The Influence of Empathy and the In-Group-Out-Group Bias on the Content of

Condolence Letters: It is All About the Details

Marouscha Scheffer

Department of Conflict, Risk & Safety, University of Twente

202000377: Conflict, Risk and Safety

First Supervisor: Dr. Max A. Friehs

Second Supervisor: Jedidjah. G. Schaaij

June 26, 2024

Abstract

With hostilities towards individuals perceived as not belonging to one's own group becoming increasingly common, it is important to investigate the mechanisms contributing to these perceptions, such as the in-group-out-group bias. This study aimed to explore the role of empathy in letter writing within the context of a manipulated in-group-out-group situation. Specifically, it examined whether an individual's level of trait empathy influenced the detail and length of condolence letters written to the families of an in-group and out-group soldier. A story recording was created in which participants ($N = 46$) were asked to imagine themselves as commanding officers and had to write two letters from this perspective: one to the family of an in-group soldier and one to the family of an out-group soldier. Levels of trait empathy were measured using the Toronto Empathy Scale (TEQ). Data analysis revealed no significant relationship between participants' levels of trait empathy and the content or length of the letters written to the families of the in-group and out-group soldier. However, differences in content and length were observed between in-group and out-group letters, indicating the presence of an in-group-out-group bias, but this effect was not influenced by empathy levels. As there is currently little known about whether the in-group-out-group bias manifests in fictitious scenarios and on an individual level, this study contributes to this body of knowledge by suggesting that this bias can indeed emerge even in fictitious war settings and influence the perception of individual persons. Moreover, the current study highlights the importance of writing in communication research by demonstrating that written letters convey differing emotional responses, thereby emphasising their potential role in supporting grieving individuals during emotional processing.

Keywords: Empathy; In-Group-Out-Group Bias; Condolence Letters; Recorded Narrative; World War 2

Contents

The Influence of Empathy and the In-Group-Out-Group Bias on the Content of

Condolence Letters: It is All About the Details

When a loved one suddenly passes away, family members of the deceased often receive condolence letters from other relatives expressing empathy and compassion for their loss. These letters often help family members feel supported during the grieving process, which can subsequently aid them when coming to terms with the passing of a loved one (Mayer, 2017). Therefore, it is important to consider how these emotional messages are conveyed to ease the pain of surviving family members.

Communication and Grief

Throughout history, letters have been a common means of communication between soldiers on the battlefield and their families back home. These letters served not only to keep in touch but also to provide mutual support and maintain familial bonds during the hardships of war (Carter & Renshaw, 2016; Vaizey, 2010). Through letter writing, individuals express ideas, emotions, and provide insights into their interactions with others (Nevala & Palander-Collin, 2005). The emotional depth of these communications is especially evident in condolence letters, which are written, for example, to console a grieving family that has just learned of a loved one's death in combat (Durflinger, 2000). In such cases, emotional responses are heightened, leading to an increased expression of emotions (D'Mello & Mills, 2013). Consequently, condolence letters often include abundant use of affection, emotionality, and sorrow in their wording. Hence, analysing condolence letters provides a valuable opportunity to explore how individuals navigate and articulate emotions in their communication during times of profound loss. By understanding these emotional expressions, support for grieving individuals can be enhanced by ensuring that written communications offer comfort effectively.

Effective communication plays a crucial role in supporting individuals through grief. When a family learns of the sudden passing of a loved one, it causes significant disruption and grief within the household (Neimeyer & Sands, 2011). During these moments filled with grief, it is important to create a safe and supportive space for the family to process the distressing information. When bereaved family members are not properly aided in the process of grief, their mental well-being is more likely to deteriorate. Consequently, they run a higher risk of developing mental illnesses such as depression or prolonged grief disorder (Moreira et al., 2023; Szuhany et al., 2021). Therefore, it is essential to build a connection by showing understanding and using sensible language when communicating about emotional topics. This can be achieved through the proper use of empathy when communicating about grief.

Empathy in Grief Communication

Empathy as a personality trait can be understood as the ability to understand and experience someone else's emotions from one's own perspective (Cuff et al., 2016). Previous research indicates that regardless of empathy being considered as a trait, it is not a set concept. Rather, it can be acquired through repeated acts of perspective-taking, resulting in varying levels of empathic ability among individuals (Ratka, 2018). Moreover, empathy is tightly intertwined with the development of communication skills (Öğüt et al., 2022). It increases the ability to understand and connect with another individual, as well as improve communication on topics such as emotions and their accompanying experiences (Ioannidou & Konstantikaki, 2008; Meneses & Larkin, 2016). This holds even in non-verbal communication methods, such as letter writing, where conveying empathy is challenging due to the absence of additional cues like facial expressions that help interpret the message (Botrugno, 2019; Duffy et al., 2023; Lemay et al., 2017). Therefore, using appropriate communication techniques, such as perspective-taking, is crucial to effectively express empathy in writing (Shaffer et al., 2019). Moreover, multiple studies indicate that using a

letter-writing task, participants can enhance their empathic abilities (Mrduljaš-Đujić et al., 2013; Schoonover et al., 2019). Therefore, given the emotionality expressed in condolence letters addressing topics such as grief and bereavement, it is reasonable to assess empathy within these communication methods.

In-Group-Out-Group Bias

Considering the complexity of emotional expression, it is important to recognise factors that shape how individuals relate to others. One significant dynamic in this regard is the creation of group distinctions, driven by a biased perspective known as the in-group-out-group bias. This bias leads individuals to perceive their own group more favourably than groups they are not a part of (Ruffle & Sosis, 2006). Group distinctions can emerge based on various factors, including cultural differences, societal norms, and personal motivations (Ruffle & Sosis, 2006). Additionally, conscious efforts to create group distinctions can further exacerbate this bias (Greven & Ramsey, 2017). Moreover, the in-group-out-group bias manifests in various behaviours, such as perspective-taking, derogation, and even deriving pleasure from an individual's suffering, alongside difficulties in empathising with out-group members (Cikara et al., 2014; Hudson et al., 2019; Mashuri et al., 2013; Richins et al., 2021). Understanding the in-group-out-group bias is crucial as it significantly influences social interactions and can lead to prejudiced behaviours and attitudes towards those perceived as outside one's own group.

The in-group-out-group bias becomes particularly evident in situations of warfare, as there is a clear delineation between the in-group and out-group. During combat, many different parties are involved both on opposing sides of the conflict. Allies fighting on the same side during a conflict are considered part of the in-group because they share a similar perspective that is easier to identify with (Ruffle & Sosis, 2006). On the other hand, individuals with opposing perspectives on a conflict are more difficult to identify with.

Therefore, they are often considered as part of an out-group. This bias plays an important role in shaping attitudes and behaviours during warfare, which can help explain the gruesome acts sometimes committed against members of an out-group. Previous research shows that members of an out-group can be dehumanised by depriving them of their cognitive aptitude and civility (Borinca et al., 2023). This deprivation strips these individuals of their positive human traits, making them appear more animal-like, and ultimately leads to their treatment as less than human. In some instances, it goes as far as portraying these out-group members as more threatening. This leads to the support of actions that will cause them harm, as can be observed when individuals commit a war crime (Kteily et al., 2016). Understanding these group dynamics sheds light on the complexities of the in-group-out-group bias, revealing its profound impact on conflicts and providing insights into the behaviours and attitudes exhibited during warfare.

Nonetheless, individuals may identify more strongly with one group over another for reasons other than being on opposing sides of a conflict. Even within a specific military unit, the creation of in-group and out-group dynamics can occur. Differences based on factors such as gender or ethnicity can lead to stronger identification with similar soldiers, compared to those perceived as dissimilar (Ben-Shalom, 2012). To avoid the creation of the in-group-out-group bias within a military unit it is important to underline the shared goal during conflicts. Emphasising the importance of collaboration to achieve a common goal can foster a sense of unity, creating new perspectives on group dynamics (Galinsky, 2002). However, this sense of unity may falter when an emotional event occurs that disrupts the group dynamics.

In-Group-Out-Group Bias and Empathy

During combat, many emotional events occur that can interfere with the ability of soldiers to feel empathy towards members belonging to an out-group. For example, Richins et al. (2021) found that responses towards the suffering of out-group members contained less

empathy when individuals were exposed to fearful imagery than without inducing this fearful state. Furthermore, individuals demonstrate more empathy and out-group helping than their counterparts when they are strong on perspective-taking and perceive an out-group to be of lower status (Mashuri et al., 2013). Therefore, levels of empathy and other traits alike can differ under specific circumstances and between different individuals.

Moreover, levels of trait empathy can directly influence the extent to which an individual experiences empathy for out-group members. Plieger et al. (2022) discovered that individuals with higher levels of trait empathy were less likely to fear out-group members when compared to those scoring lower on trait empathy. Additionally, research by Hudson et al. (2019) revealed that individuals who preferred promoting in-group-out-group divisions tended to score lower on trait empathy and perspective-taking measures. Furthermore, individuals with higher levels of trait empathy demonstrated greater empathy towards the pain experienced by out-group members than individuals with lower trait empathy (Han, 2018). Consequently, individuals with higher levels of trait empathy experienced reduced effects of the in-group-out-group bias. Drawing from this research, it is reasonable to assume that individuals scoring higher on trait empathy react empathically towards both in-group and out-group members. This is likely to also extend to their letters since they are better at expressing emotions in their writing (Nevala & Palander-Collin, 2005).

The Current Research

As war is a current topic of debate, it is important to fully understand the psychological phenomena that contribute to the creation and continuation of these conflicts. The majority of prior research on the in-group-out-group bias has primarily focused on global group affiliations and real-life warfare data. However, there is a lack of studies exploring how this bias operates in fictitious war scenarios and on the perception of individual persons. This study aims to address these gaps in the literature by assessing whether the in-group-out-group

bias becomes evident in scenarios where participants are asked to imagine themselves in a war setting and write letters about individual soldiers designated as either in-group or out-group members. This can help shed light on the dynamics of the in-group-out-group bias and the factors that help sustain this division. In addition, investigation into the topic of grief and letter writing is relatively new within the field of communication research. Prior research on empathy and grief communication mainly focuses on verbal communication within the medical field (Angell, 1998; Hebert et al., 2009). Therefore, this study seeks to contribute to the understanding of communication by exploring how empathy is expressed in written letters. Learning more about empathy in written communication is important because written forms of communication, such as condolence cards, are still prevalent nowadays. By gaining a better understanding of how empathy can effectively be conveyed through writing, written communication methods can be made more supportive and emotionally resonant. This is especially relevant in areas such as grief and bereavement, where conveying empathy through writing can significantly contribute to creating a more supportive environment for grieving individuals.

The current study thus aims to extend existing research on trait empathy and the in-group-out-group bias in letter writing. This will be accomplished by addressing the following research question: '*Does the level of trait empathy influence the content, or the extent of the letters written to the families of a deceased in-group versus out-group soldier?'*. To this end, two different hypotheses are formulated.

