Supporting Information for "Segregation, Integration, and Death: Evidence From the Korean War"

Contents

1 Segregation Analysis: Results, Robustness, and Mechanisms

1.1 Clustering Standard Errors at the Battalion Level

Standard errors. Results from segregation period analysis (Table 1, Models 1-2) with standard errors clustered on the battalion.

Table A1: Fatality Rate by Race: Segregation–Clustered SEs

	Battalions in Korea	
	(1)	(2)
Black Battalion	−0.05	−0.17
	(0.13)	(0.13)
Constant	0.89***	0.82***
	(0.08)	(0.15)
N	1,670	1,670
Period FEs	N	Y

$^{*}p < 0.1$ $^{**}p < 0.05$ $^{***}p < 0.01$

Notes: OLS regression with the battalion-period as the unit of analysis where each half-month is a period. Standard errors clustered on the battalion in parentheses. Period fixed effects not shown. Outcome is probability of fatality multiplied by 100.

1.2 Varying Battalion Size

Battalion size. The main segregation period analyses use the TO&E prescribed battalion size (917) as a denominator to calculate fatality rates. The analysis below examines whether systematic variation in battalion sizes such that either Black or white units were larger than the other would alter the results. As shown, even if white or Black units were on average 100 soldiers larger than the other, racial fatality rate gaps remain small and statistically insignificant. Analysis uses Table 1, Model 1 from the manuscript as the benchmark.

Table A2: Fatality Rate by Race: Segregation–Variation in Battalion Size by Race

	Battalions in Korea										
Avg white bn size vs. avg Black bn size	-100	-80	-60	-40	-20	0	20	40	60	80	100
Black Battalion	−0.14	−0.13	−0.11	−0.09	−0.07	−0.05	−0.03	−0.01	0.01	0.03	0.05
	(0.22)	(0.22)	(0.22)	(0.21)	(0.21)	(0.21)	(0.21)	(0.20)	(0.20)	(0.20)	(0.20)
Constant	0.94***	0.93***	0.92***	0.91***	0.90***	0.89***	0.88***	0.87***	0.86***	0.86***	0.85***
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
N	1,670	1,670	1,670	1,670	1,670	1,670	1,670	1,670	1,670	1,670	1,670

*$p < 0.1$ **$p < 0.05$ ***$p < 0.01$

Notes: OLS regression with the battalion-period as the unit of analysis where each half-month is a period. Standard errors in parentheses. Outcome is probability of fatality multiplied by 100. Analysis varies the average size of Black vs. white battalions.

1.3 Varying Integration Start Date

Date integration period began. The main segregation period analyses use the start of November 1951 as the point at which units are integrated. The analysis below shows that results do not depend on using this date as the cut point. Early and later dates yield similar results. Analysis uses Table 1, Model 1 from the manuscript as the benchmark. Integration was an admittedly gradual process which complicates the analysis. Some understrength white units—such as the 1st and 2nd battalions of the 9th Infantry Regiment, 2nd Infantry Division (ID)—incorporated Black soldiers as early as August 1950 due to manpower demands. However, the November 1, 1951 cut point remains promising as over 80% of Black soldiers remained in segregated units as late as May 1951 and the all Black 24th Regiment was only inactivated at the start of October 1951.

Table A3: Fatality Rate by Race: Segregation–Variation in Integration Cut Point

Integration start...	1H-09-51	2H-09-51	1H-10-51	2H-10-51	1H-11-51	2H-11-51	1H-12-51	2H-12-51	1H-01-52
Black Battalion	−0.01	−0.02	−0.03	−0.05	−0.05	−0.04	−0.03	−0.02	−0.002
	(0.23)	(0.22)	(0.22)	(0.21)	(0.21)	(0.20)	(0.20)	(0.20)	(0.19)
Constant	0.89***	0.89***	0.88***	0.90***	0.89***	0.87***	0.85***	0.83***	0.80***
	(0.07)	(0.07)	(0.07)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.05)
N	1,436	1,496	1,556	1,613	1,670	1,727	1,784	1,844	1,910

$^{*}p < 0.1$ $^{**}p < 0.05$ $^{***}p < 0.01$

Notes: OLS regression with the battalion-period as the unit of analysis where each half-month is a period. Model headings indicate Month Half-Month-Year. Standard errors in parentheses. Outcome is probability of fatality multiplied by 100.

