnaire regarding Chinese military aircraft circling Taiwan. The Risk perceptions of war scale are measured on a 6-point Likert scale, ranging from "1 = strongly disagree" to "6 = strongly agree." The scoring is calculated by averaging the responses across the six items, with higher average scores indicating greater perceived war risk. The details of the scale are presented in Table 1:

Table 1: *Risk perceptions of war Scale*

Dimension	Item No.	Question
<i>Risk perceptions of war</i>	1	I believe it is very likely that a war will break out between Taiwan and China.
	2	I believe that conflict between Taiwan and China is difficult to avoid.
	3	If a war breaks out between Taiwan and China, I am likely to be affected.
	4	If a war breaks out between Taiwan and China, the consequences will be very severe.
	5	If a war breaks out between Taiwan and China, many people may die.
	6	If a war breaks out between Taiwan and China, the situation will be difficult to control.

Source: Compiled by the researcher.

Acceptance of war risks

The risk acceptance items in this study were adapted from Zhou, Liu, Zeng, Zhang, & Chen (2020), which explored how risk perceptions of soil pollution affected farmers' environmental behavior, and from Li Wan-ting (2018), who examined military personnel's risk acceptance regarding the surveillance and defense against Chinese military aircraft circling Taiwan. Additionally, the items were informed by the first wave of the 2023 Taiwan National Defense Awareness Survey (You, 2023). A 6-point Likert scale was used, ranging from "1 = strongly disagree" to "6 = strongly agree," to measure the level of cross-strait war risk acceptance among military personnel. The score for risk acceptance was calculated by

averaging the responses across the five items, with higher average scores indicating greater Acceptance of cross-strait war risk. Details of the scale are presented in Table 2.

Table 2: Risk Acceptance Scale

Dimension	Item No.	Question
Risk Acceptance	1	The government has concrete plans to respond to a potential conflict between Taiwan and China.
	2	Even if a conflict breaks out between Taiwan and China, the People's Liberation Army cannot capture Taiwan.
	3	Overall, I am confident in Taiwan's ability to resist the People's Liberation Army.
	4	I believe Taiwan cannot withstand the risk of war breaking out. [Reverse-scored]
	5	I would consider immigrating or other means to avoid the risk of war. [Reverse-scored]

Source: Compiled by the researcher.

Support for National Defense Policies

To examine the relationship between risk perception and policy support, this study draws from Fu Wen-cheng and Chen Jin-gjun's (2017) research on media trust, public risk perception, and media usage in the context of recruitment policy. Additionally, items from the first wave of the 2023 Taiwan National Defense Awareness Survey explored six dimensions: increasing the defense budget, extending military service, acquiring new weapons, promoting indigenous submarine development, improving compensation, and enhancing training. A 6-

point Likert scale, ranging from "1 = strongly disagree" to "6 = strongly agree," was used to measure military personnel's Support for defense policies. The policy support score was calculated by averaging the responses across the six items, with higher scores indicating greater Support for defense policies. Details of the scale are presented in Table 3

Table 3: Policy Support Scale

Dimension	Item No.	Question
<i>Policy Support</i>	1	Overall, I support the government reducing other budget items and prioritizing increasing the defense budget.
	2	Overall, I support extending Taiwan's mandatory military service to one year or longer.
	3	I support the Taiwan government in acquiring new weapons, either through independent research and development or procurement from the U.S., to strengthen Taiwan's defense capabilities.
	4	Overall, I support Taiwan's continued promotion of the indigenous submarine development policy.
	5	I support increasing the salaries and benefits of volunteer and conscripted soldiers to attract more talent to the military.
	6	I support strengthening Taiwan's military training, such as increasing new weapons operation, more live-fire exercises, and combat-oriented training.

Source: Compiled by the researcher.

Behavioral tendencies of military personnel

This study examines military personnel's behavioral tendencies by referencing Kelley,

Killgore, Athy, & Dretsch's (2009) research on risk perception and behavior in the U.S. military, along with the first wave of the 2023 Taiwan National Defense Awareness Survey. Two dimensions—combat willingness and willingness to serve the country during a national crisis—were used to assess behavioral tendencies. The study used a 6-point Likert scale, with response options ranging from "1 = strongly disagree" to "6 = strongly agree," to measure both combat willingness and the willingness to serve during a crisis. The behavioral tendency score was calculated by averaging the responses to the two questions. Details of the behavioral tendency scale are shown in Table 4.

Table 4: Behavioral Tendency Scale

Dimension	Item No.	Question
Behavioral Tendency	1	If the People's Liberation Army were to invade Taiwan, I would be willing to fight to defend Taiwan.
	2	In times of national need, I would be willing to answer the government's call and contribute to the country.

Source: Compiled by the researcher.

Personal Information and Demographic Variables

This study includes six demographic variables: gender, age, education level, rank, marital status, and whether the participant has children under 18. Education level is categorized into five options: junior high school, senior high/vocational school, junior college, university, and graduate school or above. Rank is divided into eight categories, from private second class to officer. Marital status is classified as married or unmarried, and participants

are also asked whether they have children under 18. These demographic variables are used to assess their moderating effects on other variables. An attention check question enhances the reliability and validity of the questionnaire. Responses from participants who fail the attention check will be excluded from the analysis.

Pilot Study and Reliability Analysis of the Scale

The pilot study, conducted on March 4, 2024, used convenience sampling to recruit participants from the Department of Journalism at National Defense University. Each participant received a beverage worth NT\$15 as a token of appreciation. The pilot study followed the formal testing procedure and was conducted in a quiet classroom to ensure accuracy. Thirty-four participants were recruited, and 32 valid questionnaires were collected after excluding invalid responses.

After analysis, all questionnaire dimensions achieved a Cronbach's α of .70 or higher, indicating respectable reliability. For Risk perceptions of war, after removing the items "I believe it is very likely that a war will break out between Taiwan and China," "I believe that conflict between Taiwan and China is difficult to avoid," and "If a war breaks out between Taiwan and China, I am likely to be affected," reliability reached .767, which is considered respectable. For risk acceptance, removing the reverse-scored item, "I would consider immigrating or other means to avoid the risk of war," increased reliability to .717, which is also respectable. For policy support, after removing the item "I support increasing the salaries

and benefits of volunteer and conscripted soldiers to attract more talent to the military," reliability reached .745, which is respectable. The results of the pilot study reliability analysis are presented in Table 5.

Table 5: Cronbach's α Reliability Analysis of Pilot Study Questionnaire Items

Dimension	Question	Mean	Cronbach's α	Cronbach's α After Deletion
Risk perceptions of war	If a war breaks out between Taiwan and China, the consequences will be very severe.	5.63	.767	.776
	If a war breaks out between Taiwan and China, many people may die.	5.59		.577
	If a war breaks out between Taiwan and China, the situation will be difficult to control.	5.31		.696
Risk Acceptance	The government has concrete plans to respond to a potential conflict between Taiwan and China.	3.84	.717	.666
	Even if a conflict breaks out between Taiwan and China, the People's Liberation Army cannot capture Taiwan.	3.31		.698
	Overall, I am confident in Taiwan's ability to resist the People's Liberation Army.	3.66		.599
	I believe Taiwan cannot withstand the risk of war breaking out. [reverse-scored]	2.53		.642
Policy Support	Overall, I support the government reducing other budget items and prioritizing increasing the defense budget.	4.25	.745	.719
	Overall, I support extending Taiwan's mandatory military service to one year or longer.	4.94		.728
	I support the Taiwan government in acquiring new weapons, either through independent research and development or procurement from the U.S., to strengthen Taiwan's defense capabilities.	5.06		.662
	Overall, I support Taiwan's continued promotion	4.66		.662

	of the indigenous submarine development policy.		
	I support strengthening Taiwan's military training, such as increasing new weapons operation, more live-fire exercises, and combat-oriented training.	5.41	.727
Behavioral Tendency	If the People's Liberation Army were to invade Taiwan, I would be willing to fight to defend Taiwan.	4.84	-
	In times of national need, I would be willing to answer the government's call and contribute to the country.	4.66	-
			.912

Source: Compiled by the researcher.

Given that the pilot study involved military academy students who may differ from basic unit officers and soldiers in terms of future career paths, education, or family background, and to ensure broader applicability of the study across military units, Cronbach's α reliability tests were conducted again after the formal experiment. A total of 176 participants were recruited, and after excluding those who failed the attention check or provided invalid responses, 149 valid questionnaires were collected.