Hypothesis 1

Individuals who score lower on trait empathy react less empathically towards out-group members than they do towards in-group members (Han, 2018; Plieger et al., 2022). Furthermore, empathy encourages individuals to emotionally connect with others and express this in their communication (Ioannidou & Konstantikaki, 2008). Therefore, it is likely that

individuals with lower trait empathy scores, as opposed to those with higher levels, write letters to the out-group with fewer details regarding expressions of sorrow, showing understanding, and sensitivity towards the circumstances of the bereaved families. Accordingly, the first hypothesis is formulated as follows: *'Participants with lower levels of trait empathy write more detailed letters to the family of an in-group soldier than to the family of an out-group soldier. In contrast, participants with higher levels of trait empathy write letters of similar detail to both families.'*

Hypothesis 2

Research suggests that individuals reporting lower levels of empathy are more susceptible to the in-group-out-group bias (Hudson et al., 2019; Plieger et al., 2022). Moreover, empathic grief communication requires mutual understanding, perspective-taking, and support towards the bereaved families (Mayer, 2017; Meneses & Larkin, 2016; Shaffer et al., 2019). Consequently, Individuals experiencing difficulty in empathising with out-group members are expected to have more difficulties formulating longer written messages for this group. However, this effect is anticipated to be less pronounced in individuals with higher levels of empathy. Therefore, the second hypothesis states as follows: *'Participants with lower levels of trait empathy write lengthier letters to the family of an in-group soldier than to the family of an out-group soldier. In contrast, participants with higher levels of trait empathy write letters of similar length to both families.'*

Methods

Participants

The survey was completed by a total of 81 participants. A convenience sample was used to recruit participants either through the University of Twente BMS's SONA-systems sampling platform or by distributing the survey link online. If participants signed up and completed the study through SONA-systems, they were rewarded with course credits. Ethical

approval was granted before the start of data collection, which lasted for approximately four weeks. To be eligible to participate in the study, participants had to be at least 18 years old and have a sufficient comprehension of the English language. Furthermore, a disclaimer was given to make participants aware of the discussion of sensitive topics such as war and death during the study. To ensure reliability of the data for analysis, several exclusion criteria were implemented. Participants were excluded if they did not give informed consent or failed to complete the entire questionnaire. Additionally, a control question was included in the survey to confirm whether participants had watched the entire video recording; those who answered "No" were removed from the dataset. Lastly, participants who failed to write both letters were also excluded from the study. These criteria resulted in a total of 35 participants being removed from the dataset.

Design & Procedure

This study used a within-subjects research design and consisted of an online survey that participants were asked to fill out. First, they were introduced to the study and asked to carefully read and give their informed consent (see Appendix A). Next, demographic data was gathered, including age, gender, and nationality. To measure empathy levels, the Toronto Empathy Questionnaire (TEQ) was administered (Spreng et al., 2009). Additionally, two questions were included to self-report perceived interest and previous general knowledge on the topic of World War 2.

After completing the first part of the survey, participants watched a video recording of a story narrative (see Figure 1). They were asked to imagine themselves in the role of a commanding officer during the 'Battle of the Bulge' which took place in the Ardennes during the Second World War. The video aimed to transport them into the battle scene and introduced the writing tasks and soldier descriptions. Watching the recording took approximately five minutes and was followed by a control question to confirm whether they

watched the entire video. Afterwards, participants completed the Transportation Scale – Short Form (TS-SF), which measures how transported they felt into the story narrative (Appel et al., 2015).

Next, participants completed two letter-writing tasks. Each task began with a reminder of the story recording, providing the option to rewatch the video before writing the letter. Additionally, a picture of the soldier and their character description were included to aid in writing the letters (see Figure 1). The order of the two soldiers was the same for each participant. First, they were asked to write a letter to the family of the out-group soldier, and then to the family of the in-group soldier. After each writing task, there was the option to leave any final remarks on either the soldier or the written letter.

Lastly, participants answered a few debriefing questions and a manipulation check to ensure attention was paid to the story narrative. They self-reported their perceived interest and general knowledge of the topic of World War 2 after completing the writing tasks. They were also asked which soldier was the most likeable as a manipulation check, to determine if the in-group-out-group effect was reflected in their attitudes. Additionally, an open question was included to allow participants to share the context of their answer on the manipulation check. Finally, they were thanked for their participation in the study and allowed to ask questions or leave final remarks.

Figure 1

Set-Up of the Video Recording and Writing Tasks in the Survey

Note. The Left picture in the figure depicts an example of the survey page presented to participants when they were asked to watch a short video recording. The right picture in the figure shows an example page of one of the writing tasks in the survey.

Materials

Since this study consisted of an online survey, participants were required to have access to a computer or smartphone with a working internet connection to be able to participate. The survey itself was created using the online survey software platform Qualtrics. The survey used the TEQ created by Spreng et al. (2009) and the TS-SF from Appel et al. (2015). Additionally, it included two questions that asked participants to report their self-

perceived interest and general knowledge of World War 2 on a scale of 1 to 10, both before and after completing the writing tasks. Lastly, the qualitative data analysis tool ATLAS.ti was used to analyse the written letters.

Story Recordings

Within the survey, two video recordings of the story narrative were implemented. These videos were recorded in the Do-It-Yourself studio at the University of Twente and depicted a PowerPoint slide show with real photographs taken during the Battle of the Bulge to assist the recorded story narrative (see Figure 2). The narrative itself was subdivided into three different parts. The first part of the video focused on setting the scene and getting the participants immersed in the battle and their role as commanding officer. The second part presented the battle from a bird's eye view, introducing necessary background details to aid participants in their understanding of the subsequent writing tasks. Lastly, participants were informed that two of the soldiers of their unit deceased under their command and were given a description of these soldiers. Subsequently, they were made aware that they were given the task of writing a letter to the relatives of both these soldiers to inform them of their passing. The written script of this story narrative can be found in Appendix B.

The two soldier descriptions aimed to create a clear distinction between an in-group and out-group character. This was done through the implementation of certain details in the character description that were supposed to make participants favour one of the soldiers over the other. An example of such detail was the inclusion of "a pendant containing a photo of his loved ones" in the listing of the personal belongings that could be sent back to the family of the in-group soldier. This detail was left out for the description of the out-group soldier.

Additionally, to control for potential variability between interpretations of the two different voices of the researchers that were used in the recordings, the recordings were cut up in parts and merged in a different order so that each researcher's voice was included in

both videos. Therefore, two different videos were created in which the same story narrative was told but each researcher recorded either the beginning and end of the narrative in one video and the middle part in the other video. Participants were randomly assigned to either one of these two video recording conditions while completing the survey. The two recordings were published on the online video platform YouTube and implemented in the Qualtrics survey. Both videos can be found on the YouTube channel Research (2024)[12].

Figure 2

Example of a PowerPoint Slide Used in the Video Recording
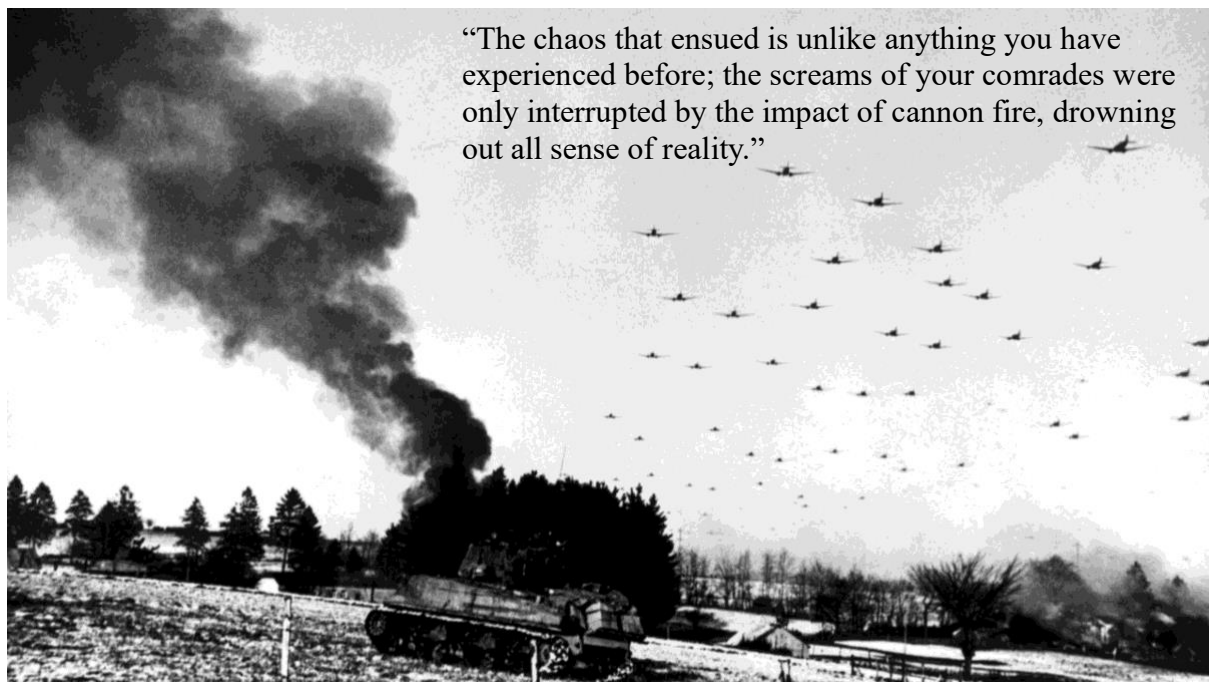
Note. The figure showcases an example of one of the PowerPoint slides that was used in the video recording. The text presented in quotation marks in the right corner depicts the recorded narrative for this slide.

---

[1] Research. (2024, March 21). *Research* [Video]. YouTube.
https://www.youtube.com/watch?v=0YcnSuLyETM&t=1s

[2] Research. (2024, March 21). *Research 2* [Video]. YouTube.
https://www.youtube.com/watch?v=TfdqXV3A-2w

The Toronto Empathy Questionnaire (TEQ)

To be able to assess participants' levels of trait empathy, the survey made use of a self-report measurement created by Spreng et al. (2009) called the Toronto Empathy Questionnaire (TEQ). This questionnaire contains a total of 16 statements of which eight statements are positively worded, for example, "I enjoy making other people feel better" and "It upsets me to see someone being treated disrespectfully". The other eight statements are reverse coded, for example, "Other people's misfortunes do not disturb me a great deal" and "I remain unaffected when someone close to me is happy". Participants are asked to indicate how much they agree with each statement using a 5-point Likert scale with answers ranging from 0 (*Never*) to 4 (*Always*). A participant's final score on the TEQ is derived by calculating the mean score of all the statements. Therefore, the higher the score of a given participant on the TEQ, the higher the level of trait empathy of this participant. In this sample, the TEQ demonstrated satisfactory internal consistency with a Cronbach's alpha coefficient of $\alpha = .81$.