1.4 Including All Within-Unit Fatalities

Include all fatalities. The main segregation period analyses only count fatalities when the individual's race matches the putative race assigned to that battalion. The analysis below shows that results are similar when including all fatalities in a battalion even when they do not match a battalion's assigned race. This includes white officers dying in Black battalions as well as Black soldiers dying in white battalions that experienced some integration before the November 1951 cut point. Analysis based on Table 1, Models 1-2 from the manuscript as the benchmark.

Table A4: Fatality Rate by Race: Segregation–All Battalion Fatalities Regardless of Individual Race

	Battalions in Korea	
	(1)	(2)
Black Battalion	0.07	−0.05
	(0.22)	(0.20)
Constant	0.98***	0.94***
	(0.07)	(0.31)
N	1,670	1,670
Period FEs	N	Y

$^{*}p < 0.1$ $^{**}p < 0.05$ $^{***}p < 0.01$

Notes: OLS regression with the battalion-period as the unit of analysis where each half-month is a period. Standard errors in parentheses. Period fixed effects not shown. Outcome is probability of fatality multiplied by 100. Includes all fatalities within a battalion-period regardless of whether an individual's race matches the assigned race of the battalion.

1.5 Skewed Fatality Rate Distribution and Central Limit Theorem

Skewed fatality rate distribution and central limit theorem. Battalion-period fatality rates during the segregated portion of the war are right-skewed (see Manuscript Figure 2). Most observations have low fatality rates but a few have exceptionally high rates (over 20%). A concern is that skewed distributions require larger samples for the central limit theorem to apply, which could distort the OLS results. Specifically, it would be problematic if the issue inflated p-values and thus increased the prevalence of null findings. We might then incorrectly fair to reject the null hypothesis when in fact we should reject it. Given the centrality of the null finding to the study, we address this concern using the following procedure.

1. Randomly assign observed outcomes (battalion-period fatality rates) to either white or Black battalions while maintaining the relative ratio of white to Black battalions.
2. Run the regression used for Manuscript Table 1 Model 1 and record the p-value.
3. Repeat the process 1,000,000 times.
4. Assess whether p-values less than 0.05 occur in approximately 5% of iterations. If it occurs less frequently, the null finding could stem from the skewed distribution of fatalities rather than a substantive basis.

Overall, as depicted in Figure A1 $p \leq 0.05$ occurs in 4.5% of the 1,000,000 iterations. Distributional skew creates a very modest inflation of null results. However, it is very unlikely this is the source of the segregation-era null result. The p-value obtained in Table 1 Model 1 (0.81) is greater than 81.5% of the p-values in the simulation. In sum, there is some evidence that the statistical procedure modestly inflates the likelihood of obtaining a null result but it is highly unlikely that our null result is merely an outcome of a statistical distortion rather than a lack of substantively different fatality rates across racial lines.

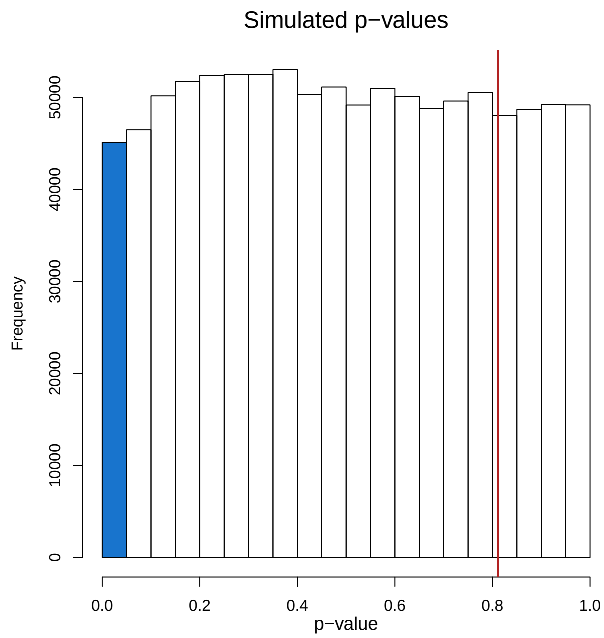

Figure A1: Distribution of p-values from 1,000,000 simulations. Blue highlights values less than 0.05, which occur in 4.5% of simulations. Vertical red line shows the true p-value from Table 1 Model 1 in the manuscript.