Following the analysis, all dimensions except for policy support achieved respectable reliability, with Cronbach's α values exceeding .70. For the risk acceptance dimension, removing the items " The government has concrete plans to respond to a potential conflict between Taiwan and China" and " I believe Taiwan cannot withstand the risk of war breaking out" increased reliability to .787, indicating solid reliability. The policy support dimension had a Cronbach's α of .663, which is considered minimally acceptable. The reliability analysis of the formal test questionnaire is shown in Table 6.

Table 6: Cronbach's α Reliability Analysis of Formal Test Questionnaire Items

Dimension	Question	Mean	Cronbach's α	Cronbach's α After Deletion
Risk perceptions of war	If a war breaks out between Taiwan and China, the consequences will be very severe.	5.50	.770	.683
	If a war breaks out between Taiwan and China, many people may die.	5.55		.690
	If a war breaks out between Taiwan and China, the situation will be difficult to control.	5.24		.703
Risk Acceptance	Even if a conflict breaks out between Taiwan and China, the People's Liberation Army cannot capture Taiwan.	3.46	.787	-
	Overall, I am confident in Taiwan's ability to resist the People's Liberation Army.	3.70		-
Policy Support	Overall, I support the government reducing other budget items and prioritizing increasing the defense budget.	4.49	.664	.560
	Overall, I support extending Taiwan's mandatory military service to one year or longer.	4.79		.648
	I support the Taiwan government in acquiring new weapons, either through independent research and development or procurement from the U.S., to strengthen Taiwan's defense capabilities.	5.17		.572
	Overall, I support Taiwan's continued promotion of the indigenous submarine development policy.	4.67		.620
	I support strengthening Taiwan's military training, such as increasing new weapons operation, more live-fire exercises, and combat-oriented training.	5.27		.657
Behavioral Tendency	If the People's Liberation Army were to invade Taiwan, I would be willing to fight to defend Taiwan.	4.80	.912	-
	In times of national need, I would be willing to	4.70		-

answer the government's call and contribute to the country.
--

Source: Compiled by the researcher.

Results

Descriptive Statistics

This study includes six demographic variables: gender, age, education level, rank, marital status, and whether the participant has children under 18, to assess their moderating effects on other variables. The frequency distribution results for these categories are summarized below and detailed in Table 7.

Table 7 : Frequency Distribution of Demographic Variables

Variable	Option	Frequency	Percentage (%)
Gender	Male	136	91.3
	Female	13	8.7
Children Under 18	Yes	18	12.1
	No	131	87.9
Marital Status	Married	17	11.4
	Unmarried	132	88.6
Highest Education	Junior High School	2	1.3
	High School	72	48.3
	Junior College	19	12.8
	University	49	32.9
	Graduate School or	7	4.7

Above			
Rank	Private second class	49	32.9
	Private First Class	11	7.4
	Lance Corporal	15	10.1
	Corporal	16	10.7
	Sergeant	27	18.1
	Staff Sergeant	12	8.1
	Master Sergeant	7	4.7
	Officer	12	8.1

Note: The average age of participants is 25.97 years, $SD = 5.75$

Source: Compiled by the researcher

Main Research Findings

Pearson correlation analysis was conducted on the three groups of participants who read war news reports ($N = 118$). The correlation results are summarized in Table 8, with a general description of each variable's means and standard deviations.

Table 8 : Descriptive Statistics for Each Variable

Dimension	$M (SD)$	Risk perceptions of war	Risk Acceptance	Policy Support	Behavioral Tendency
Risk perceptions of war	5.45 (0.73)	-			
Risk Acceptance	3.63 (1.34)	-.11	-		
Policy Support	4.90 (0.81)	.19*	.35***	-	

Behavioral Tendency	4.76 (1.37)	.07	.28**	.47***	-
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Note: *** $p < .001$; ** $p < .01$; * $p < .05$

Source: Compiled by the researcher

The results demonstrate a significant positive correlation between war risk perceptions and policy support $【r(116) = .19, p = .03】$. Risk acceptance is also positively correlated with both policy support $【r(116) = .35, p < .001】$ and behavioral tendencies $【r(116) = .28, p = .002】$. Additionally, policy support shows a strong positive correlation with behavioral tendencies $【r(116) = .47, p < .001】$.

A linear regression analysis was conducted between the two variables to validate further the relations between war risk perceptions and policy support, and the results are summarized in Table 9. The analysis indicates a significant relationship between war risk perceptions and Support for national defense policies, with $\beta = .19, p < .05$. This suggests that higher war risk perception scores are associated with higher levels of Support for national defense policies; these findings help answer **Research Question 1:** If any, do higher risk perceptions of war influence attitudes about the Acceptance of war risks, Support for national defense policies, and the behavioral tendencies of military personnel?

While higher war risk perceptions seem to positively influence attitudes toward policy support, there is no significant correlation between war risk perceptions and either risk acceptance or behavioral tendencies.

Table 9 : Linear Regression of Risk perceptions of war and Policy Support

	Policy Support		
	<i>B</i>	<i>S.E. B</i>	β
Risk perceptions of war	0.20*	0.10	.19*
R^2	.03		
<i>Adj R</i> ²	.02		
<i>F</i>	4.34*		
<i>df</i>	(1, 116)		

Note: $N = 118$; *** $p < .001$; ** $p < .01$; * $p < .05$

Source: Compiled by the researcher

To test **Research Hypothesis 1:** "Compared to the control group that did not read war news reports, participants who read war news reports (narrative news reports/traditional news reports/news photos only) will perceive higher risk perceptions of war," This study conducted independent sample t-tests to compare the differences between the narrative news, traditional news, and news photos only groups and the control group. The results are presented in Tables 10, 11, and 12.

Table 10 : Independent Sample T-test Statistics for Narrative News vs. Control Group

Dimension	<i>M (SD)</i>		<i>df</i>	<i>t</i>	<i>p</i>	<i>d</i>
	Narrative News reports ($N=38$)	Control Group ($N=31$)				
Risk perceptions of war	5.41 (0.79)	5.34 (0.59)	67	.39	.69	0.09
Risk Acceptance	3.39 (1.51)	3.37 (1.14)	67	.07	.94	0.01
Policy Support	4.82 (0.89)	4.77 (0.85)	67	.22	.82	0.05
Behavioral Tendency	4.46 (1.57)	4.69 (1.39)	67	-.64	.52	-0.15

Source: Compiled by the researcher

Table 11 : Independent Sample T-test Statistics for Traditional News vs. Control Group

Dimension	<i>M (SD)</i>		<i>df</i>	<i>t</i>	<i>p</i>	<i>d</i>
	Traditional News reports (<i>N</i> =40)	Control Group (<i>N</i> =31)				
Risk perceptions of war	5.50 (0.69)	5.34 (0.59)	69	.99	.32	0.24
Risk Acceptance	3.85 (1.34)	3.37 (1.14)	69	1.58	.11	0.38
Policy Support	5.12 (0.72)	4.77 (0.85)	69	1.84	.06	0.44
Behavioral Tendency	4.97 (1.20)	4.69 (1.39)	69	.91	.36	0.21

Source: Compiled by the researcher

Table 12 : Independent Sample T-test Statistics for News Photos Only vs. Control Group

Dimension	<i>M (SD)</i>		<i>df</i>	<i>t</i>	<i>p</i>	<i>d</i>
	News Photos Only (<i>N</i> =40)	Control Group (<i>N</i> =31)				
Risk perceptions of war	5.45 (0.72)	5.34 (0.59)	69	.65	.51	0.16
Risk Acceptance	3.63 (1.15)	3.37 (1.14)	69	.96	.33	0.22
Policy Support	4.76 (0.78)	4.77 (0.85)	69	-.04	.96	-0.01
Behavioral Tendency	4.85 (1.30)	4.69 (1.39)	69	.48	.62	0.11

Source: Compiled by the researcher

The results of Tables 10, 11, and 12 indicate that, compared to the control group that did not read war news reports, participants who read narrative news reports, traditional news reports, or only viewed news photos did not show significantly higher perceptions of war risk. Only participants who read traditional news reports demonstrated a small positive effect size

($d = 0.24$) on war risk perceptions. Thus, **Research Hypothesis 1** was not supported, which posited that participants who read war news reports (narrative news reports/traditional news reports/news photos only) would perceive higher risk perceptions of war compared to the control group. Aside from the slight effect seen in those who read traditional news, neither narrative news reports nor viewing news photos significantly increased readers' risk perceptions of war.

To examine the effectiveness of the manipulation of reporting format, a One-way ANOVA was employed on ratings of Risk perceptions of war, Risk Acceptance, Policy Support, and Behavioral Tendency among three groups: reading "narrative news reports," "traditional news reports" and "news photos only." The results are presented in Tables 13, 14, 15, and 16.