The Transportation Scale – Short Form (TS-SF)3

To test the participants' level of transportation, the Transportation Scale - Short Form (TS-SF) by Appel et al. (2015) was included in the survey. It includes two subscales with a total of six statements scored on a 7-point Likert scale ranging from 1 (*not at all*) to 7 (*very much*). The first subscale consists of four questions and focuses on transportation into, and the emotionality felt with the narrative (TS-Story), while the second subscale consists of two questions and focuses on the ability of participants to depict themselves in the two soldiers described in the narrative (TS-Character). Examples of statements from this questionnaire are: "The narrative affected me emotionally" and "I could picture myself in the scene of the

---

[3] The description of this questionnaire is included in the methods section to account for the completeness of the study description. However, for the scope of this bachelor thesis, the results of this questionnaire will not be further discussed. For more information on the transportation scale used in this study see: Meerhof, J. L. (2024). The Influence of Transportation on the Content of Condolence Letters: It is All About the Details.

events described in the narrative". A participant's final score is determined by calculating the mean score of each statement. Therefore, the higher the participant's score on the TS-SF, the greater their level of transportation. The Cronbach's alpha coefficient for the TS-SF in this sample was calculated to be $\alpha = .82$, indicating satisfactory internal consistency.

Analysis Procedure

Quantitative Analysis Procedure

The first step in the quantitative analysis of the survey scales was to reverse code necessary items on the questionnaires, followed by calculating the mean and total scores for each scale and subscale. The Cronbach alpha scores were also computed for each questionnaire to assess their reliability. Additionally, correlational analyses were performed to explore potential interactions between traits and other variables that could influence the data. Moreover, a manipulation check using a chi-squared test was conducted to determine whether the narrative frame succeeded in creating an in-group and an out-group soldier. Finally, a multivariate linear regression analysis was performed to assess the relationship between participants' empathy scores and the length and content of their written letters to both in-group and out-group families.

Qualitative Analysis Procedure

To analyse the qualitative data systematically, a thematic analysis method was employed to examine the written letters (Braun & Clarke, 2006). First, the researchers had to familiarise themselves with the dataset (Braun & Clarke, 2019). This was done by independently reading some of the survey letters and having a first initial brainstorm on the potential codes that would fit the content of the letters. Next, the data was subjected to an analysis procedure in which inductive and deductive methods were combined in a so-called abductive approach (Braun & Clarke, 2006; Guest et al., 2012; Timmermans & Tavory, 2012). Here, both researchers read 20 letters each and identified preliminary codes that often

emerged, which were written down in a precursory codebook. They then came together to discuss and review their independent findings, identifying both overlapping themes and discrepancies to refine the codebook as needed. This process was repeated until they agreed on a first draft of the final version. Subsequently, both researchers used this draft to independently code a randomly selected subset of 15% of the letters to evaluate the effectiveness of the codebook for both their coding styles. For these subsets the inter-rater agreement was calculated and determined to be 75%. The researchers had to review each code, determining their specific meaning and usual emergence in the data. Moreover, codes that were deemed redundant were removed from the dataset while missing codes were introduced. This process was again repeated until everyone involved agreed and a final codebook could be determined. Now, each researcher coded all the letters in the dataset according to the final codebook. Afterwards, the coded letters were swapped and looked over by the other researcher to ensure cohesiveness. Lastly, codes that were deemed similar were grouped into overarching code groups, which were then organised into broader themes. In "Results – Analysis Survey Letters" a comprehensive overview of the final codebook can be found. This includes the themes, code groups, and codes, organised per theme, which are presented in Tables 2, 3, 4, and 5. Numerical scores for each theme, code group, and code were calculated separately for each participant's in-group and out-group letter. This division allows for a detailed analysis of the differences in letter content.

Results

Demographics

After the criteria determined in "Methods – Participants" were implemented, a final sample size of 46 participants was left for use in the analysis. This sample included a total of 27 female and 19 male participants with a mean age of 23.91 ($SD = 8.18$). The youngest participant was 18 years old, while the oldest was 59 years old (Median = 22). Most

participants indicated that their nationality was Dutch ($n = 22$), followed by German ($n = 16$), and other ($n = 8$). If participants indicated 'other' as their nationality they were asked to specify; American = 3, Belgian = 1, Canadian = 1, Danish = 1, Polish = 1, Romanian = 1. Additionally, participants were asked to self-assess their general knowledge and interest in World War 2 on a scale of 1 to 10 before and after completion of the survey. Prior to completion of the survey, knowledge scores ranged from 1 to 10 with a mean score of 5.80 ($SD = 1.97$) and a median of 6, alongside interest scores ranging from 2 to 10 with a mean score of 6.74 ($SD = 1.84$) and a median of 7. Following completion of the survey, general knowledge scores ranged from 1 to 9 with a mean score of 5.87 ($SD = 1.80$) and a median of 6 and interest scores ranged from 2 to 10 with a mean score of 6.76 ($SD = 1.83$) and a median of 7.

Empathy Questionnaire

Scores on the TEQ ranged from 2.4 to 3.8 with a median of 3.1. To explore potential relationships within the data, a correlational analysis was conducted. Table 1 provides an overview of the mean and standard deviation for each questionnaire and their correlations. When comparing the TEQ to the TS-SF and both its subscales, no significant correlations could be observed. This suggests that variations in participants' scores on the TEQ did not affect their scores on any of the other factors measured by the TS-SF. However, significant correlations were found between the TS-SF and both of its subscales, TS-Story, and TS-Character. In addition, a significant correlation was also found between the two subscales TS-Story and TS-Character. This indicated a strong positive relationship between the overall TS-SF questionnaire and its subscales, suggesting that changes in scores on one subscale or the overall questionnaire were associated with changes in scores on the other subscales or the overall questionnaire.

Table 1

Correlational Analysis of the Questionnaires Including Descriptive Statistics

	Mean	SD	2	3	4
1 TEQ	3.1	0.4	0.19	0.23	0.07
2 TS-SF	4.7	1.0		0.91***	0.82***
3 TS-Story	4.8	1.0			0.51***
4 TS-Character	4.6	1.4			

Note. Mean and standard deviation for each scale and subscale; TEQ, TS-SF, TS-Story, and TS-Character. As well as the correlations between each scale.

***$p < .001$.

Manipulation Check

A manipulation check was conducted to assess which soldier participants found most likeable. To this end, a chi-squared test was conducted, comparing the categorical responses 'In-group soldier', 'Both', and 'Neither'. Since no participants chose the 'Out-group soldier' response, this category was excluded from the analysis. The results showed significant differences in participants' preferences among the three categories (X^2 (2, $N = 46$) = 22.09, $p < .001$), implying that a prominent majority of the participants favoured the 'In-group soldier' ($N = 28$) over the response options 'Both' ($N = 16$), and 'Neither' ($N = 2$). This indicated a consistent preference for the 'In-group soldier' among participants compared to the other response options.

Analysis Survey Letters

On average, participants wrote letters to the family of the in-group soldier with a length of 119 words (Median = 104) with the shortest letter being 38 words and longest letter being 328 words. Additionally, the letters written to the family of the out-group soldier had an

average length of 96 words (Median = 89) with a minimum of 33 words and a maximum of 222 words. This suggested that, on average, the letters written to the family of the in-group soldier were 23 words longer than those written to the family of the out-group soldier, highlighting a notable difference in the length of letters between the two groups. As indicated in the codebook, all codes that were created were organised into specific code groups where relevant, and these code groups and single codes were then categorised under overarching themes. The overarching themes that were created are 'Formalities', 'Solace', 'Soldier characteristics', and 'Team dynamics'.

The theme 'Formalities' (see Figure 3 for its distribution) appeared on average 3.46 times ($SD = 0.66$) in the letters to the in-group soldier's family and 3.5 times ($SD = 0.72$) times in letters to the out-group soldier's family. This theme included code groups addressing formal aspects of letter writing, including 'Salutations', used at the start of a letter to address the recipient ("Concerning the family members of John Miller") and 'Sign-off', used to conclude the letter ("My deepest condolences, commanding officer"). Under the code group 'Salutations' were two codes placed: 'Addressing family' and 'Personal greetings'. The frequency of 'Addressing family' was 2 in the in-group letters and 4 in the out-group letters, while 'Personal greetings' appeared 44 times in the in-group letters and 42 times in the out-group letters. Similarly, the code group 'Sign-off' encompassed the codes 'Empathic sign-off' and 'Regular sign-off'. The frequency of 'Empathic sign-off' was 25 in the in-group letters and 23 in the out-group letters; for 'Regular sign-off', the frequency was 11 in the in-group letters and 12 in the out-group letters. Lastly, the code group 'Details of death' was included, comprising expressions that aimed to convey the message of a soldier's passing ("I inform you of the passing of your son, John Miller"), and additional details surrounding the way the soldier passed ("He was shot and killed during a push to break the enemy frontlines"). The first code in this code group was 'Death statement' with a frequency of 46 in the in-group

letters and 47 in the out-group letters. Additionally, 'Gruesome details' was also included, which had a frequency of 31 in the in-group letters and 33 in the out-group letters. When comparing the frequencies for each code per group, no significant differences were evident. Moreover, for both the in-group and out-group letters, participants employed the codes similarly. This suggests that the use of the theme 'Formalities' was consistent across both groups. See Table 2 for a complete overview of this theme.

Figure 3

Distribution of the Theme Formalities in the Survey Letters Split by In-Group and Out-Group
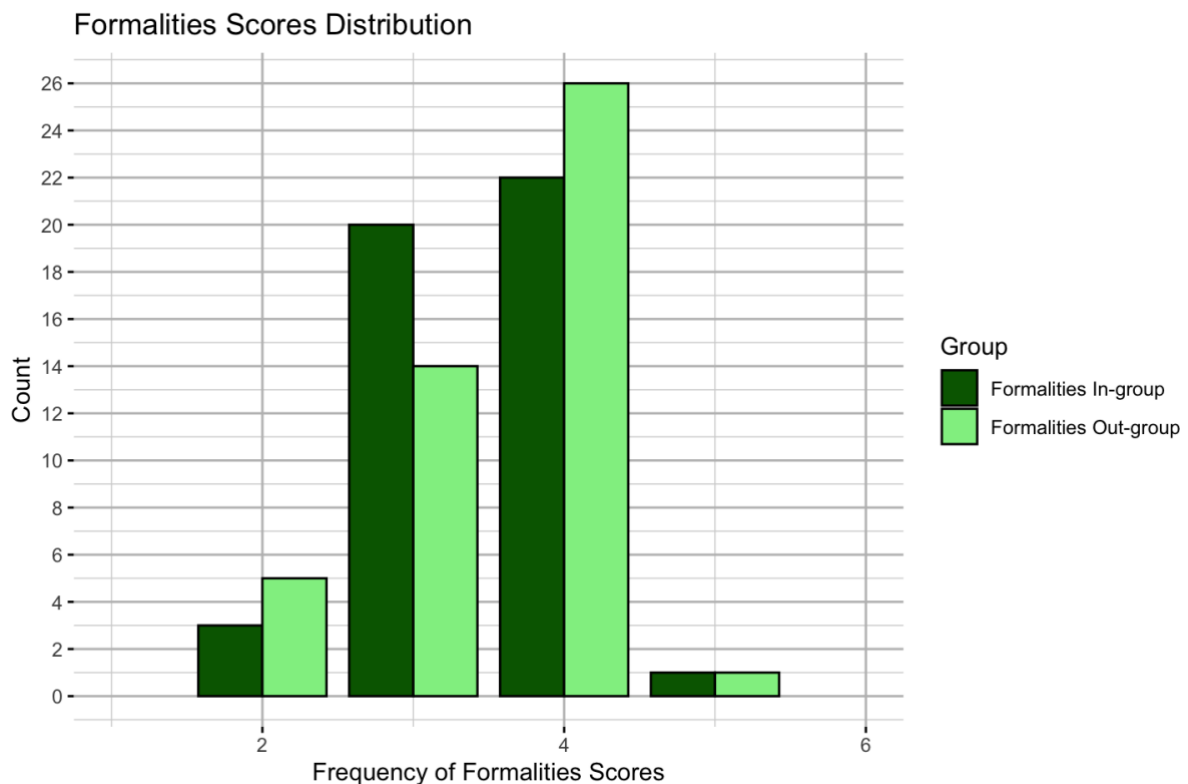
Note. This figure displays the distribution of scores for the theme 'Formalities' categorised by in-group and out-group. On the x-axis, the frequency of each score is depicted, while the y-axis represents the number of letters corresponding to each score.