1.6 Fatalities in Periods of Defense, Offense, and Stalemate

Defense, offense, and stalemate. To better understand the mechanism underpinning the null result, we examine whether racial fatality gaps emerge under different modes of fighting. We divide the segregated portion of the war into phases of *defense*, *offense*, and *stalemate* from the US perspective. If fatality gaps emerge under one phase but not another, that provides insights on whether the aggregate null result stems from none of the theorized mechanisms being operative vs. multiple theorized mechanisms offsetting each other. As show in Table A5, results are consistent with the first scenario. Across all three phases of fighting, we find no evidence for substantively or statistically significant differences in racial fatality rates. To the extent that there individual periods do exhibit gaps, these are offset by other periods with a gap in the opposite direction (sizable offsetting gaps are most pronounced when on defense).

The three phases are coded as follows (year-month-half):

- *Defense*: 1950-07-01—1950-09-01 (North Korean invasion); 1950-11-02—1951-01-01 (Chinese entry); 1951-04-02—1951-06-02 (Adversary attempt to retake Seoul)
- *Offense*: 1950-09-02—1950-11-01 (Incheon landing and march north); 1951-01-02—1951-04-01 (Recapture Seoul)
- *Stalemate*: 1951-07-01—1951-10-02 (Armistice talks commence)

Table A5: Fatality Rate by Race: Segregation–Split by War Phase

	Defense (1)	Offense (2)	Stalemate (3)	All (4)
Black Bn	−0.09	0.08	−0.31	−0.31
	(0.43)	(0.28)	(0.20)	(0.42)
Defense				0.71***
				(0.15)
Offense				0.11
				(0.16)
Black Bn*Defense				0.22
				(0.53)
Black Bn*Offense				0.39
				(0.56)
Constant	1.29***	0.69***	0.58***	0.58***
	(0.13)	(0.08)	(0.06)	(0.12)
N	662	546	462	1,670

*p < .1; **p < .05; ***p < .01

Notes: OLS regression with the battalion-period as the unit of analysis where each half-month is a period. Standard errors in parentheses. Outcome is probability of fatality multiplied by 100. Models 1-3 split sample by fighting phase (defense, offense, stalemate) from the US perspective. Model 4 includes the full segregation sample with an interaction between battalion race and fighting phase (stalemate serves as the base category for the fighting phase variable).

1.7 Additional Qualitative Evidence on Casualty Differentials Under Segregation

Diving deeper into periods when short-term fatality gaps emerged, historical evidence suggests that logistics drove the fatality rate discrepancy during early July. The three Black battalions of the 24th Regiment were the only Black units on the peninsula during the period. Having arrived on July 11, Black units simply had less opportunities for combat when compared to white units, some of which arrived more than a week earlier.[1]

There is similarly limited reason to believe that commanders' race-based choices created the racial fatality gap in late July. US forces were on the defensive during the period. We theorized that if commanders believe Black units to be less capable they may not assign them to critical defensive tasks. However, acute manpower concerns likely overrode such considerations. Consistent with war demands superseding commander dispositions,[2] elements of the 24th Regiment both attacked and defended during this period. The 3rd Battalion led the successful capture of Yechon (Bowers, Hammond, and MacGarrigle 1997: 91–93). In contrast, the full regiment was assigned to, and failed to, defensively repel the North Korean assault on Sangju (Bowers, Hammond, and MacGarrigle 1997: ch. 5). Black units in late July 1950 received offensive and defensive assignments with substantial risk of fatalities. Chance, rather than commander choice, seems to have caused the unequal burden during this fortnight with white fatality rates exceeding Black rates.

During the second half of November, when Black units suffered disproportionately, Chinese forces halted and reversed the US push north. Four of the Black battalions incurred heavy casualties during the Battle of the Ch'ongch'on River (Hannings 2007). A posited theoretical mechanism suggests that commanders may placed Black units at the front of US movements during this offensive phase of the war, causing them to suffer the worst fate if the enemy counter-attack. However, there is little evidence of differential unit positioning.