Table 13 : ANOVA of different reporting formats on Risk perceptions of war

	<i>S.S.</i>	<i>df</i>	<i>M.S.</i>	<i>F</i>	<i>p</i>	η_p^2
Formats	0.15	2	0.07	0.13	.87	.002
SE	63.10	115	0.54			
sum	63.25	117				

Source: Compiled by the researcher

The results of Table 13 show different reporting formats on Risk perceptions of war with no significant difference, $F(2, 115) = 0.13, p = .87, \eta_p^2 = .002$. It demonstrates that

Research Hypothesis 2: "News stories about the Russia-Ukraine War will be more effective

at raising "Risk perceptions of war" when presented in a narrative instead of a non-narrative format." was not supported, different reporting formats on Risk perceptions of war with no significant difference.

Table 14 : ANOVA of different reporting formats on Risk Acceptance

	<i>S.S.</i>	<i>df</i>	<i>M.S.</i>	<i>F</i>	<i>p</i>	η_p^2
Formats	4.04	2	2.02	1.12	.33	.019
SE	207.17	115	1.80			
sum	211.21	117				

Source: Compiled by the researcher

The results of Table 14 show different reporting formats on Risk Acceptance with no significant difference, $F(2, 115) = 1.12, p = .33, \eta_p^2 = .019$.

Table 15 : ANOVA of different reporting formats on Policy Support

	<i>S.S.</i>	<i>df</i>	<i>M.S.</i>	<i>F</i>	<i>p</i>	η_p^2
Formats	2.90	2	1.45	2.25	.11	.038
SE	74.04	115	0.64			
sum	76.94	117				

Source: Compiled by the researcher

The results of Table 15 show different reporting formats on Policy Support with no significant difference, $F(2, 115) = 2.25, p = .11, \eta_p^2 = .038$.

The results of Table 16 show different reporting formats on Behavioral Tendency with no significant difference, $F(2, 115) = 1.49, p = .22, \eta_p^2 = .025$.

Table 16 : ANOVA of different reporting formats on Behavioral Tendency

	<i>S.S.</i>	<i>df</i>	<i>M.S.</i>	<i>F</i>	<i>p</i>	η_p^2
Formats	5.58	2	2.79	1.49	.22	.025
SE	214.77	115	1.87			
sum	220.34	117				

Source: Compiled by the researcher

In summary, in response to **Research Question 2:** " How do different reporting formats (narrative news reports/traditional news reports/news photos only) influence attitudes about the Acceptance of war risks, Support for national defense policies, and the behavioral tendencies of military personnel?" The results showed no significant difference in various indicators between the three reporting formats in this experiment.

It is important to note that, although the differences were not statistically significant, scholars highlight the relevance of "Partial Eta Squared" (η_p^2), which SPSS uses to report effect size in ANOVA tests. According to Cohen (1988), as cited by Yan Zhi-long and Zheng Zhong-ping (2016), an effect size of $.01 \leq \eta_p^2 < .058$ represents a small effect; $.058 \leq \eta_p^2 < .138$ represents a medium effect, and $\eta_p^2 \geq .138$ represents a large effect. Based on these standards, the three reporting formats (narrative news reports, traditional news reports, and news photos only) demonstrated small effect size differences in Risk Acceptance, Policy Support, and Behavioral Tendency. Further analysis using independent sample t-tests for these variables across the three reporting formats is presented in Tables 17, 18, and 19.

Table 17 suggests that although the results are not statistically significant, compared to traditional news, reading narrative news—being more immersive—may lead participants to feel that Taiwan is less capable of resisting a PLA invasion, reduce their Support for defense policies, and lower their willingness to fight for the country.

Table 17 : Independent Sample T-test Statistics for Narrative News vs. Traditional News

Dimension	<i>M (SD)</i>		<i>df</i>	<i>t</i>	<i>p</i>	<i>d</i>
	Narrative News reports (<i>N</i> =38)	Traditional News reports (<i>N</i> =40)				
Risk Acceptance	3.39 (1.51)	3.85 (1.34)	76	-1.40	.16	0.32
Policy Support	4.82 (0.89)	5.12 (0.72)	76	-1.62	.10	0.37
Behavioral Tendency	4.46 (1.57)	4.97 (1.20)	76	-1.62	.10	0.36

Source: Compiled by the researcher

Similarly, Table 18 indicates that, although not reaching significance, reading narrative news compared to just viewing news photos may reduce participants' willingness to defend their country.

Table 18 : Independent Sample T-test Statistics for Narrative News vs. News Photos Only

Dimension	<i>M (SD)</i>		<i>df</i>	<i>t</i>	<i>p</i>	<i>d</i>
	Narrative News reports (<i>N</i> =38)	News Photos Only (<i>N</i> =40)				
Risk Acceptance	3.39 (1.51)	3.63 (1.15)	76	-.79	.42	0.18

Policy Support	4.82 (0.89)	4.76 (0.78)	76	.29	.76	-0.07
Behavioral Tendency	4.46 (1.57)	4.85 (1.30)	76	-1.19	.10	0.27

Source: Compiled by the researcher

Table 19 shows a significant difference in policy support between participants who read traditional news reports and those who only viewed news photos. This indicates that the traditional news reporting format on war casualties is more effective in garnering Support for defense policies than simply viewing war photos, which demonstrates a notable effect.

Table 19 : Independent Sample T-test Statistics for Traditional News vs. News Photos Only

Dimension	<i>M (SD)</i>		<i>df</i>	<i>t</i>	<i>p</i>	<i>d</i>
	Traditional News	News Photos Only				
	reports (<i>N</i> =40)	(<i>N</i> =40)				
Risk Acceptance	3.85 (1.34)	3.63 (1.15)	78	0.76	.45	-0.18
Policy Support	5.12 (0.72)	4.76 (0.78)	78	2.10	.04	-0.48
Behavioral Tendency	4.97 (1.20)	4.85 (1.30)	78	0.45	.66	-0.10

Source: Compiled by the researcher

Discussion

This study primarily examines how different "reporting formats" in "war casualty reporting" impact the "risk perceptions of war" among Taiwan's Marine Corps personnel and

how these perceptions influence their "risk acceptance," "policy support," and "behavioral tendencies." In traditional academic perspectives on war casualty reporting, it is believed that during wartime, reports should minimize civilian and enemy casualties. Political elites often argue that information about casualties could dampen public morale, as British Prime Minister David Lloyd George remarked in 1917 during World War I: "If the people really knew [the truth], the war would be stopped tomorrow. But of course, they don't know and can't know" (David Lloyd George, the British prime minister, 1917, as cited in Greenslade, 2014, p 56).

However, with the rise of the internet and mobile technology, it has become nearly impossible to prevent war-related information and images from reaching the public eye, as seen in the Russo-Ukrainian War and the Israel-Palestine conflict of October 2023. For instance, when brutal images of massacres in Ukraine, a nation often viewed by Taiwanese as sharing a similar plight, are disseminated through media and the internet, understanding how these images influence the resolve of Taiwan's military personnel to resist an enemy becomes a critical and urgent issue.

This study is divided into two parts to explore relevant variables. In the first part, the study proposed **Hypothesis 1**: "Compared to the control group that did not read war news reports, participants who read war news reports (narrative news reports/traditional news reports/news photos only) will perceive higher war risk perceptions." The analysis revealed that whether participants read narrative news reports, traditional news reports, or only viewed

news photos, their perceived war risk did not significantly differ from the control group. Only those who read traditional news reports showed a small positive effect size ($d = 0.24$) on war risk perception, indicating that reading war news reports does not substantially increase perceived war risks.

The researchers believe this may be due to the already high levels of war risk perception among Marine Corps personnel before the study. Specifically, the average war risk perception score for all participants who read war news reports ($N = 118$) was $M = 5.45$, with an SD of 0.73 . For the control group ($N = 31$), who did not read war news, the average score was $M = 5.34$, with an SD of 0.59 . These findings suggest that while reading war news reports may slightly raise war risk perception, Marine Corps personnel already had a high level of perceived risk regarding a potential Taiwan Strait war, even without exposure to war reports.

The study also posed **Research Question 1**: "Do higher war risk perceptions influence attitudes about risk acceptance, support for national defense policies, and the behavioral tendencies of military personnel?"

The linear regression analysis revealed a significant relationship between Risk perceptions of war and Support for national defense policies among Marine Corps personnel. As their crisis awareness scores increased, so did their Support for defense policies. However, a higher war risk perception did not significantly affect their judgment of whether the military could defend Taiwan or whether the PLA could occupy Taiwan. Furthermore, risk perception

was not related to whether personnel were willing to fight for the defense of the country.