Table 2

Overview of the Codebook for the Theme Formalities

Theme	Code group	Code	Quotation	Frequencies		
				Overall	**In-group soldier**	**Out-group soldier**
Formalities				320	159	161
	Details of death			157	77	80
		Death statement: Phrases that simply state that the soldier has passed away without giving any additional detail.	*"Your son, Harry, has passed away during the battle".*	93	46	47
		Gruesome details: Phrases that present more detail about the exact way the soldier passed away.	*"He was shot and killed during a push to break the enemy frontlines".*	64	31	33
	Salutations			92	46	46
		Addressing family: Letters starting off specifically stating that the written letter	*"Concerning the family members of John Miller".*	6	2	4

	is addressed to the family of one of the deceased soldiers.				
	Personal greetings: Letters starting off with a personal greeting to the family of one of the soldiers.	*"Dear Mrs. and Mr. Taylor"*.	86	44	42
Sign-off			71	36	35
	Empathic sign-off: Conclusions to a letter that have been embellished by adding additional detail that indicate a higher expression of emotionality.	*"May his honourable soul rest in peace Commanding officer Sir Sirring"*.	48	25	23
	Regular sign-off: Standard conclusions to a letter that have no additional detail to indicate higher emotionality.	*"Greetings ..."*.	23	11	12

Note. This table displays the grouping of code groups and codes under the theme 'Formalities'. It includes explanations and example quotes for each code, as well as overall frequencies and frequencies split by in-group and out-group.

The theme 'Solace' (see Figure 4 for its distribution) appeared on average 4.93 times (SD = 2.62) in letters to the in-group soldier's family and 4.61 times (SD = 2.09) in letters to the out-group soldier'. This theme encompassed various codes aimed at expressing understanding and providing consolation to the grieving families. It included the code group 'Writer's compassion', reflecting efforts to convey understanding and express sadness towards the family's situation ("Missing a son and brother must be a deep pain only parents and a sister can feel"). This code group included the code 'Perspective taking', which appeared 109 times in the in-group letters and 104 times in the out-group letters, and 'Expressions of grieving', which had a frequency of 65 in the in-group letters and 57 in the out-group letters. Moreover, the single code 'Supportive action or promise' was placed under this theme, indicating offers of assistance in the grieving process ("Additionally, a final salute will be offered as soon as possible"). The frequencies for this code were 53 in the in-group letters and 51 in the out-group letters. When comparing the frequencies of the codes per group, some minor differences could be observed, with the in-group having slightly higher frequencies than the out-group. Additionally, the content of many of the in-group letters appeared to be framed in a somewhat more emotional and personalised manner towards the soldier's family. However, overall, these differences were so small that no significant conclusion could be drawn from them. For a complete overview of this theme see Table 3.

Figure 4

Distribution of the Theme Solace in the Survey Letters Split by In-Group and Out-Group
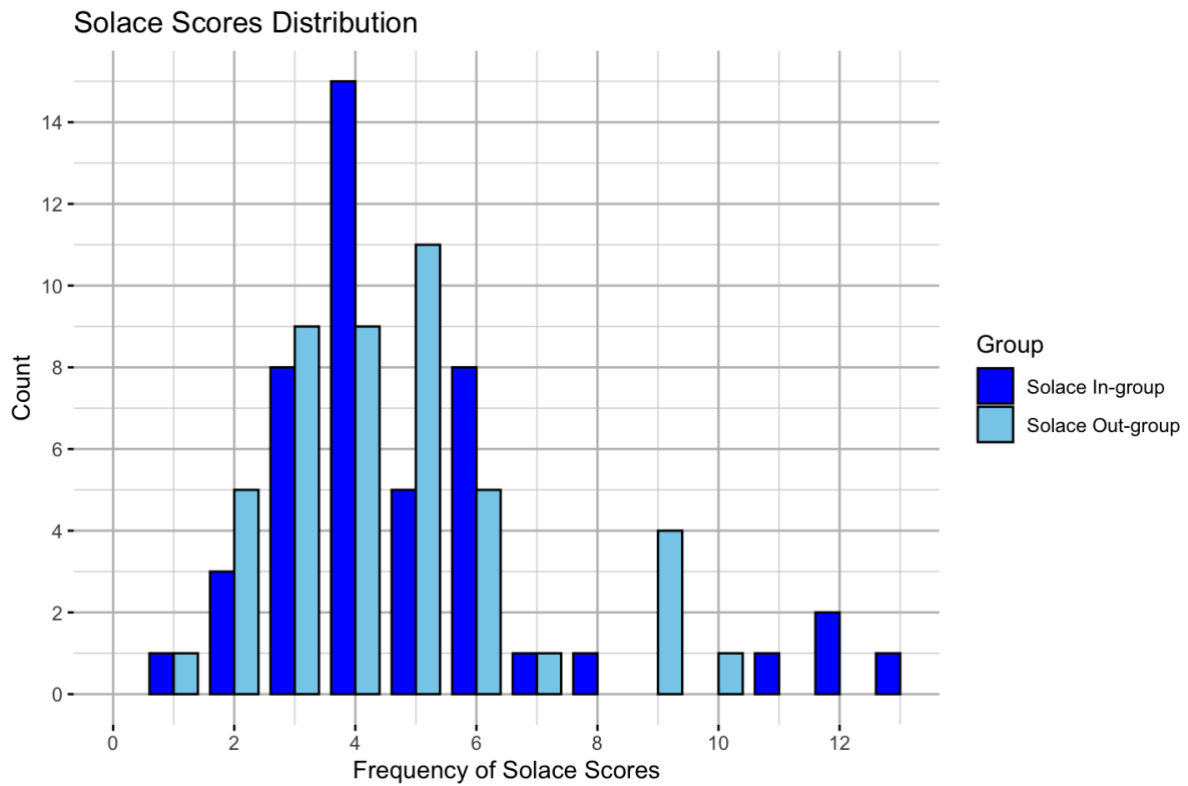
Note. This figure displays the distribution of scores for the theme 'Solace' categorised by in-group and out-group. On the x-axis, the frequency of each score is depicted, while the y-axis represents the number of letters corresponding to each score.

Table 3

Overview of the Codebook for the Theme Solace

Theme	Code group	Code	Quotation	Frequencies		
				Overall	**In-group soldier**	**Out-group soldier**
Solace				439	227	212
		Supportive action or promise: Phrases that indicate offering a form of help to aid in the grieving process of the family of the deceased soldier by performing some type of action.	*"Additionally, a final salute will be offered as soon as possible".*	104	53	51
	Writer's compassion			335	174	161
		Expressions of grieving: Expressions that show the intense sadness of the writer and/or unit regarding	*"He was an important part of our team, we are all grieving him".*	122	65	57

	the death of the soldier.				
	Perspective taking: Expressions that aim to console the reader, possibly through conveying the understanding of the feelings of the family of the deceased soldier.	*"Missing a son and brother must be a deep pain only parents and a sister can feel"*.	213	109	104

Note. This table displays the grouping of code groups and codes under the theme 'Solace'. It includes explanations and example quotes for each

code, as well as overall frequencies and frequencies split by in-group and out-group.

The theme 'Soldier characteristics' (see Figure 5 for its distribution) appeared on average 1.46 times ($SD = 1$) in letters to the in-group soldier's family and 0.72 times ($SD = 0.72$) in letters to the out-group soldier's family. First, this theme encompassed the single code 'Ambitious work attitude', which described the soldier's commitment to the job ("Harry learned quickly and took his job seriously"). This code appeared 10 times in the in-group letters and 8 times in the out-group letters. Second, the single code 'Devotion to the cause' described the soldier's loyalty to the cause ("For 2 years he has served our country and allies loyally and died for this cause"). This code had a frequency of 12 in the in-group letters and 19 in the out-group letters. Lastly, the single code 'Heroic action or description' included any expression or description of actions undertaken by the deceased soldier that indicated admirable or brave behaviour ("While we were attacked, he sacrificed himself to protect his squad"). This code appeared 45 times in the in-group letters and 6 times in the out-group letters. The differences in code frequency were significant, particularly for the code 'Heroic action or description'. Here, the in-group letters included considerably more positive descriptions of the soldier's admirable and brave actions undertaken during battle. On the other hand, the out-group soldier was more often positively mentioned in relation to the overall cause. This indicated a clear divergence in narrative focus between the two groups. The in-group soldier was depicted with a primary emphasis on their individual attributes, while the out-group soldier was portrayed with a greater emphasis on their contribution to the collective purpose. See Table 4 for a complete overview of this theme.

Figure 5

Distribution of the Theme Soldier Characteristics in the Survey Letters Split by In-Group and
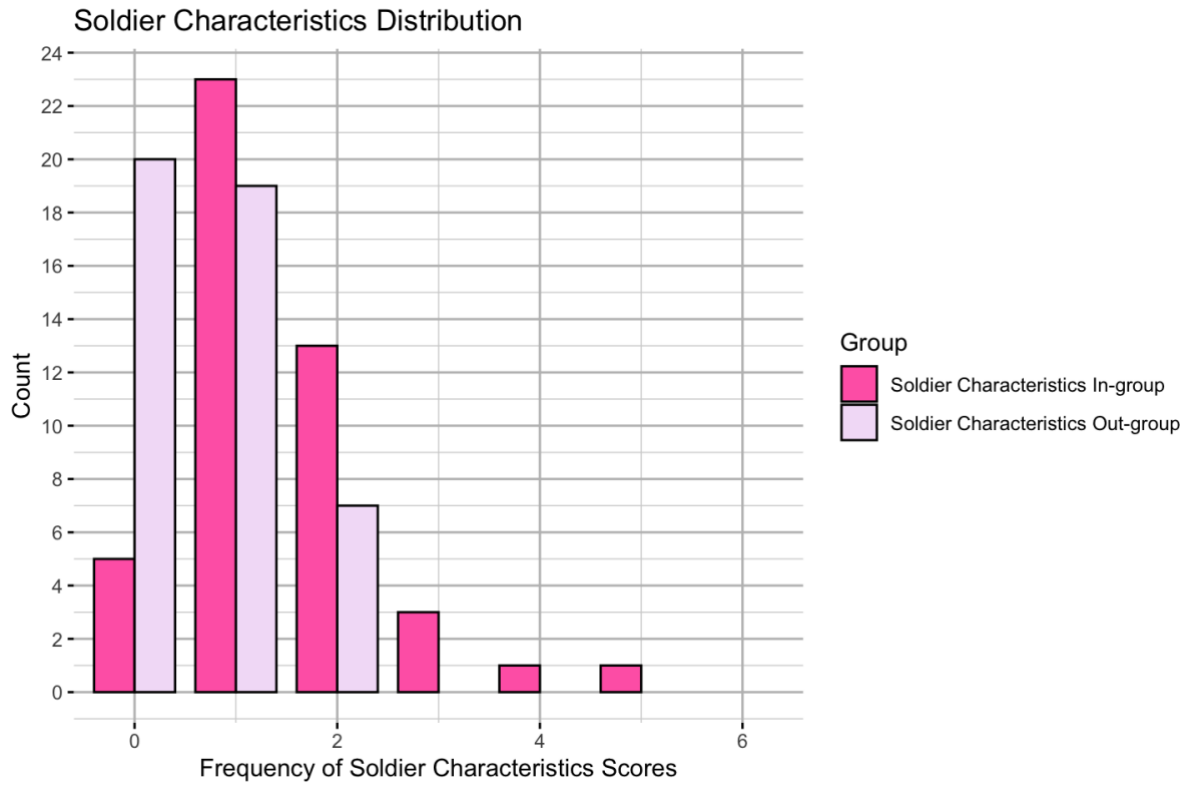
Out-Group

Note. This figure displays the distribution of scores for the theme 'Soldier characteristics'

categorised by in-group and out-group. On the x-axis, the frequency of each score is depicted,

while the y-axis represents the number of letters corresponding to each score.