Elements of chance intrinsic to war largely account for the disproportionately high Black fatality rates in late November 1950, though we cannot entirely preclude racial bias. On one hand, the entire Eighth Army made the push north, of which the four Black battalions constituted a small fraction. On the other hand, holding the Infantry Division fixed, Black battalions suffered higher fatalities. While the Eighth Army suffered broadly, the Black battalions within it suffered at a higher rate. The average white battalion in the 25th ID suffered a 2.8% fatality rate whereas the all Black 24th Regiment within the 25th ID had a 6.3% fatality rate. The comparable fatality rates for white and Black units in the 2nd ID were 5.7% and 7.4%. Near the Ch'ongch'on River, Black battalions fought alongside white battalions but incurred higher costs. While Black units faced an onslaught from Chinese forces, the same was true of those white units flanking them. Unit positioning does not fully account for divergent fatality rates; rather, other factors partially explain the discrepancies. These include a communication failure which caused an all-Black task force to miss the retreat order and a poor-performing officer who led the 3rd Battalion of the 24th Regiment and subsequently disparaged his Black soldiers (Bowers, Hammond, and MacGarrigle 1997: 199–218).

[1] The choice of which battalions to deploy first to Korea stemmed from geographic proximity. The 24th ID was the first to arrive because it was stationed nearby in southern Japan (Maxwell 2018: 57).

[2] That said, some individuals continue to discriminate despite steep costs to doing so (Edelman, Luca, and Svirsky 2017), suggesting that some commanders, despite pressing military needs, could divide unit assignments in a discriminatory fashion.

2 Integration Analysis: Results and Robustness

2.1 Addressing Potential Challenges of Using the Race-Battalion as the Unit of Analysis

Imbalanced unit composition. Our use of *unit* fatality rates could mask meaningful gaps in racial *aggregate* fatality rates if battalions had high variation in their racial composition during the integrated portion of the war. The manuscript's analysis assumes that Blacks constitute 13.7% (the observed mean) of total battalion personnel (Table 3, Models 1-3) and also uses the observed racial composition when data was available (Table 3, Models 4-6).

The following example illustrates the potential problem. For ease of exposition, we use simple round numbers.

- Imagine there are two battalions (A and B), each with 100 total personnel.
- A has a 90/10 Black/white split while B has a 10/90 Black white split.
- A suffers 90% losses equally borne across racial lines (81/9 Black/white deaths) while B suffers 10% losses equally borne across racial lines (1/9 Black/white deaths).
- Using *unit* fatality rates as the outcome variable would indicate no racial fatality gap (equivalent Black/white loss rates of 90% in A and 10% in B).
- Using *aggregate* fatality rates, by contrast, reveals a stark racial fatality gap (82% vs. 18% for Black and white service member respectively).

To address the potential problem, we calculate aggregate period fatality rates for Black and white soldiers across all battalions. Using aggregated racial fatality rates, we continue to find no substantively or statistically significant differences in racial fatality rates, as shown in Table A6. The procedure necessarily reduces sample size (n=84), but the core substantive point continues to hold. In the average post-integration period of the war, 0.15% of Black soldiers died and 0.15% of white soldiers died. Moreover, the empirical distribution of unit composition shows that we never observe composition differentials as stark as that provided in the hypothetical example (10% Black in one unit and 90% in another). At most, Black soldiers made up 28% of a total battalion and the majority of battalions were between 12% and 17%.

Table A6: Integration: Aggregated Fatality Rate by Race

	Battalions in Korea	
	(1)	(2)
Black Soldiers	0.003	0.003
	(0.03)	(0.01)
Constant	0.15^{***}	0.34^{***}
	(0.02)	(0.03)
N	84	84
Period FEs	N	Y

$^{*}p < 0.1$ $^{**}p < 0.05$ $^{***}p < 0.01$

Notes: OLS regression with the race-period as the unit of analysis where each half-month is a period. Standard errors in parentheses. Period fixed effects not shown. Outcome is probability of fatality multiplied by 100.