The author suggests that these findings indicate that when military personnel recognize serious war risks, they are more likely to support measures such as extending military service, acquiring more weapons, and increasing the defense budget. However, the lack of a relationship between risk perception and risk acceptance suggests that even though personnel recognize the potential for heavy casualties and costs, this does not necessarily undermine their belief in Taiwan's ability to resist the PLA. Confidence in Taiwan's defense capability appears to be influenced by other factors. Additionally, the fact that risk perception did not significantly correlate with behavioral tendencies is encouraging. It suggests that even if Marine Corps personnel are aware of the potential for severe casualties in a war, this does not reduce their willingness to defend the country. These findings highlight that defending the country is influenced by factors beyond life and death for military personnel, and this insight is crucial for fostering national morale.

In the second part of the study, **H2** was proposed: "News stories about the Russia-Ukraine War will be more effective at raising 'Risk perceptions of war' when presented in a narrative rather than a non-narrative format." Additionally, **RQ2** was posed: "How do different reporting formats (narrative news reports/traditional news reports/news photos only) influence attitudes about the acceptance of war risks, support for national defense policies, and the behavioral tendencies of military personnel?"

To address the hypothesis and research question, a one-way independent sample ANOVA was conducted to analyze the effects of three reporting formats—narrative news reports, traditional news reports, and news photos only—on Risk perceptions of war, risk acceptance, policy support, and behavioral tendencies. The results showed no significant differences between the different formats regarding their effects on war risk perception, risk acceptance, policy support, or behavioral tendencies.

However, further pairwise comparisons revealed that although the results did not reach statistical significance, participants who read narrative news reports, compared to traditional news, were more likely to believe that Taiwan would be unable to withstand a PLA invasion, showed less willingness to support defense policies, and were less inclined to fight for the country. Compared to the news photos only group, narrative news formats showed a small negative effect size on behavioral tendencies, suggesting that reading narrative news may slightly reduce military personnel's willingness to defend the country, even though these differences were insignificant.

Notably, participants who read traditional news reports, compared to those who only viewed news photos, showed significant differences in their Support for defense policies. This indicates that traditional news reporting is more effective in fostering military personnel's Support for defense policies. The researchers suggest that this finding aligns with the study by Pfau et al. (2006), which pointed out that when negative topics such as casualties are reported,

whether through images or more vivid narrative news formats, they may evoke stronger negative emotions, potentially decreasing public Support for military actions. In contrast, simple text (as in traditional news reports) appears to foster more positive emotions about continuing military actions.

Frey (2014) also found that while there were no significant differences between narrative and non-narrative articles in short-term comprehension and knowledge acquisition, narrative formats were more effective in the long term, suggesting that time could be a hidden variable. Similarly, Arya & Maul (2012) found that narrative texts led to better comprehension, particularly among students from lower socioeconomic backgrounds or when the topics were less engaging, highlighting the importance of topic relevance and participant demographics in determining the effectiveness of reporting formats.

On the other hand, Emde, Klimmt, & Schluetz (2016) did not find significant differences between traditional and narrative news regarding readers' understanding. They suggested that the differences in written formats might be too subtle to produce a significant effect and that the impact of narrative versus traditional formats may be more pronounced in certain media, such as television, where viewers must process both audio and visual information simultaneously, making it harder to control the pace of information processing. Future research should explore how different media formats (e.g., videos, images, infographics) affect comprehension.

These studies suggest that while narrative news is generally believed to enhance reader identification and immersion, more variables need to be considered and controlled better to understand the potential effects of narrative formats in communication.

Conclusions

According to the 2006 edition of the National Military News Practices Manual, Appendix 1, Article 4 of the Battlefield Reporting Code of Conduct stipulates that certain items must not be reported or disclosed, including:

(1) Details about military mobilizations, unit numbers, personnel strength, force deployments, military plans, tactical actions, locations of command posts, unit formations, weapons specifications, logistics, and other information that could compromise mission success. **(2) The number and names of military and civilian casualties or the ranks, positions, and names of captured officers.** (3) The identities and biographies of military commanders and key personnel. (4) Details of enemy psychological operations or propaganda activities. (5) Reporting false war information. (6) Information about allied military aid. **(7) Without permission, do not interview or film injured personnel those with mental health issues, or depict gruesome military scenes.** (8) Information containing classified national defense secrets or unverified military news. (9) Based on combat situations, the Ministry of National Defense may classify certain details as national defense secrets to protect operational

security.

Items (2) and (7) are particularly relevant to this study. As discussed earlier, past academic views emphasized minimizing civilian casualties in reports during wartime, a sentiment echoed in military regulations. However, with the advent of the internet and mobile technology, it has become nearly impossible to prevent the public from seeing graphic images of bodies and violence. Therefore, the researcher is keen to explore how such violent and graphic imagery might affect the resolve of military personnel to resist the enemy.

As mentioned in the previous section, even without reading war reports, Marine Corps personnel participating in the experiment already had high levels of perceived risk regarding a potential Taiwan Strait war. Additionally, those who did read war news had slightly higher average scores for war risk perception than those in the control group, suggesting that reading war news might still raise war risk perceptions, even if the effects are not statistically significant. Furthermore, participants who read traditional news reports showed a small positive effect ($d = 0.24$) on their war risk perception, indicating that more "distant" formats like traditional news may be more effective in raising risk awareness.

From the exploration of **Research Question 2**—"How do different reporting formats (narrative news/traditional news/news photos only) influence emotions, war risk perception, risk acceptance, policy support, and behavioral tendencies?"—it was observed that although not statistically significant, compared to traditional news, narrative news, which is more

immersive, might make participants believe Taiwan is less capable of resisting a PLA invasion and reduce their willingness to support defense policies or fight for the country. Interestingly, traditional news, which theoretically should be less immersive, was more effective in significantly boosting military personnel's support for defense policies. This conclusion provides preliminary support for the military regulations that restrict reporting on "casualties" and "interviewing or filming the injured or depicting gruesome military scenes."

However, since this study targeted military personnel, its conclusions are limited to similar units, such as Marine Corps infantry.

To fully understand the impact of war-related information on both military morale and public sentiment, future studies should replicate this experiment with other branches, such as the Army, Air Force, and Navy, and conduct similar experiments with civilians. This could provide valuable insights for shaping communication policies during national emergencies. Additionally, future research should explore how different media formats, such as sound and visuals, influence communication effectiveness, as many international scholars in narrative communication have suggested.

As Wang Jun-Nan (2012) pointed out, in democratic nations, press freedom and national security should be complementary. True press freedom supports national security, and national security provides the foundation for press freedom. The government should not restrict press freedom under the guise of national security, and the media should not abuse press freedom to

the detriment of national security or public interest. Only through positive interaction can democratic governance flourish, and national development be secured. However, when considering whether media coverage of military information neglects national security, more detailed research and experimental evidence are needed. Accumulating sufficient results from randomized experiments will provide clearer, scientific standards for national decision-makers and media professionals to determine whether certain information should be published. In this way, academic research can contribute meaningfully to national security. Such research is intended to equip government officials, military leaders, and media professionals with clearer guidelines based on rigorous, scientific analysis to determine which information is appropriate for public dissemination, thereby ensuring that the protection of national security does not come at the expense of press freedom, and vice versa. Ultimately, the goal is for this research to serve as a modest but valuable contribution to safeguarding national interests during times of conflict while also upholding the principles of transparency and public trust that are foundational to democratic societies.

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Appendix 1: Questionnaire on Risk perceptions of war Among ROC Military Personnel**Version Date: 1130303**

Dear service members,

This is an academic questionnaire survey conducted by the Graduate Institute of Journalism at National Defense University. We deeply appreciate your time in completing this questionnaire. The survey is anonymous and consists of five parts, with an estimated completion time of 20 minutes.

If you agree to participate in this research, please note the following points:

1. This questionnaire aims to understand your thoughts after reading the news. Therefore, you will be asked to read two news reports before completing the survey. Please ensure that you read the texts and view the images in the questionnaire before answering.
2. Sometimes participants may not pay full attention and provide random answers. This survey includes "attention detection questions." If answered incorrectly, the questionnaire will be considered invalid. Please read the questions carefully before responding.
3. You must complete the survey personally. If you experience any discomfort during the process, you are free to withdraw. The survey cannot be completed on your behalf by someone else, and please avoid filling it out multiple times.
4. Please refrain from talking while completing the questionnaire. If you have any questions, feel free to stop and raise your hand to ask the researcher. You are welcome to rejoin and continue later.
5. Once you have completed the survey, please remain seated and avoid disturbing other participants who are still completing the survey.
6. Once the form is submitted, your responses cannot be deleted as the survey is anonymous. The data you provide will only be used for overall statistical analysis, and your identity will be kept confidential with no personal information disclosed.