Table 4

Overview of the Codebook for the Theme Soldier Characteristics

Theme	Code group	Code	Quotation	Frequencies		
				Overall	**In-group soldier**	**Out-group soldier**
Soldier characteristics				100	67	33
		Ambitious work attitude: Expressions that show the soldier was committed to his job.	*"Harry learned quickly and took his job seriously".*	18	10	8
		Devotion to the cause: Expressions that show that the soldier was loyal to the cause.	*"For 2 years he has served our country and allies loyally and died for this cause".*	31	12	19
		Heroic action or description: Expressions of descriptions or	*"While we were attacked, he sacrificed himself to protect his squad".*	51	45	6

|	actions undertaken by the deceased soldier that indicate behaviour that is considered admirable or brave.

Note. This table displays the grouping of code groups and codes under the theme 'Soldier characteristics'. It includes explanations and example

quotes for each code, as well as overall frequencies and frequencies split by in-group and out-group.

The last theme called 'Team dynamics' (see Figure 6 for its distribution) appeared on average 3.43 times (SD = 1.81) in letters to the in-group soldier's family and 1.87 times (SD = 1.47) in letters to the out-group soldier's family. This theme included codes that described relationships or interactions between the deceased soldier, other unit members, and the commanding officer. Specifically, it included the code group 'Social identity', which encompassed the codes 'Companionability of the soldier', 'Solitariness of the soldier', and 'Authority of the writer'. The code 'Companionability of the soldier' described interactions between the deceased soldier and other members of the unit ("Harry was a sweet guy who was always there for his companions") and appeared 38 times in the in-group letters and 6 times in the out-group letters. The code 'Solitariness of the soldier', which included indications that the soldier was often distanced from the unit ("I got to know him as a somewhat solitary person"), never appeared in the in-group letters but appeared 10 times in the out-group letters. The code 'Authority of the writer' referred to descriptions of the rank of the commanding officer ("I am xx and the commanding officer of Harry") and appeared 27 times in in-group letters and 17 times in out-group letters. Additionally, the code group 'Honouring the soldier' contained any expression that aimed to convey respect and recognition towards the deceased soldier through the perspective of either the unit or the commanding officer ("His bravery and dedication to the group will always be remembered and honoured and he will stay in our hearts forever"). The code 'Honourable mention from the unit' appeared 20 times in the in-group letters and 10 times in the out-group letters, while 'Honourable mention from the commander' appeared 73 times in in-group letters and 43 times in out-group letters. Overall, there was a significant difference in the frequency of codes for each group within this theme. In-group letters more often described the in-group soldier as loyal to the unit, a great friend, someone reliable, and overall seemed more deserving of honourable mentions. The out-group soldier on the other hand was the only

soldier described as solitary. This suggested that in-group soldiers were more frequently

described in positive terms regarding their position in the unit compared to out-group

soldiers. For a complete overview of this theme see Table 5.

Figure 6

Distribution of the Theme Team Dynamics in the Survey Letters Split by In-Group and Out-
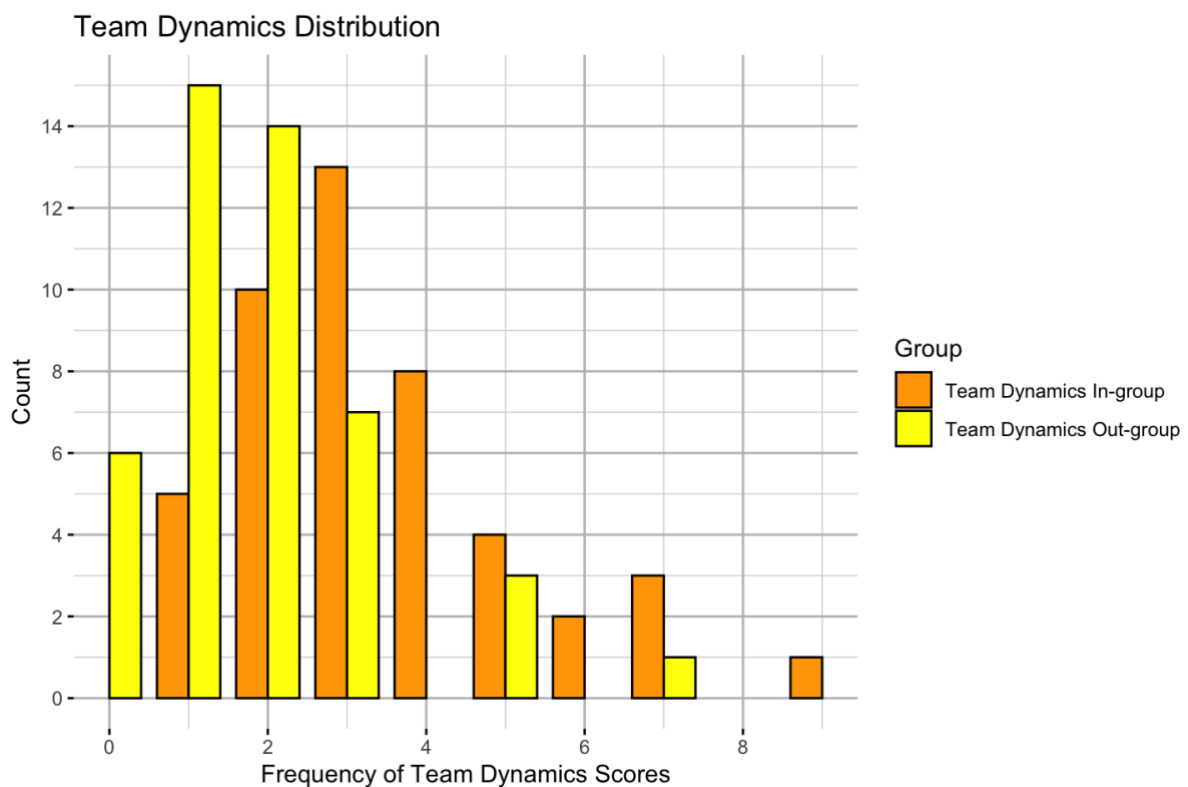
Group

Note. This figure displays the distribution of scores for the theme 'Team dynamics'

categorised by in-group and out-group. On the x-axis, the frequency of each score is depicted,

while the y-axis represents the number of letters corresponding to each score.

Table 5

Overview of the Codebook for the Theme Team Dynamics

Theme	Code group	Code	Quotation	Frequencies		
				Overall	**In-group soldier**	**Out-group soldier**
Team dynamics				244	158	86
	Honouring the soldier			146	93	53
		Honourable mention from the commander: Expressions that aim to convey great respect and recognition towards the deceased soldier from the point of view of the commanding officer.	*"I can say that many would not have acted the way John did.".*	116	73	43
		Honourable mention from the unit: Expressions that aim to convey great	*"His bravery and dedication to the group will always be remembered and*	30	20	10

	respect and recognition towards the deceased soldier from the point of view of the unit.	*honoured and he will stay in our hearts forever".*			
Social identity			98	65	33
	Authority of the writer: Expressions that indicate that the writer of the letter is the commanding officer of the deceased soldier.	*"I am xx and the commanding officer of Harry".*	44	27	17
	Companionability of the soldier: Expressions of mutual trust and loyalty, friendship or team bonding among the deceased soldier and other members of the unit.	*"Harry was a sweet guy who was always there for his companions".*	44	38	6

	Solitariness of the soldier: Expressions that indicate the deceased soldier was often by himself.	*"I got to know him as a somewhat solitary person".*	10	0	10

Note. This table displays the grouping of code groups and codes under the theme 'Team dynamics'. It includes explanations and example quotes for each code, as well as overall frequencies and frequencies split by in-group and out-group.

Influences of Empathy on Survey Letters

To explore any potential relationships between the empathy scores and the content of the letters written towards both the families of the in-group and out-group soldier, a correlational analysis was conducted (see Table 6). However, no significant correlations were found between empathy scores and the content of letters addressed to either the family of the in-group or out-group soldier. These findings suggested that the empathy scores may only have limited predictive value for the content of the letters.

Table 6

Correlation Analysis of Empathy Scores and Letter Content Split by In-Group and Out-Group

	TEQ	
Letter content	In-group soldier	Out-group soldier
1 Formalities	-0.08	0.06
2 Solace	-0.018	-0.019
3 Soldier characteristics	-0.21	-0.09
4 Team dynamics	-0.17	-0.06
5 Word count	-0.13	-0.04

Note. Correlations between the empathy scores and the numeric letter content scores 'Formalities', 'Solace', 'Soldier characteristics', 'Team dynamics', and 'Word count'.

Nonetheless, to gain deeper insights into the structure of the data for both the in-group and out-group letters across each theme, a multivariate linear regression analysis was performed. The empathy scores were used as the predictor variable, while the variables 'Formalities', 'Solace', 'Soldier characteristics', 'Team dynamics', and 'Word count' functioned as the different types of outcome variables. The results for both the in-group and

out-group letters are summarised in Table 7. The intercept of the analysis for each outcome variable is included in Appendix C for comparison.

Table 7

Linear Regression of Empathy Scores Versus Letter Content Split by Soldier Type

	B	*SE*	*t*	*p*
In-group soldier				
1 Formalities	-0.14	0.28	-0.51	.61
2 Solace	-0.13	1.12	-0.12	.91
3 Soldier characteristics	-0.59	0.42	-1.40	.17
4 Team dynamics	-0.89	0.76	-1.18	.25
5 Word count	-24.13	28.46	-0.85	.40
Out-group soldier				
1 Formalities	0.13	0.31	0.42	.68
2 Solace	-0.11	0.89	-0.13	.90
3 Soldier characteristics	-0.17	0.31	-0.57	.57
4 Team dynamics	-0.23	0.63	-0.37	.71
5 Word count	-5.34	18.29	-0.29	.77

Note. Multivariate linear regression of the predictor variable empathy Scores versus the outcome variables 'Formalities', 'Solace', 'Soldier characteristics', 'Team dynamics', and 'Word count' split by soldier type. Included are the estimate (*B*), standard error (*SE*), *t*-value, and *p*-value.