3 Segregation vs. Integration Analysis–Short-Term Differentials: Results and Robustness

3.1 Addressing Casualty Differences Between War-Periods

Institutional policy and absolute racial fatality rate gap differential. Let $\bar{y}_t^b$ and $\bar{y}_t^w$ equal the mean racial fatality rate in period t for Black and white units respectively. For each period t, we calculate an absolute racial fatality rate gap as $|\bar{y}_t^b - \bar{y}_t^w|$. This serves as the outcome variable for an OLS specification with *Segregation* as a binary indicator for whether that period had segregated or integrated units. Model 2 repeats this analysis but after inflating fatality levels under integration to match those under segregation. Fatality levels were lower in the latter portions of the war. Inflating fatalities insures that lower overall combat intensity cannot explain the near disappearance of short-term racial fatality rate gaps under integration as shown in manuscript Figure 4. Rather, integration itself accounts for the decline in short-term divergences.

Table A7: Short-Term Fatality Rate Differentials Under Different Institutions: Segregation vs. Integration—OLS

	Actual Fatalities	Inflated Integration Fatalities
Segregation	0.68***	0.48**
	(0.21)	(0.22)
Constant	0.04	0.24*
	(0.14)	(0.14)
N	74	74

$^{*}p < 0.1$ $^{**}p < 0.05$ $^{***}p < 0.01$

Notes: OLS regression with the period as the unit of analysis where each half-month is a period. Standard errors in parentheses. Outcome is absolute difference in Black fatality rate and white fatality rate by unit in a given period, multiplied by 100. Larger racial discrepancies in a given half-month produces larger outcome values. Inflated model increases overall fatality rates under integration to match those of segregation to insure that a lower level of overall lethality in the latter phases of the war does not explain the decline in short-term racial fatality rate gaps.

3.2 Alternative Tests of Variance Differentials

Levene's test: institutional policy and variance differentials. Again let $\bar{y}_t^b$ and $\bar{y}_t^w$ equal the mean racial fatality rate in period t for Black and white units respectively. For each period t, we calculate a racial fatality rate gap as $\bar{y}_t^b - \bar{y}_t^w$ and create two vectors of these gaps, one for under segregation and one for under integration. Levene's test establishes whether the variance in these two vectors differs. Model 2 repeats this analysis but after inflating fatality levels under integration to match those under segregation for the reasons discussed for Table A11.

Table A8: Short-Term Fatality Rate Differentials Under Different Institutions: Levene's Test

	Actual Fatalities	Inflated Integration Fatalities
Levene's Test (Mean)	$p < 0.01$	$p < 0.05$
Levene's Test (Median)	$p < 0.01$	$p < 0.05$

Notes: Levene's test compares the variance of two vectors: (1) a vector with the absolute inter-racial fatality rate differential in each period under segregation and (2) a vector with the absolute inter-racial fatality rate differential in each period under integration. Inflated model increases overall fatality rates under integration to match those of segregation to insure that a lower level of overall lethality in the latter phases of the war does not explain the decline in short-term racial fatality rate gaps.

Randomization inference: institutional policy and variance differentials. Again let $\bar{y}_t^b$ and $\bar{y}_t^w$ equal the mean racial fatality rate in period t for Black and white units respectively. For each period t, we calculate a racial fatality rate gap as $\bar{y}_t^b - \bar{y}_t^w$ and create two vectors of these gaps, one for under segregation and one for under integration. Let v_s and v_i equal the variance of these vectors under segregation and integration respectively. We use $|v_s - v_i|$ as the test statistic for the randomization inference. Next, we randomly assign each $\bar{y}_t^b - \bar{y}_t^w$ to have occurred under segregation or integration, recalculate v_i and v_s given these assignments, and generate a test statistic based on these variances. We repeat this exercise for 10,000 iterations. Overall, just over 2% of these 10,000 iterations produce a test statistic as or more extreme than the one observed in the real data. Model 2 repeats this analysis but after inflating fatality levels under integration to match those under segregation for the reasons discussed for Table A11. In this reanalysis, 3.3% of the 10,000 iterations produce a test statistic more extreme than the one observed in the actual data.

Table A9: Short-Term Fatality Rate Differentials Under Different Institutions: Randomization Inference

	Actual Fatalities	Inflated Integration Fatalities
Randomization Inference (two-tailed)	<5%	<5%

Notes: Randomization inference (10,000 iterations) using a test statistic of the absolute difference of variance in the inter-racial fatality rate differential in each period under segregation vs. that same differential under integration. Inflated model increases overall fatality rates under integration to match those of segregation to insure that a lower level of overall lethality in the latter phases of the war does not explain the decline in short-term racial fatality rate gaps.