7. The research results will be presented at academic conferences or published in journals without generating any commercial interests.

We sincerely invite you to participate in this experiment. Your responses are of great value to this research.

Wishing you good health and happiness,

Graduate Institute of Journalism, College of Political Warfare, National Defense University

Advisor: Dr. Bian, Ming Dao

Graduate Student: Lieutenant Yang, Shu An

Contact: z420360@gmail.com

Second Part:

Please use the following words to describe the emotions or feelings you might have after reading the report. The rating scale ranges from 1 (not feeling at all) to 7 (feeling very strongly). Circle the number that best represents your current emotional state.

1. I feel angry 1, 2, 3, 4, 5, 6, 7
 2. I feel confused 1, 2, 3, 4, 5, 6, 7
 3. I feel surprised 1, 2, 3, 4, 5, 6, 7
 4. I feel sad 1, 2, 3, 4, 5, 6, 7
 5. I feel scared 1, 2, 3, 4, 5, 6, 7
 6. I feel proud 1, 2, 3, 4, 5, 6, 7
-

Third Part:

Please use the following words to describe the emotions or feelings you might have after reading the report. The rating scale ranges from 1 (very close) to 5 (very distant). Circle the number that best represents your current emotional state.

1. To me, the outbreak of war in Taiwan feels very close... very distant 1, 2, 3, 4, 5
 2. To me, the outbreak of war in Taiwan feels like it's happening here... like it's on the other side of the world 1, 2, 3, 4, 5
 3. To me, the outbreak of war in Taiwan feels like it could happen tomorrow... like it's thousands of years away 1, 2, 3, 4, 5
 4. To me, the outbreak of war in Taiwan feels like it will affect me... only affect distant strangers 1, 2, 3, 4, 5
 5. To me, the outbreak of war in Taiwan feels very real... very unimaginable 1, 2, 3, 4, 5
-

Fourth Part:

This section mainly asks for your views on the issues, with the rating scale ranging from "strongly disagree" to "strongly agree." There are no right or wrong answers. Please select the option that best matches your current perception and opinion.

After reading the following statements, circle the number that best represents your level of agreement:

1. I believe that a war between the two sides of the Taiwan Strait is likely to occur
[Perceived Risk of War]
(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree
2. I believe that conflict between the two sides of the Taiwan Strait is difficult to avoid
[Perceived Risk of War]
(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree
3. If a war breaks out between the two sides, I am likely to be affected [Perceived Risk of War]
(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree

4. If a war breaks out between the two sides, the consequences will be severe [Perceived Risk of War]
(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree
5. If a war breaks out between the two sides, many people may die [Perceived Risk of War]
(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree
6. If a war breaks out between the two sides, the situation will be uncontrollable [Perceived Risk of War]
(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree
7. The government has concrete plans to deal with potential conflicts between the two sides [Risk Acceptance]
(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree
8. Even if conflict breaks out between the two sides, the PLA cannot occupy Taiwan [Risk Acceptance]
(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree
9. Overall, I have confidence in Taiwan's ability to resist the CCP [Risk Acceptance]
(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree
10. I believe Taiwan cannot bear the risk of war [Risk Acceptance] [Reversed]
(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree
11. I would consider avoiding war risks by immigrating [Reversed] [Risk Acceptance]
(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree
12. Overall, I support the government reducing other budget items to prioritize increasing

the defense budget [Policy Support]

(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree

13. Overall, I support extending the military service period in Taiwan to one year or longer [Policy Support]

(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree

14. I support Taiwan's acquisition of new weapons, either through domestic development or purchase from the U.S., to strengthen Taiwan's defense capabilities [Policy Support]

(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree

15. Overall, I support Taiwan's continued promotion of the indigenous submarine program [Policy Support]

(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree

16. I support increasing the salaries and benefits of both voluntary and conscripted military personnel to attract talent to the military [Policy Support]

(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree

17. I support strengthening the intensity of military training, such as increasing the operation of new weapons, increasing the number of live-fire drills, and enhancing realistic combat training [Policy Support]

(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree

18. If the CCP invades Taiwan by force, I am willing to fight to defend Taiwan [Behavioral Tendency]

(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree

19. I am willing to accept a government call-up and contribute to the country if needed [Behavioral Tendency]

(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree

20. Below are six options, please answer "Strongly Agree" for this question [Attention Test Question]

(1) Strongly Disagree; (2) Disagree; (3) Somewhat Disagree; (4) Somewhat Agree; (5) Agree; (6) Strongly Agree

Fifth Part:

1. What year were you born in the ROC calendar?
(1) ____ Year
 2. What is your highest level of education (including currently enrolled, specify school level)?
(1) Illiterate or not in school; (2) Primary school; (3) Junior high school; (4) Senior high school; (5) Junior college; (6) University; (7) Graduate school or higher
 3. What is your current rank?
(1) Private Second Class; (2) Private First Class; (3) Corporal; (4) Sergeant; (5) Staff Sergeant; (6) Sergeant Major; (7) Officer
 4. What is your current marital status?
(1) Married; (2) Divorced; (3) Single
 5. Do you have children under 18 years old?
(1) Yes; (2) No
 6. What is your gender (self-identified)?
(1) Male; (2) Female
-

Appendix 2: Narrative News Report

Bucha, Ukraine: A Month of Horror

Bucha is located several kilometers west of Kyiv, the capital of Ukraine, and has been under Russian attack since the first day of the war—February 24—with civilians bearing the brunt. Russian special forces fired on cars on the road as they walked through the woods, and an armored convoy opened fire as it entered the suburbs, killing a woman in her garden.

But these early cruelties paled in comparison to what happened next.

Civilians reported that as the Russian advance on Kyiv stalled amid fierce resistance, the occupation of Bucha turned into a campaign of terror and retribution. When a defeated and demoralized Russian army finally retreated, it left behind a tragic scene: bodies of civilians scattered on the streets, in basements, or backyards, many shot in the head, some with their hands tied behind their backs.

Journalists and photographers from The New York Times spent more than a week in Bucha, working with city officials, coroners, and dozens of witnesses to uncover new details of the execution-style atrocities against civilians. The New York Times documented the locations of more than 30 bodies—in their homes, in the woods, or set on fire in an open parking lot—and learned the stories behind many of the deaths. They also witnessed over 100 body bags at a mass grave and the city's cemetery. Evidence indicated that the Russians killed indiscriminately, and in some cases tortured, partly as a form of revenge.

Unsuspecting civilians were killed while performing the most mundane daily activities. On the morning of March 5, retired teacher Lyudmila, known as "Aunt Luda," was shot when she opened her front door in a small alley. Her body remained twisted for more than a month, half inside the door. Her mentally disabled sister, Nina, who lived with her, died on the kitchen floor. The cause of her death remains unknown. "They took over this area and started shooting, so no one would approach," said neighbor Sergey. "Why would they kill an old

lady?"

As the violence escalated, 43-year-old welder Roman Gavrilyuk and his 46-year-old brother Serhiy Dukhlik sent their families out of Bucha but insisted on staying. They were found dead in their yard. "My uncle stayed for the dogs, my father stayed for the house," said Gavrilyuk's son Nazar. "A stranger lay nearby, and the two dogs were covered in bullet wounds."

Ransacked Houses and Bodies in Basements

People soon realized why these bodies remained in place for so long.

Troops began searching houses and ordered residents not to go outside. "They were clearing house to house," said 42-year-old mechanic Valery Yurchenko, who lives by the river. A Russian commander warned him not to go out on the street. "We have orders to shoot," the commander threatened. Soldiers confiscated residents' phones and computers; some were polite but still ordered families near the base to leave for a nearby kindergarten.

"They handed me my cane," said 65-year-old Tatyana Masanovich, who was told to leave.

The soldiers trashed her house and used one room as a toilet. "They took everything," she said sorrowfully.

As more troops arrived, their armored vehicles drove directly into people's yards, smashing through metal gates and fences, aiming guns down the street when they stopped. Volodymyr Shepetko, 66, and his wife fled when a Russian armored vehicle crashed through the fence in their backyard. They took refuge in the basement of Middle School No. 3. Russian soldiers also used the school and the adjacent residential area as a mortar position. It wasn't until the Russians withdrew from Kyiv and he returned home that he realized how much damage the Russian soldiers had done. His house was ransacked, littered with garbage and beer bottles. Then, in a cellar under the garden shed, his nephew found the body of a woman. She was slumped on the floor, her legs bare, her arms crossed, wearing only a fur coat. The woman's head was shot, and police pulled her out and searched the house. They found two shell

casings, a torn condom wrapper, and a used condom upstairs.