The results of this multivariate regression analysis indicated that there were no significant relationships present within the data. In other words, the predictor variable,

empathy scores, did not significantly predict any of the outcome variables, including 'Formalities', 'Solace', 'Soldier characteristics', 'Team dynamics', and 'Word count' for either the in-group or out-group letters. These findings suggested that participants' scores on the empathy scale did not strongly influence the content of the letters written to the families of both the in-group and out-group soldier, as was indicated by the themes 'Formalities', 'Solace', 'Soldier characteristics', 'Team dynamics', and 'Word count'.

Discussion

The present study investigated the influence of trait empathy on the content of condolence letters written to the families of two fictitious soldiers, who deceased in the Battle of the Bulge during World War 2. In the study design, one soldier was portrayed with characteristics representative of the in-group, while the other soldier was described with attributes aligning him with the out-group. This allowed for an exploration of potential in-group-out-group biases and an examination of whether trait empathy influences these responses. Overall, the findings revealed significant differences in the content of the letters addressed to the family of the in-group versus the out-group soldier, however, no relationship with trait empathy was found.

Theoretical Implications

Empathy and Condolence Letters

The two previously formulated hypotheses *'Participants with lower levels of trait empathy write more detailed letters to the family of an in-group soldier than to the family of an out-group soldier. In contrast, participants with higher levels of trait empathy write letters of similar detail to both families.'* and *'Participants with lower levels of trait empathy write lengthier letters to the family of an in-group soldier than to the family of an out-group soldier. In contrast, participants with higher levels of trait empathy write letters of similar length to both families.'* were rejected after analysis. When examining the correlations between the

empathy scale and the letter themes and word count, split by in-group and out-group, only minor negative correlations emerged. Additional linear regression analyses revealed non-significant results, further challenging the initial hypotheses. These findings suggest that variations in trait empathy did not significantly affect the content or the length of the letters for both soldiers.

A possible explanation for the non-existing relationship between empathy and letter content can result from both the context participants experienced during the writing tasks and the influence of media depictions. As previous research indicates, empathy is a context-dependent social process and can adapt based on social cues when invoked (Melloni et al., 2014). Our written narrative might not have significantly invoked empathic feelings within participants for the families of the deceased soldiers, resulting in similar amounts of detail in the letter content of both participants with higher and lower levels of trait empathy. Additionally, prior studies have indicated that depictions in movies and media narratives can significantly influence individuals' perceptions of warfare (Karatzogianni, 2013). It is plausible that participants formulated an idea of what a condolence letter should entail based on such depictions. Consequently, this likely resulted in similar letter structures and content, characterised by the inclusion of standard phrases and expressions.

Furthermore, there was no observed relationship between participants' levels of empathy and the length of the letters they wrote to the families of both the in-group and out-group soldiers. This finding is consistent with the research conducted by Tettegah & Anderson (2007), who found that word count did not predict how much empathy individuals expressed. Participants in the current study may have relied on standard expressions of condolences when conveying the news of the soldiers' passing to their family, particularly due to influences from sources like movies and media narratives.

Additionally, multiple participants pointed out that they deliberately kept both their written letters of similar length and detail ("[…] the letter is similar because I feel like a regiment leader would have to write a lot of these and needs to desensitise themselves for this kind of stuff to a certain extent"). These participants expressed that they believed that commanding officers would be tasked with writing numerous condolence letters during wartime and would not have the time to personalise each message. Indeed, historical practices reveal that families were initially informed of a soldier's death through standardised telegram messages (Royal Air Force Museum, 2021). Such messages were typically short, without the inclusion of personal messages or anecdotes to assist grieving families. These conscious practices of standardised letter writing add an additional dimension to the explanation of the non-significant results.

Condolence Letters and the In-Group-Out-Group Bias

When evaluating the condolence letters independently of the empathy scores, differences emerged in both content and length between the in-group and out-group letters. The themes 'Soldier characteristics' and 'Team dynamics' appeared nearly twice as often in the in-group letters compared to the out-group letters, while the usage of 'Formalities' and 'Solace' was similar across both groups. Especially codes related to the soldier's heroic actions, as well as mentions of honour from both the commanding officer and the unit, were notably more frequent in the in-group. Additionally, the in-group letters were, on average, 23 words longer than the out-group letters, highlighting the greater content and length of the in-group letters.

The observed differences between the groups suggest the presence of an underlying in-group-out-group bias influencing participants' letter writing, though trait empathy did not appear to contribute to its emergence. A study by De Vries (2003) provides a potential explanation, indicating that socially distant individuals often receive more negative

evaluations. In the present study, the out-group soldier was portrayed as an outcast within the unit. This portrayal likely created a perceived social distance, leading participants to negatively evaluate this soldier, which in turn could have affected both the content and length of the letters. Additionally, research shows that individuals' perceptions of others can be influenced by group associations, even if these are temporary and based on arbitrary criteria (Bernstein et al., 2007; Hertel and Kerr, 2001). Therefore, when individuals are intentionally placed into groups, as in the present study, it significantly impacts how they perceive and behave towards others (Greven & Ramsey, 2017). This explains the variations in content between the in-group and out-group letters. Moreover, research indicates that individuals tend to process and remember information about in-group members more efficiently than about out-group members (Greenstein et al., 2016). This likely resulted in the more detailed and longer letters written about the in-group soldier, leading to the inclusion of more themes.

Comparison With a Historical Letter

Additionally, when comparing the letters from the current study with an authentic condolence letter sent to the wife of a soldier who passed away during the Battle of the Bulge, some noticeable similarities can be observed (see Appendix D for the transcript of the letter; Guise, 2015). Similar to letters in the present study, the historical letter starts off by providing words of comfort to the recipient in this time of profound loss ("I know only too well tint words cannot bring comfort to your heart in these hours of loss"). Moreover, the commander addresses details regarding the soldier's death. Subsequently, a supportive action is conducted by providing the contact details of the person in charge of the burial place and bodily remains, before closing the letter with some words of honourable mention. Overall, the letter reflects expressions that are similar to the codes presented in the themes 'Solace', 'Formalities', and 'Team dynamics'. While there are some minor differences in the content, such as the body being buried near the place of death instead of being sent back to the family,

these differences likely resulted from the narrative in the writing tasks. Consequently, this comparison highlights the ability of individuals to write letters that can be difficult to distinguish from actual historical documents. This underlines the effectiveness of using a fictitious scenario to investigate complex phenomena such as the in-group-out-group bias.

Implications

Given the ongoing global conflicts and prevalent hostilities towards specific groups involved, understanding all potential influences on these conflicts is crucial for their resolution. One significant contributing factor discussed in this study is the in-group-out-group bias. Previous research explored factors underlying this bias for various aspects such as perception, prejudices, and attention (Greven & Ramsey, 2017; Lacozza et al., 2019; Saarinen et al., 2021). This study adds to this literature by demonstrating that the in-group-out-group bias can occur independently of trait empathy, thereby challenging earlier research linking empathy to this bias in similar contexts. Additionally, previous studies primarily focused on how the in-group-out-group bias affects perceptions of entire groups (Cairns et al., 2010; Harrison et al., 2020; Mana et al., 2014). This study, however, investigates the effects of this bias on the perception of individual soldiers identified as in-group or out-group members. Since the current findings indicate the presence of an in-group-out-group bias without a global group affiliation, this approach helps explain why individuals might be perceived as out-group members even when they are not part of a broadly targeted group. For example, this bias may be triggered by specific contextual cues or individual characteristics (Melloni et al., 2014). Understanding these factors can aid in developing strategies to counteract negative perceptions and facilitate the reintegration of those perceived as outsiders. Such strategies could be valuable in interventions aimed at combating social issues like bullying. Furthermore, this study suggests that even a fictitious narrative can effectively induce an in-group-out-group bias, as highlighted by the comparison with a historical letter. This can have

significant real-world implications, implying that groups can be artificially framed in ways that may lead to negative perceptions, such as through the creation of fake news (Delaney et al., 2024; Steinfeld & Lissitsa, 2021). While more research is needed, the current findings suggest the existence of an in-group-out-group bias, laying the groundwork for future investigations into the factors that may drive this bias, particularly within the context of fictitious stories.

Additionally, this study serves as a stepping stone for integrating letter-writing tasks into communication research. Current research in this field primarily focuses on face-to-face interactions that incorporate elements such as body language, facial expressions, and intonation. These components are essential for effectively conveying emotionally charged messages and are only relevant when both parties are visible (Bänziger & Scherer, 2005; Gelder et al., 2014; Scarantino, 2017). However, written communication, such as condolence letters, also plays a significant role, especially given the common practice of writing condolence cards when someone passes away. This study advocates for the inclusion of non-verbal communication methods in research related to grief and bereavement, by demonstrating that written letters elicit a diverse range of emotional responses, as evidenced by the different types of themes included in the condolence letters. Future studies exploring how written communications support grieving individuals could enhance our understanding of their needs and lead to interventions that aid in the emotional processing of grief. Such research could for example result in the development of communication guidelines for workplaces, or for family members and friends, ultimately creating a more supportive environment for those grieving.

Limitations & Future Research

Besides the unique perspective this study offers on the manifestation of the in-group-out-group bias in written letters about a fictitious scenario, the present study effectively

enhanced participant engagement with the story narrative by innovatively employing a self-made video recording in the questionnaire, a methodological approach that was well-received by participants as evidenced in their feedback. Moreover, the detailed coding process of the written condolence letters provided rich data, which revealed significant differences in themes between the in-group and out-group letters. While these strengths underline the present study's ability to enhance participant engagement and highlight differences in themes, some important limitations need to be addressed to improve future research in this area.

Specifically, further examination of the methodological constraints and potential biases is warranted to ensure soundness and generalisability of the findings. First, the relatively small final sample size resulted from a high drop-out rate once the letter-writing tasks were introduced. This resulted in the exclusion of a significant number of participants who failed to complete the survey, suggesting that participants may have found the tasks daunting or overly challenging, leading to disengagement. Future studies should aim for a larger sample size while ensuring participants' commitment to completing the survey. Additionally, some participants expressed confusion regarding the perspective from which they were instructed to write the letter and encountered difficulty in interpreting the reversed items on the TEQ. To address these issues, future studies may consider using a different questionnaire to measure trait empathy, such as the Perth Empathy Scale (Brett et al., 2022), and providing clearer instructions regarding the perspective for writing the letter at the beginning of the task.