3.3 Advance Versus Stalemate in War

Advance versus stalemate. Casualty patterns undoubtedly differ in some ways across different phases of wars in general, and the Korean War in particular. The Korean War featured periods of both rapid US and adversary advances as well as extended periods of essentially stasis. Does the nature of the fighting occurring (advance vs. stalemate) explain the higher casualty variance under segregation compared to under integration? The specific concern is that the integrated period of the war coincided with stalemate whereas the segregated portion of the war featured US retreats, US advances, and stalemate.

To address the issue, we compare only stalemated periods of the war under segregation and integration. Precisely when the Korean War settled into a stalemate is subjective. We use two possible dates which produce substantively similar results. First, the first half of July 1951 marks the beginning of armistice talks between the combatants. A publication from the US Army Center for Military History identifies July 1951 to July 1953 as the "years of stalemate."[3] Second, we use the first half of May 1951 to mark the onset of stalemate, which follows the end of North Korean and Chinese efforts to recapture Seoul.

We repeat the analyses from above dropping all observations from before the stalemated portion of the war. While necessarily reducing the sample size (n=50 or 54), this insures roughly fixed war phases across the segregated and integrated observations. Results for the three variance differential tests are as follows:

- *Regression.* The absolute difference in Black and white fatality rates is higher under segregation than under integration, regardless of selected start date for stalemate. Differences remain statistically significant ($p < 0.001$).
- *Levene's test.* Variance in the absolute difference in racial fatality rates is higher under segregation than under integration, regardless of selected start date for stalemate ($p < 0.001$).
- *Randomization inference.* We again use the difference in absolute fatality rate variance across staffing policies as the test statistic. For the July 1951 and May 1951 stalemate onset dates, fewer than 10% and 1% of randomizations, respectively, produce a test statistic as extreme as the observed one.

In sum, holding fixed the nature of the war to periods of stalemate, we still observe higher variance in racial fatality gaps under segregated policies than under integrated policies. The relative stasis of the Korean War's later years cannot account for higher fatality rate gap fluctuations observed when soldiers served in segregated units.

[3]Birtle, Andrew J. 2000. *The Korean War: Years of Stalemate, July 1951-July 1953.* Vol. 19, No. 10., US Army Center for Military History.

3.4 Within- and Between-Unit Variation Under Segregation and Integration

Sources of variation. The potential sources of variation in racial fatality gaps changes between the segregated and integrated periods of the war. Under segregation, fluctuations in the racial fatality gap stem from between-battalion differences. Integration makes these between-battalion differences largely moot; instead fluctuations in the racial fatality gap stem from within-battalion differences. While the move to integration might remove the possibility of discrimination between military units, it could still be the case that discriminatory attitudes are driving differential fatality rates within units. We might then observe our variance results while masking a potential increase in within-unit fluctuations. If true, then racially-motivated discrepancies are simply pushed down the organizational hierarchy from the battalion level to, say, the company level. To evaluate whether this possibility is in fact occurring, we analyze within-unit and between-unit fatality fluctuations.

No clear evidence of elevated within-unit fluctuations under integration. First we evaluate whether within-battalion racial fatality rate gaps exhibited higher variance under integration, which could provide evidence of commanders assigning missions of disparate risks to soldiers of different races at, say, the company level. Calculating within-unit fatality gaps is easy under integration because we have racial variation within the battalion. Calculating an equivalent statistic under segregation is more difficult because there was no within-battalion variation in race. To deal with this challenge, we take the following approach:

- Randomly partition each battalion from the segregated portion of the war into a "Black" and "white" component of sizes that match the equivalent components from under integration (126 Black soldiers; 791 white soldiers).
- Calculate the racial fatality gap between these randomly generated subsets within a single battalion.
- To account for variation in combat intensity due to shifts between periods of advance and periods of stalemate, we calculate the racial fatality gap in three ways. The first uses the raw numbers. The second divides the raw gap by the number of total fatalities in the battalion period and sets those periods with no fatalities equal to 0. The third similarly divides the raw gap by the number of total fatalities in the battalion period but drops those periods with no fatalities.
- For each battalion under segregation, find the variance in the racial fatality gap. For instance, we calculate the variance of the fatality gap for each period during segregation for the 2nd ID, 9th Regiment, 2nd Battalion. Repeat this calculation for all battalions during segregation and then repeat the exercise for all battalions under integration. This is akin to recreating Figure 4 from the manuscript but for each battalion rather than in aggregate.
- Using the battalion variance as the outcome variable, we use OLS to assess whether this value is higher under segregation or integration. To qualify for the sample, a battalion must have at least 10 periods of data. Battalions with fewer periods are more likely to produce extreme variance values.

As shown in Table A10, there is no evidence of higher within-battalion variance under integration. There is no clear sign discriminatory attitudes are driving differential fatality rates *within* integrated units.

Little evidence of heightened between-unit fluctuations under segregation. To evaluate between-battalion fatality gap fluctuations, the nature of the data problem is reversed. We observe between-battalion variance under segregation when each unit had an assigned race. The equivalent designa-

Table A10: Within-Unit Variance in Fatality Rate Gaps—OLS

	Raw	Adjusted1	Adjusted2
Segregation	0.5846***	0.0026	−0.0093
	(0.0902)	(0.0030)	(0.0059)
Constant	0.1794***	0.0157***	0.0414***
	(0.0593)	(0.0019)	(0.0041)
N	132	132	106

$^{*}p < 0.1$ $^{**}p < 0.05$ $^{***}p < 0.01$

Notes: OLS regression with the battalion-policy period as the unit of analysis (e.g., a battalion across segregation is an observation; a battalion across integration is an observation). Variance of the fatality gap within a fixed battalion serves as the outcome variable. Model 1 uses the raw fatality rate gaps. Models 2 and 3 adjusts fatality rate gaps as described above to account for changes in the nature of fighting (e.g., advance vs. stalemate) across the Korean War. For inclusion in the analysis, a battalion must have at least 10 periods of data which avoids wild fluctuations across a battalion with few data points from driving the result.

tions definitionally do not exist under integration. To deal with this challenge, we take the following approach:

- Randomly assign each battalion from the integration period of the war a designated race with proportions equivalent to those from the segregated period of the war (roughly 8% of battalions are designated as "Black").
- The rest of the analysis follows the procedure from Section 3.1. Calculate the absolute racial fatality rate gap for each period using the randomly designated "white" and "Black" units for the integration period data.
- We use two approaches for generating absolute fatality rate gaps. The first uses the raw data. The second divides the gap by the total number of fatalities in that period to account for variation in the nature of fighting (e.g., advance vs. stalemate).
- Using the absolute fatality rate gap as the outcome variable, we use OLS to evaluate whether between-battalion variance differed between the segregated and integrated portions of the war.

As Table A.11 shows, once adjusting for level of combat intensity, there is no substantively meaningful difference in the between-unit fluctuations across the war.

Takeaways. Overall, we find no clear evidence of a change in either within- or between-battalion fatality fluctuations with the shift to unit integration. This reveals (1) that our existing result is not masking a spike in within-unit fluctuations and (2) that the existing result largely stems from the fact that integration removed the racial implication of between-unit fluctuations in fatalities. A battalion could suffer many fatalities in one period while another was hit hard the next, but once in integrated units this pattern no longer generated large fluctuations in the racial fatality rate gap.

Table A11: Between-Unit Variance in Fatality Rate Gaps—OLS

	Raw	Adjusted
Segregation	0.6083***	0.0005
	(0.2155)	(0.0004)
Constant	0.1122	0.0011***
	(0.1417)	(0.0003)
N	74	74

$^{*}p < 0.1$ $^{**}p < 0.05$ $^{***}p < 0.01$

Notes: OLS regression with the period as the unit of analysis where each half-month is a period. Standard errors in parentheses. Outcome is the absolute difference in Black fatality rate and white fatality rate by unit in a given period, multiplied by 100. Larger racial discrepancies in a given half-month produces larger outcome values. Adjusted models divide the raw fatality rate gap by the number of period fatalities to account for changes in combat intensity throughout the Korean War.

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