Ukraine's official human rights commissioner, Lyudmila Denisova, said the abuse suffered by this woman was one of many cases. She said Ukraine's official human rights agency had documented horrific sexual violence by Russian forces in Bucha and other places, including a group of women and girls held in a basement for 25 days. Nine of them are now pregnant. She speculated that the violence was a form of revenge against Ukraine's resistance movement, but it might also be that Russian soldiers used sexual violence as a weapon of war against Ukrainian women.

Bucha's chief prosecutor, Ruslan Kravchenko, said in an interview that of the 360 bodies found in Bucha and surrounding areas last weekend, more than 250 had been killed by bullets or shrapnel, and all of these deaths were part of a war crimes investigation. Many more people died from hunger, cold, lack of medication, and medical care. The vast majority of the dead were civilians. Bucha city cemetery official Serhiy Kaplychnyi said that among the victims in the city, only two were Ukrainian soldiers.

"The brutality of the terrorist and executioner army of the Russian Federation knows no bounds," wrote Denisova, calling on the UN Human Rights Council to "take note of the facts of the war crimes committed by Russia in Ukraine."

Narrative News Report - This text was adapted from - The New York Times Chinese website - (1724 words) (Participants cannot see) Reference link: <https://reurl.cc/K4gMem>



Nina was found dead on the kitchen floor.



Tatiana Blavats stood in the garden, horrified after discovering the bodies of Roman Gavriyuk, his brother Serhiy Dukhlik, and an unidentified person.



Police found a woman's body in a cellar with a gunshot wound to the head and found a torn condom wrapper and used condom upstairs.



Body bags on the cemetery lawn, the vast majority of the dead were civilians.

Appendix 3: Traditional News Report

Massacre of Civilians in Bucha, Ukraine by Russian Troops: Over 300 Civilians Killed, Shocking the World

The town of Bucha, located in the suburbs of Kyiv with a population of about 37,000, has been under intense attack by Russian forces since Russia invaded Ukraine on February 24, 2022. Bucha was occupied on the third day of the war, February 26, and was inaccessible for over a month until the shelling stopped on March 31, allowing Ukrainian forces to fully enter in the following days.

After the Russian forces hastily retreated from Bucha, they left behind hundreds of civilian bodies. Local officials reported that nearly 300 civilian bodies were found in several mass graves after the Russian forces withdrew from Bucha. Serhii Kaplychnyi, who was in charge of rescue work in Bucha, said that 57 people were buried in a mass grave behind a church in the town center alone. An AFP reporter saw at least 20 bodies scattered on a street, all wearing civilian clothes, one with his hands tied behind his back with a white cloth, and his Ukrainian passport lying nearby.

Although the Russian Defense Ministry denies that Russian troops committed such atrocities, the United States, the United Kingdom, France, Germany, and NATO have expressed shock and condemned the actions, joining Ukraine in accusing Russian forces of war crimes.

Ukrainian Foreign Minister Dmytro Kuleba wrote on Twitter: "The Bucha massacre was deliberate. The Russians aimed to kill as many Ukrainians as possible. We must stop them and drive them out. We want the G7 to impose new, strong sanctions against Russia now."

Bucha Mayor Anatoliy Fedoruk said that these people were executed with gunshots to the back of the head by Russian troops. Fedoruk told AFP that among the victims was a 14-year-old boy, and that everything was destroyed by the Russian army as they advanced. Mines were also hidden in the bodies scattered on the streets. Fedoruk said that due to fears that the

Russian forces had set traps, the bodies were not cleaned up. Fifty-seven bodies were found discarded in a trench behind a church, all dressed in civilian clothes, some unburied or only partially buried. Kyiv Mayor Vitali Klitschko also mentioned: "We believe that more than 300 civilians were killed. This is not war; this is genocide, the genocide of the Ukrainian people."

International Outcry: Zelensky Says Bucha Massacre Will Be Recognized as Genocide by the World

During a visit to Bucha, Ukrainian President Volodymyr Zelensky stated regarding the Russian atrocities: "This is a war crime that will be recognized as genocide by the world." He earlier pointed out that the Russian leadership should be held accountable for the massacre of civilians in Bucha. He also said that Ukraine has established a "special mechanism" to investigate the "war crimes" committed by Russian troops in Ukraine. The Russian side denied killing civilians, calling these accusations "another fabrication by the Kyiv regime and Western media."

The European Union (EU) stated on the 4th that they are urgently discussing a new round of sanctions against Russia while condemning the atrocities reported from towns occupied by Russian forces in Ukraine. The EU's High Representative for Foreign Affairs and Security Policy, Josep Borrell, said in a statement on behalf of the EU that the EU "will make the promotion of further sanctions against Russia a priority." The Washington Post, citing two sources, reported that U.S. President Joe Biden and his officials have begun discussing escalating sanctions against Russia, although the scope and actions of these sanctions are not yet clear. French President Emmanuel Macron also said on the 4th that more sanctions against Russia are needed after Ukraine accused Russian troops of massacring civilians in Bucha.

More Than a Month of War in Ukraine: Tens of Thousands of Civilians Killed, Cities Turned to Ruins

The scenes in Bucha have shocked the world. U.S. Secretary of State Antony Blinken said

today that the sight of bodies strewn across Bucha is "shocking." Homes have been looted and burned, newly built houses have had their doors smashed open, and the houses are riddled with bullet holes left from recent clashes between Ukrainian and Russian forces.

In the areas around Kyiv that Ukrainian forces have reclaimed in recent days, civilians have endured weeks of fighting and the fear of occupation. Now, with the Ukrainian military recapturing dozens of villages and suburbs to the east, west, and north of Kyiv, the Russians have retreated from Kyiv's gateway and withdrawn to areas near the northern border.

However, there was no celebration or joy on the ground.

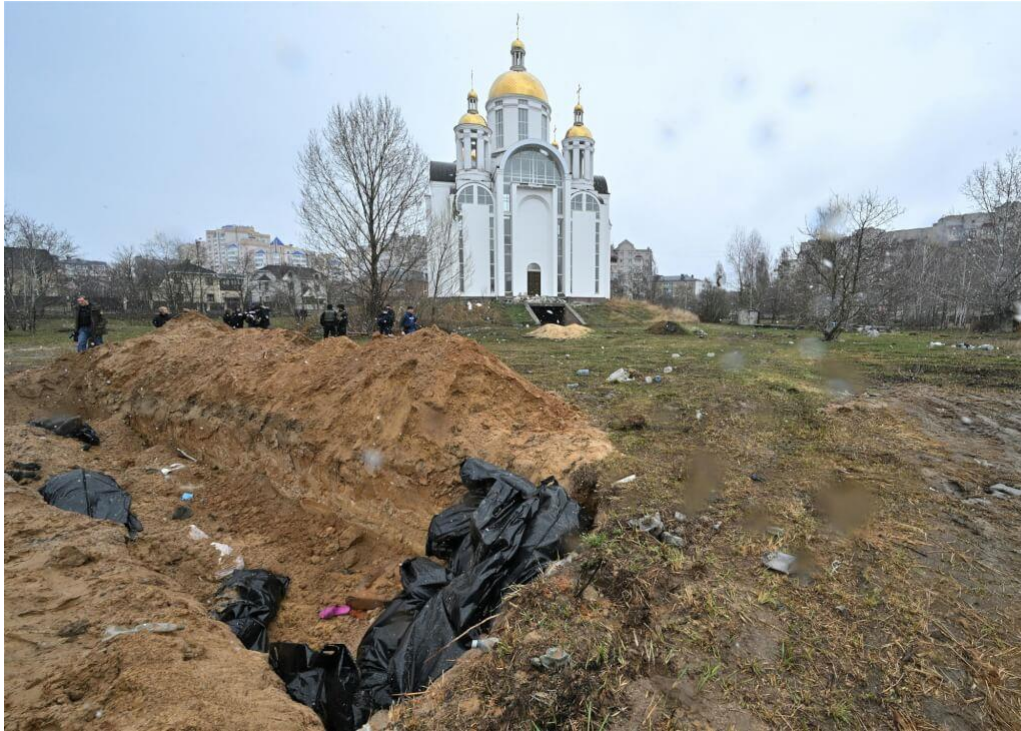
Ukraine's official human rights commissioner, Lyudmila Denisova, said that Ukraine's official human rights agency had documented horrific sexual violence by Russian forces in Bucha and other places, including a group of women and girls held in a basement for 25 days. She said nine of them are now pregnant. She speculated that the violence was a form of revenge against Ukraine's resistance movement, but it might also be that Russian soldiers used sexual violence as a weapon of war against Ukrainian women. Bucha's chief prosecutor, Ruslan Kravchenko, said in an interview that of the 360 bodies found in Bucha and surrounding areas last weekend, more than 250 had been killed by bullets or shrapnel, and all of these deaths were part of a war crimes investigation. Many more people died from hunger, cold, lack of medication, and medical care. The vast majority of the dead were civilians. Bucha city cemetery official Serhiy Kaplychnyi said that among the victims in the city, only two were Ukrainian soldiers.