Moreover, the soldier descriptions aimed to delineate between an in-group soldier and an out-group soldier within the same unit specifically because the letters had to be written from the commanding officer's perspective. However, to distinguish between the two, the in-group soldier was portrayed with attributes like being well-regarded within the unit and dying heroically, whereas the out-group soldier was depicted as someone who preferred solitude

and died as collateral damage from a bomb explosion. Arguably, this difference may have led to the unintended inclusion of additional variables, such as introversion-extraversion, heroic-non-heroic, and different types of death. These variables could have influenced the qualitative analysis and impacted the in-group-out-group bias. Therefore, future research could employ a 2 x 2 design, with one condition using identical soldier descriptions (e.g., same cause of death), while the other condition incorporated different descriptions (e.g., different causes of death). This approach will provide clearer insights into how these additional variables affect the in-group-out-group distinction and subsequently influence the analysis of letter content. In addition, in operational control for specific missions, commanding officers oversee soldiers who are directly under their command alongside those who are only temporarily assigned to the unit. Future research could use this distinction between in-group and out-group soldiers to avoid introducing additional variables. Since the out-group soldier is only temporarily assigned to the unit and therefore also unknown to the commanding officer, they differ from the permanent in-group soldier in this regard. Lastly, the characteristics used to describe the in-group-out-group distinction were frequently incorporated into the content of the participants' written letters. Participants may have felt compelled to include these descriptions because they were part of the soldier's profile, potentially resulting in a higher frequency of related codes. This, in turn, could have influenced the outcomes of the qualitative analysis. On the other hand, participants may have deliberately chosen to include these descriptions, suggesting the presence of a potential in-group-out-group bias.

Conclusion

Altogether, the study's findings suggest that an individual's level of trait empathy does not significantly affect the content or length of condolence letters, regardless of whether they were addressed to the family of an in-group soldier or out-group soldier. However, differences were observed in the frequency of themes and letter length between the in-group

and out-group, especially regarding the themes 'Soldier characteristics' and 'Team dynamics'. This indicates the presence of an underlying in-group-out-group bias, possibly stemming from the perceived social distance with the out-group soldier within the unit.

References

Angell, L. R. (1998). Communication comforting strategies and social bereavement: Verbal and nonverbal planning and appropriateness. *Journal of Personal and Interpersonal Loss*, *3*(3), 271–283. https://doi.org/10.1080/10811449808409704

Appel, M., Gnambs, T., Richter, T., & Green, M. C. (2015). The Transportation Scale–Short Form (TS–SF). *Media Psychology*, *18*(2), 243–266. https://doi.org/10.1080/15213269.2014.987400

Bänziger, T., & Scherer, K. R. (2005). The role of intonation in emotional expressions. *Speech Communication*, *46*(3–4), 252–267. https://doi.org/10.1016/j.specom.2005.02.016

Ben-Shalom, U. (2012). Soldiers' in-group and out-group peer perception: Contact and ethnic identity. *Military Psychology*, *24*(5), 473–487. https://doi.org/10.1080/08995605.2012.716267

Bernstein, M. J., Young, S. G., & Hugenberg, K. (2007). The cross-category effect: Mere social categorization is sufficient to elicit an own-group bias in face recognition. *Psychological Science*, *18*(8), 706–712. https://doi.org/10.1111/j.1467-9280.2007.01964.x

Borinca, I., Van Assche, J., Gronfeldt, B., Sainz, M., Anderson, J., & Taşbaş, E. H. O. (2023). Dehumanization of outgroup members and cross-group interactions. *Current Opinion in Behavioral Sciences*, *50*, Article 101247. https://doi.org/10.1016/j.cobeha.2023.101247

Botrugno, C. (2019). Information technologies in healthcare: Enhancing or dehumanising doctor–patient interaction? *Health*, *25*(4), 475–493. https://doi.org/10.1177/1363459319891213

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, *11*(4), 589–597. https://doi.org/10.1080/2159676x.2019.1628806

Brett, J. D., Becerra, R., Maybery, M. T., & Preece, D. A. (2022). The psychometric assessment of empathy: Development and validation of the Perth Empathy Scale. *Assessment*, *30*(4), 1140–1156. https://doi.org/10.1177/10731911221086987

Cairns, E., Kenworthy, J., Campbell, A., & Hewstone, M. (2010). The role of in-group identification, religious group membership and intergroup conflict in moderating in-group and out-group affect. *British Journal of Social Psychology*, *45*(4), 701–716. https://doi.org/10.1348/014466605x69850

Carter, S. P., & Renshaw, K. D. (2016). Spousal communication during military deployments: A review. *Journal of Family Issues*, *37*(16), 2309–2332. https://doi.org/10.1177/0192513x14567956

Cikara, M., Bruneau, E., Van Bavel, J. J., & Saxe, R. (2014). Their pain gives us pleasure: How intergroup dynamics shape empathic failures and counter-empathic responses. *Journal of Experimental Social Psychology*, *55*, 110–125. https://doi.org/10.1016/j.jesp.2014.06.007

Cuff, B. M. P., Brown, S. J., Taylor, L., & Howat, D. J. (2016). Empathy: A review of the concept. *Emotion Review*, *8*(2), 144–153. https://doi.org/10.1177/1754073914558466

D'Mello, S. K., & Mills, C. (2013). Emotions while writing about emotional and non-emotional topics. *Motivation and Emotion*, *38*(1), 140–156. https://doi.org/10.1007/s11031-013-9358-1

De Gelder, B., De Borst, A., & Watson, R. (2014). The perception of emotion in body expressions. *WIREs Cognitive Science*, *6*(2), 149–158. https://doi.org/10.1002/wcs.1335

De Vries, R. E. (2003). Self, in-group, and out-group evaluation: Bond or breach? *European Journal of Social Psychology*, *33*(5), 609–621. https://doi.org/10.1002/ejsp.173

Delaney, T., Castillo, L., Friehs, M. A., Buttlar, B., & Greene, C. M. (2024). Us versus them: The role of national identity in the formation of false memories for fake news. *Journal of Experimental Psychology: Applied, 30*(1), 33–47. https://doi.org/10.1037/xap0000498

Duffy, L. V., Evans, R., Bennett, V., Hady, J. M., & Palaniappan, P. (2023). Therapeutic relational connection in telehealth: Concept analysis. *Journal of Medical Internet Research*, *25*, Article e43303. https://doi.org/10.2196/43303

Durflinger, S. (2000). "I regret to inform you… ": Next-of-kin notification and official condolences—The case of flight lieutenant George J. Chequer, RCAF. *Canadian Military History, 9*(4), Article 5. https://scholars.wlu.ca/cmh/vol9/iss4/5

Galinsky, A. D. (2002). Creating and reducing intergroup conflict: The role of perspective-taking in affecting out-group evaluations. *Research on Managing Groups and Teams, 4*, 85–113. https://doi.org/10.1016/s1534-0856(02)04005-7

Greenstein, M., Franklin, N., & Klug, J. (2016). In-group versus out-group source memory. *Experimental Psychology*, *63*(3), 150–158. https://doi.org/10.1027/1618-3169/a000322

Greven, I. M., & Ramsey, R. (2017). Neural network integration during the perception of in-group and out-group members. *Neuropsychologia*, *106*, 225–235. https://doi.org/10.1016/j.neuropsychologia.2017.09.036

Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied thematic analysis*. SAGE

    Publications, Inc. https://doi.org/10.4135/9781483384436

Guise, K. (2015, May 24). Remembering Sgt. Wendell Wiley Wolfenbarger. *See & Hear:*

    Museum Blog. https://www.nww2m.com/tag/battle-of-the-bulge/

Han, S. (2018). Neurocognitive basis of racial ingroup bias in empathy. *Trends in Cognitive*

    Sciences, *22*(5), 400–421. https://doi.org/10.1016/j.tics.2018.02.013

Harrison, V., Hole, G., & Habibi, R. (2020). Are you in or are you out? The importance of

    group saliency in own-group biases in face recognition. *Perception*, *49*(6), 672–687.

    https://doi.org/10.1177/0301006620918100

Hebert, R. S., Schulz, R., Copeland, V. C., & Arnold, R. M. (2009). Preparing family

    caregivers for death and bereavement. Insights from caregivers of terminally ill

    patients. *Journal of Pain and Symptom Management*, *37*(1), 3–12.

    https://doi.org/10.1016/j.jpainsymman.2007.12.010

Hertel, G., & Kerr, N. L. (2001). Priming in-group favoritism: The impact of normative

    scripts in the minimal group paradigm. *Journal of Experimental Social Psychology*,

    37(4), 316–324. https://doi.org/10.1006/jesp.2000.1447

Hudson, S. T. J., Cikara, M., & Sidanius, J. (2019). Preference for hierarchy is associated

    with reduced empathy and increased counter-empathy towards others, especially out-

    group targets. *Journal of Experimental Social Psychology*, *85*, Article 103871.

    https://doi.org/10.1016/j.jesp.2019.103871

Ioannidou, F., & Konstantikaki, V. (2008). Empathy and emotional intelligence: What is it

    really about? *International Journal of Caring Sciences*, *1*(3), 118–123.

    https://www.internationaljournalofcaringsciences.org/docs/Vol1_Issue3_03_Ioannido

    u.pdf

Karatzogianni, A. (Ed.). (2013). *Violence and war in culture and the media*. Routledge.

Kteily, N., Hodson, G., & Bruneau, E. (2016). They see us as less than human: Metadehumanization predicts intergroup conflict via reciprocal dehumanization. *Journal of Personality and Social Psychology*, *110*(3), 343–370. https://doi.org/10.1037/pspa0000044

Lacozza, S., Meyer, A. S., & Lev-Ari, S. (2019). How in-group bias influences source memory for words learned from in-group and out-group speakers. *Frontiers in Human Neuroscience*, *13*, Article 308. https://doi.org/10.3389/fnhum.2019.00308

Lemay, M., Encandela, J., Sanders, L., & Reisman, A. (2017). Writing well: The long-term effect on empathy, observation, and physician writing through a residency writers' workshop. *Journal of Graduate Medical Education*, *9*(3), 357–360. https://doi.org/10.4300/jgme-d-16-00366.1

Mana, A., Sagy, S., Srour, A., & Mjally-Knani, S. (2014). On both sides of the fence: perceptions of collective narratives and identity strategies among Palestinians in Israel and in the West Bank. *Mind & Society*, *14*(1), 57–83. https://doi.org/10.1007/s11299-014-0159-3

Mashuri, A., Hasanah, N., & Rahmawati, I. (2013). The effect of out-group status and perspective-taking on empathy and out-group helping. *International Journal of Research Studies in Psychology*, *2*(2), 3–14. https://doi.org/10.5861/ijrsp.2012.149

Mayer, D. D. M. (2017). Improving the support of the suddenly bereaved. *Current Opinion in Supportive and Palliative Care*, *11*(1), 1–6. https://doi.org/10.1097/spc.0000000000000253

Melloni, M., Lopez, V., & Ibanez, A. (2014). Empathy and contextual social cognition. *Cognitive, Affective & Behavioral Neuroscience*, *14*(1), 407–425. https://doi.org/10.3758/s13415-013-0205-3

Meneses, R. W., & Larkin, M. (2016). The experience of empathy: Intuitive, sympathetic, and intellectual aspects of social understanding. *Journal of Humanistic Psychology*, *57*(1), 3–32. https://doi.org/10.1177/0022167815581552

Moreira, D., Azeredo, A., Sá Moreira, D., Fávero, M., & Sousa-Gomes, V. (2023). Why does grief hurt? *European Psychologist*, *28*(1), 35–52. https://doi.org/10.1027/1016-9040/a000490

Mrduljaš-Đujić, N., Žitnik, E., Pavelin, L., Bačić, D., Boljat, M., Vrdoljak, D., Pavličević, I., Dvornik, A. R., Marušić, A., & Marušić, M. (2013). Writing letters to patients as an educational tool for medical students. *BMC Medical Education*, *13*, Article 114. https://doi.org/10.1186/1472-6920-13-114

Neimeyer, R. A., & Sands, D. C. (2011). *Grief and bereavement in contemporary society*. Routledge.