The UK said this "horrifying behavior" must be investigated as a war crime. French President Emmanuel Macron said the scenes were "unbearable," and that the Russian authorities must "respond to these crimes." Germany said that the civilian deaths in Bucha were "horrible war crimes" that "cannot go unaddressed," calling for new sanctions against Moscow.

Traditional News Report - This text was adapted from - Central News Agency - (1703 words)

(Participants cannot see) Reference links: <https://reurl.cc/VNV8YQ>; <LINK>

<https://reurl.cc/nrg7me>



After Russian forces withdrew from Bucha, a mass grave was discovered this week behind a church in the town.



Ukrainian Foreign Minister Dmytro Kuleba said that the many civilians killed in Bucha were "deliberately slaughtered" by Russian troops. The photo shows several civilian bodies lying on the streets of Bucha.



During a visit to Bucha, Ukrainian President Volodymyr Zelensky said of the Russian atrocities: "This is a war crime that will be recognized as genocide by the world." The photo shows Zelensky leading a team to inspect the recaptured suburbs of Kyiv.



Bucha was occupied by Russian troops on February 26, 2022, until shelling ceased on March 31, allowing Ukraine to regain control, only to discover widespread atrocities against civilians. The photo shows a woman walking past a destroyed Russian tank in Bucha.

Appendix 4: Control Group Neutral Article

[Title] Hidden Scenic Spots in Aowanda! A Healing Pine Needle Trail Next to the Hometown of Maple Leaves that Can't Be Found Online

By Yang Peiqi / Commonwealth Magazine, Issue 761

"Xinennwar Mountain? What? Which mountain did you say you were going to climb?" Even experienced hikers react this way when Xinennwar Mountain is mentioned. There is almost no information available online, and only a few hikers mention passing through Xinennwar Mountain when climbing Majun Mountain, one of the three "Aowanda Oddities," but detailed information is scarce.

There are two main routes to Majun Mountain, one of which must pass through Xinennwar Mountain. However, "Less than 20 people climb Majun Mountain each year, and when we explored the route of these two mountains yesterday, we didn't encounter anyone, only 6 or 7 Formosan muntjacs," said Huang Yiru, a forestry student from National Chung Hsing University who interned at Aowanda Nature Education Center in 2021. His words revealed the obscure nature of this hiking route. A hiking enthusiast, he was deeply impressed by Xinennwar Mountain and Majun Mountain during his internship. This year, he climbed again with Du Shihao, an environmental education teacher from Aowanda.

The trailhead is located on the outskirts of the pine forest area in Aowanda Forest Recreation Area. It is about 1.7 kilometers from the visitor center to the trailhead, so early rising is necessary. Walking along the park's maple forest trail, the journey is not short, but the morning breeze is particularly refreshing. In the sunlight, some green maples and sweetgums already show hints of bright orange, the vibrant colors of early autumn awakening with memories.

Crossing the Aowanda Suspension Bridge spanning the valley, you enter the pine forest area. The light suddenly dims as you step into a silent world. Sunlight faintly dances on the

treetops, and the thick pine needles carpeting the ground make the subtle rustling sound of footsteps particularly clear. If not for the early departure, it would be difficult to enjoy such tranquility, even in the most remote corner of the Aowanda Forest Recreation Area.

[Subtitle] No Need to Worry About Meeting Others on the Trail

A sign at the trailhead indicates an altitude of 1,300 meters, with a marker stating "Not within the park's maintenance area." Stepping over a fallen log blocking the entrance, you enter a natural, primitive mountain trail, overgrown with shrubs but with a clear path. The trail is lined with Taiwan red pine and Fagaceae plants, with occasional pinecones and acorns along the way.

At a turn, the cliffs reveal twisted, robust branches of Taiwan red pines growing out of nowhere, which is breathtaking. Some sections of the trail are covered with pine needles, which are delightful but slippery, so caution is needed on the steep slopes!

Along the way, the bright red berries of the viburnum bring small joys to the view, while the ancient pines on the cliffs and the fungi on tree trunks also catch your attention.

After about an hour, you reach a fork on the ridge at an altitude of 1,450 meters, overlooking the giant cliff wall depicted in the movie "Warriors of the Rainbow: Seediq Bale," also known as Mahaipu Fuji Mountain or Maipingmu Mountain.

"This section is also the exit of the Nenggao Andong Army traverse, but most hikers who spend 6 or 7 days on the traverse usually descend in the afternoon," Huang Yiru said. He believes that hiking this route in the morning means you're less likely to encounter other hikers, so there's no need to worry about noise, and less experienced hikers don't have to feel ashamed in comparison.

[Subtitle] The Hometown of Maple Leaves, with the Most Varied Autumn Colors

Aowanda has a rich variety of deciduous plants, including green maple, sweetgum, bald cypress, lacquer tree, and beech. The period for viewing red leaves is particularly long, lasting

from October until early January. "Aowanda's red leaves are not united, but the sweetgum trees on the Maple Viewing Platform always turn color first; this year they turned red in October," said Xu Haozhe, another environmental education teacher in Aowanda, who has been working there for over three years and considers this his favorite place in autumn. Liao Qingsen, the park manager who has worked at the Forest Recreation Area for over ten years, added that the best time to view the red leaves on the Maple Viewing Platform is from 8 to 10 in the morning because the angle of sunlight has a significant impact on the viewing experience. Having spent a long time in the park, Liao Qingsen has become keenly aware of the changes in light and shadow not only with the seasons but also with the time of day. "Aowanda's red leaves are not as concentrated as in other maple viewing spots; they are scattered throughout the park. The most common deciduous plant, sweetgum, is almost entirely composed of tall, giant native species, giving Aowanda the title of the hometown of maple leaves," Liao Qingsen pointed out, highlighting the precious ecological aspect of Aowanda's flora. He recalled that the most famous red leaf viewing spot used to be an 8-hectare maple forest area by Wandan North Creek, but unfortunately, 2 hectares of the pure sweetgum forest were destroyed and buried by Typhoon Sinlaku in 2008. For safety and maintenance reasons, the maple forest area is no longer open to visitors. However, the remaining 6 hectares of sweetgum, though not concentrated, are still as colorful as a palette in autumn and winter. "As long as there is sunlight, you can enjoy the gradient colors of the maple forest area from the Aowanda Suspension Bridge or Birdwatching Platform; the colors are absolutely stunning!" Liao Qingsen said. Each year, he carefully records and gradually summarizes the timing, supporting his observations with photographs. He noted that the maple forest area can be viewed in its full color by late November; the bald cypress in front of the Cherry Blossom Garden and Maple Red Villa Restaurant change color at different times; and in December, the green maple, dawn redwood, and beech by the

ecological pond all change color together, reflecting in the water like a watercolor painting with a strong sense of atmosphere.