Nevala, M., & Palander-Collin, M. (2005). Letters and letter writing: Introduction. *European Journal of English Studies*, *9*(1), 1–7. https://doi.org/10.1080/13825570500067903

Öğüt, N., Karakoç, E., & GhiAsee, A. (2022). An empirical study on determining the communication and empathy skill levels of healthcare professionals. *Konuralp Tıp Dergisi*, *14*(1), 35–41. https://doi.org/10.18521/ktd.951443

Plieger, T., Marx, S., von Gagern, E., Bode, S., & Reuter, M. (2022). The negative impact of xenophobia on compassion with suffering out-group members is attenuated by trait empathy. *Scientific Reports*, *12*(1), Article 18951. https://doi.org/10.1038/s41598-022-23776-8

Ratka, A. (2018). Empathy and the development of affective skills. *American Journal of Pharmaceutical Education*, *82*(10), Article 7192. https://doi.org/10.5688/ajpe7192

Richins, M. T., Barreto, M., Karl, A., & Lawrence, N. (2021). Incidental fear reduces

 empathy for an out-group's pain. *Emotion*, *21*(3), 536–544.

 https://doi.org/10.1037/emo0000714

Royal Air Force Museum. (2021). *The Second World War (1939 - 1945) - RAF museum*.

 RAF Museum. https://www.rafmuseum.org.uk/research/online-exhibitions/lest-we-

 forget/the-second-world-war-1939-

 1945/#:~:text=Families%20would%20initially%20be%20informed,letter%20offering

 %20sympathy%20and%20condolences.

Ruffle, B. J., & Sosis, R. (2006). Cooperation and the in-group-out-group bias: A field test on

 Israeli kibbutz members and city residents. *Journal of Economic Behavior &*

 Organization, *60*(2), 147–163. https://doi.org/10.1016/j.jebo.2004.07.007

Saarinen, A., Jääskeläinen, I. P., Harjunen, V., Keltikangas-Järvinen, L., Jasinskaja-Lahti, I.,

 & Ravaja, N. (2021). Neural basis of in-group bias and prejudices: A systematic meta-

 analysis. *Neuroscience & Biobehavioral Reviews*, *131*, 1214–1227.

 https://doi.org/10.1016/j.neubiorev.2021.10.027

Scarantino, A. (2017). How to do things with emotional expressions: The theory of affective

 pragmatics. *Psychological Inquiry*, *28*(2–3), 165–185.

 https://doi.org/10.1080/1047840x.2017.1328951

Schoonover, K., Hall-Flavin, D. K., Whitford, K. J., Lussier, M., Essary, A. C., & Lapid, M.

 I. (2019). Impact of poetry on empathy and professional burnout of health-care

 workers: A systematic review. *Journal of Palliative Care*, *35*(2), 127–132.

 https://doi.org/10.1177/0825859719865545

Shaffer, V. A., Bohanek, J. G., Focella, E. S., Horstman, H. K., & Saffran, L. (2019).

 Encouraging perspective taking: Using narrative writing to induce empathy for others

engaging in negative health behaviors. *PLOS ONE*, *14*(10), Article e0224046.

https://doi.org/10.1371/journal.pone.0224046

Spreng, R. N., McKinnon, M. C., Mar, R. A., & Levine, B. (2009). The Toronto Empathy

Questionnaire: Scale development and initial validation of a factor-analytic solution to

multiple empathy measures. *Journal of Personality Assessment*, *91*(1), 62–71.

https://doi.org/10.1080/00223890802484381

Steinfeld, N., & Lissitsa, S. (2021). Content matters, fake or not: Media content influence on

perceived intergroup threat. *AoIR Selected Papers of Internet Research*.

https://doi.org/10.5210/spir.v2021i0.12246

Szuhany, K. L., Malgaroli, M., Miron, C. D., & Simon, N. M. (2021). Prolonged grief

disorder: Course, diagnosis, assessment, and treatment. *FOCUS*, *19*(2), 161–172.

https://doi.org/10.1176/appi.focus.20200052

Tettegah, S., & Anderson, C J. (2007). Pre-service teachers' empathy and cognitions:

Statistical analysis of text data by graphical models. *Contemporary Educational*

Psychology, 32(1), 48–82. https://doi.org/10.1016/j.cedpsych.2006.10.010

Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research: From

grounded theory to abductive analysis. *Sociological Theory*, *30*(3), 167–186.

https://doi.org/10.1177/0735275112457914

Vaizey, H. (2010). Husbands and wives: An evaluation of the emotional impact of World

War Two in Germany. *European History Quarterly*, *40*(3), 389–411.

https://doi.org/10.1177/0265691410369631

Appendix A

Informed Consent Form

The purpose of this research is to analyse the content in written condolence letters. This research was approved by the BMS ethics committee/domain humanities and social sciences. For the completion of this study, the participant receives SONA-credits according to the amount on the sign-up sheet. For this study, there is a trigger-warning on the discussion of topics relating to war and death. If, at any point, you would like to withdraw your informed consent, you are free to do so, no explanation required. The study will immediately stop, and the data collected up until that point will be deleted. The only personal information that will be gathered during the study is basic demographic data, and all data will be de-identified; this will ensure that participants cannot be identified based on their answers. Digital data gathered cannot be used to identify participants. The data will be used for scientific research and teaching purposes. Thus, the digital – de-identified – data will be stored indefinitely on an Open Science Foundation (OSF) repository. For questions about this study, please contact the researchers via e-mail or leave a comment at the end of the survey in the final remarks box.

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the Secretary of the Ethics Committee/domain Humanities & Social Sciences of the Faculty of Behavioural, Management and Social Sciences at the University of Twente by ethicscommittee-hss@utwente.nl

Appendix B

Concept Script

It is 1944. You, a commanding officer of the allied forces, are stationed in the mountains of the Ardennes on a frosty winter night (Wind sound). You are sleeping in a cramped, cold tent, away from the soldiers under your responsibility. You can't find the comfort of sleep, for gusts of wind are slamming into the side of the tent (Wind hitting sail repeatedly sound). This sound reminds you of the skirmishes in the past that you and your unit have survived through. Eventually, you manage to fall into a restless slumber. Then, at 05:30, you jolt awake as 2000 German cannons fire upon your location. The chaos (cool explosion sound + screams) that ensued is unlike anything you have experienced before; the screams of your comrades were only interrupted by the impact of cannon fire, drowning out all sense of reality. The eastern front is under attack. You are under attack (Short moment of silence + Switch narrator).

In the heart of the Ardennes, the German forces slowly advanced. The first light of day exposed the gray-clad soldiers, tanks rumbling through the woods, and the muffled sounds of boots on snow. The Ardennes, once a serene haven, now bore witness to an unexpected confrontation. As the German offensive collided with the unprepared Allied lines, the silence shattered into a cacophony of gunfire and distant echoes. The cold air carried the tension of the impending struggle. In the quiet chaos, men grappled with the harsh reality of war. In the heart of this wintry battleground, the horrors of war manifested in the cries of the wounded, the haunting wails of distant artillery, and the silent prayers for a reprieve that seemed elusive. This battle became known as the battle of the bulge (Switch narrator).

Today marks the 20th day after the initial attack. You are sitting in your tent, a safe mile away from the front lines. There is a brief reprieve in the action, as a morbid silence fills the air (Cricket sound). A cup of steaming hot coffee sits on the side of your desk while a

harsh wind blows through the cracks of your tent (Sound effect of wind). Next to your cup of coffee is a pile of documents, seemingly getting higher every time you blink. On top of this pile of responsibilities is a report that you recently received from the mortuary affairs officer. It states that two of the soldiers in your unit have been identified among the deceased. As you were the commanding officer, it is your responsibility to write a condolence letter to the families of both soldiers informing them of the passing of their loved one.

John Miller of the 28th regiment, 4th squad, has been killed in action. He was shot and killed during a push to break the enemy frontlines. According to witness accounts, he protected his fellows by spotting and yelling out the enemy position, which made him a target. John was liked by the group and was known for sharing his rations. John had been under your command for over 2 years, surviving multiple battles within the squad. The identifiable remains and personal belongings that can be sent back to the family are John's body, his watch, wallet, and a pendant containing a photo of his loved ones. The only direct living relatives of John are his parents and sister.

Harry Taylor of the 28th regiment, 4th squad, has been killed in action. The death has been concluded to be the result from major head trauma that was caused by flying debris from one of the first initial explosions. Harry had only recently joined the unit and had been a member for about a month. He struggled to fit into the group and rather preferred to hang out by himself. The identifiable remains and personal belongings that can be sent back to the family are Harry's body, his watch, and his wallet, including its contents. The only direct living relatives of Harry are his parents and sister.

Appendix C

Table 8

Intercepts of the Multivariate Linear Regression Analysis

	B	SE	t	p
In-group soldier				
1 Formalities - Intercept	3.90	0.87	4.50	<.001***
2 Solace - Intercept	5.35	3.46	1.54	.13
3 Soldier characteristics - Intercept	3.26	1.30	2.51	.016*
4 Team dynamics - Intercept	6.19	2.36	2.63	.012*
5 Word count - Intercept	193.43	88.30	2.19	.034*
Out-group soldier				
1 Formalities - Intercept	3.11	0.95	3.26	.002**
2 Solace - Intercept	4.96	2.77	1.79	.08
3 Soldier characteristics - Intercept	1.26	0.95	1.33	.19
4 Team dynamics - Intercept	2.59	1.94	1.34	.19
5 Word count - Intercept	112.52	56.74	1.98	.054

Note. Intercepts of the multivariate linear regression analysis of the predictor variable empathy Scores versus the outcome variables Formalities, Solace, Soldier characteristics, Team dynamics, and Word count split by soldier type. Included are the estimate (B), standard error (SE), t-value, and p-value.

*p < .05. **p < .01. ***p < .001.

Appendix D

Transcript Historical Letter

My dear Mrs Wolfenbarger: -

I know only too well tint words cannot bring comfort to your heart in these hours of loss. However, as your husband's division commander, I want to tell you that all of us who remain in this division grieve with you in the loss of our comrade.

Your husband, Sergeant Wendell W Wolfenbarger, 37742173, was killed in action 18 January 1945 during our advance near Berle, Luxembourg. He was buried in Luxembourg, after an appropriate service at which a Protestant Chaplain officiated. You may secure more detailed information concerning the location of the grave and the disposal of your husband's remains and effects by communicating directly with the Quartermaster General, Army Service Forces, Washington, D. C.

He did his duty splendidly and was loved and admired by all who knew him. We will not forget.

He gave his life in battle in the service of his country – these simple words cannot lighten our sorrow, but they bring great pride and inspiration to use all.

Sincerely,