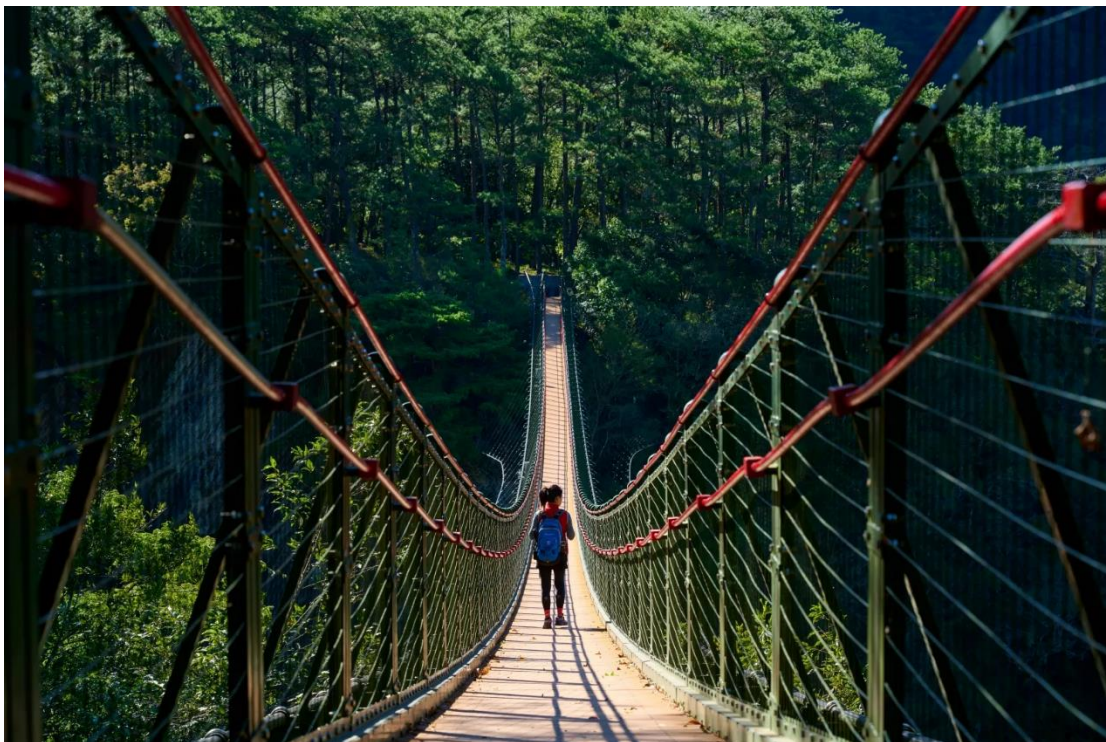
At different times, places, and angles, you can enjoy different scenes of Aowanda's autumn colors. This year, why not slow down, spend more time, and find the most beautiful scenery in Aowanda through your eyes.



On the trail to Xinennwar Mountain, you can enjoy the view of the great cliff face of Mahaipu Fuji Mountain.



Aowanda is a well-known spot for viewing maple leaves, but few people know that there is a hidden hiking trail connected within the park.



Crossing the Aowanda Suspension Bridge leads to the park's most remote pine forest area.



The adjustment pool in Aowanda Park offers a great view for mountain watching and sunset viewing, with the colors gradually becoming vibrant in autumn.

Control Group News Report - This article was adapted from Commonwealth Magazine, Issue 761 (1632 words).

Reference link: <https://reurl.cc/Z9xXlA>

Appendix 5: Reading Only News Photos

[Title] War Crime Watch: Experiencing Devastating Atrocities in Bucha

Bucha, Ukraine—In the basement of an abandoned yellow house at the end of a street near the railway tracks lies a body. The man is young and pale, with a dried bloodstain by his mouth. He was shot and left in the darkness, with no one knowing why the Russians brought him to a house that wasn't his.

Near the stairs leading to the basement, there is a pile of toys. Under the cold, gray sky, plastic clothespins sway on an empty clothesline. They are the only remaining normal things at the dark end of this Bucha street, where burnt vehicles shed their tank treads, civilian cars are crushed, and empty military rations and liquor bottles are piled next to Russian Air Force boxes. The man in the basement is almost an insignificant presence, just another body in a town full of death, with no satisfying explanation for his fate.

This story is part of an ongoing investigation by "War Crime Watch - Ukraine."



Photos taken on Sunday, April 3, 2022, show the bodies of men lying on the streets of Bucha,

Ukraine, some with their hands tied behind their backs. They were kidnapped and killed by Russian soldiers during a sweep of Bucha's streets on March 4, 2022.



Photos taken on Wednesday, April 6, 2022, show police officers identifying the bodies of civilians killed during the Russian occupation of Bucha, with the bodies to be sent to the morgue for further examination after identification.



Photos taken on Monday, April 4, 2022, show Ira Gavriluk¹ holding her cat as she walks past the bodies of her husband, brother, and a stranger who died in front of her house.



Photos taken on Monday, April 4, 2022, show a man named Dmytro Chaplyhin, found dead by a neighbor on the roadside at 144 Yablunska Street, near a factory that had been occupied

by Russian troops as a base.



Photos taken on Sunday, April 3, 2022, show multiple bodies buried together in a mass grave in Bucha.



Photos taken on Saturday, April 16, 2022, show a 70-year-old woman named Nadiya

Trubchaninova crying over the coffin of her 48-year-old son, Vadym, who was killed by Russian forces occupying Bucha on March 30.



Photos taken on Sunday, April 3, 2022, show a large mass grave in Bucha.



Photos taken on Saturday, April 2, 2022, show Ukrainian forces discovering the streets filled

with residents killed by Russian troops after retaking Bucha.



Photos taken on Wednesday, April 6, 2022, show a family walking among the destroyed Russian tanks in Bucha.



Photos taken on Tuesday, April 12, 2022, show medical workers loading the bodies of civilians killed in Bucha onto a truck, preparing to transport them to a morgue in the suburbs

of Kyiv for further investigation.

Image News Report - This article was adapted from AP's "War Crime Watch - Ukraine"

(Not visible to subjects).

Reference link: <https://reurl.cc/dLZ7O8>

Appendix 6: Neutral Article Confusing the Purpose of the Experiment

[Title] Everyone Is Crazy About Sports – Are You Exercising Correctly?

Source: Commonwealth Magazine, Issue 582; Published on: September 30, 2015

In recent years, a wave of sports enthusiasm has swept across Taiwan. With the crisp autumn weather, you can see people running in parks, hiking in the mountains, and cycling in the countryside. But have you chosen the right exercise for yourself? Here are four steps to help you "check up" on your exercise habits.

Step 1: Assess Your Physical Condition

"Everyone's physical condition is different," emphasized Fang Jinlong, a professor in the Department of Physical Education at National Taiwan Normal University, during an interview. "Therefore, it's essential to assess your physical condition first; otherwise, you may risk exercise-related injuries." Fang provided several self-assessment points. For example, if you or your family members have cardiovascular disease, diabetes, or respiratory diseases, or if you suffer from arthritis or osteoporosis, it is advisable to consult a doctor before starting an exercise regimen. For those who do not have a regular exercise habit, it is also important to evaluate your capability and proceed gradually.

Step 2: Choose Exercises Based on Your Needs

Do you want to stay healthy, lose weight, or relieve fatigue? Fang Jinlong suggests that choosing an exercise program based on your needs will yield better results. The American College of Sports Medicine (ACSM) recommends that to maintain health, aerobic exercise, resistance training, and stretching exercises should all be emphasized equally. Common aerobic exercises include brisk walking, jogging, cycling, swimming, and dancing. It is recommended to engage in at least 150 minutes of moderate-intensity aerobic exercise or 75 minutes of vigorous aerobic exercise per week. If it's difficult to gauge the intensity of exercise, it should at least reach the level of "feeling slightly challenged but still able to talk,

without pain," according to Fang. In addition, it's essential to engage in resistance training to improve muscular fitness. The ACSM also suggests increasing the amount of aerobic exercise if the goal is weight loss. For instance, moderate-intensity aerobic exercise should be increased from 150 minutes per week to 200–300 minutes. It should also be complemented with resistance training. Fang explained that increasing muscle mass can boost basal metabolic rate, allowing the body to burn energy even at rest.

Step 3: Adjust Exercise Intensity According to Time of Day

Is it better to exercise in the morning or at night? Fang Jinlong stated that as long as you find time to exercise, any time of day is good. However, you can adjust the intensity based on the time of day. Since body temperature is lower in the early morning, engaging in high-intensity exercise immediately upon waking up is like pushing a computer to run programs before it's fully warmed up—it's not advisable. Therefore, moderate to low-intensity aerobic exercise is recommended in the morning, and it's important to warm up properly before exercise, such as rotating joints and shaking limbs, rather than just doing static stretching. In the late afternoon to evening, body temperature is at its highest, making it more suitable for high-intensity exercise. However, avoid engaging in intense exercise one or two hours before bedtime, as it may affect sleep.

Step 4: Monitor and Respond to Your Condition

"During and after exercise, you should always monitor your condition," Fang Jinlong reminded. It's important to record the type of exercise, frequency, duration, and physical response. Pain, in particular, is an important warning sign from your body and should not be ignored. By assessing your physical condition, choosing the right exercise, and monitoring your condition, you can become the master of your body and create a personalized exercise plan!

Neutral Article Confusing the Purpose of the Experiment - This article was adapted

from Commonwealth Magazine, Issue 582.

Reference link: <https://reurl.cc/j30lpM>