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# Political Integration, War and Suicide

## *The Dutch Paradox?*

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**abstract:** Contrary to Durkheim's idea about suicide during wartime, the Netherlands had high suicide rates in 1940 and 1945. To explain these findings, we propose the social integration theory, according to which, people who expect to be excluded from society are more likely to commit suicide. We examine this idea using individual-level data on suicide in the Netherlands during the Second World War, assuming that Jews expected to be excluded by the occupying German forces, whereas political delinquents expected punishment after the war. In support of our theory, we found high suicide rates among Jews at the beginning of the war and high suicide rates among political delinquents when the Netherlands was liberated. These findings support the proposed theory and call for refinement of Durkheim's ideas.

**keywords:** Durkheim ♦ Jews ♦ political delinquents ♦ political integration ♦ social exclusion ♦ suicide ♦ war

Durkheim maintained that during great national wars suicide rates are lower than in more peaceful times (see Durkheim, 1951). In *Suicide*, Durkheim explained this finding with his political integration theory, stating that stronger political involvement in a country reduces the suicide rate in that country. Subsequent research in this area, however, has had mixed results. Some studies have found support for the presumed drop in wartime suicide rates (Dublin, 1963; Dublin and Bunzel, 1933; Lunden, 1947; O'Malley, 1975; Sainsbury, 1972), while others have not (Halbwachs, 1978; Marshall, 1981; Rojcewicz, 1971; Wasserman, 1989, 1992).

In this article, we examine the relationship between war and suicide in two ways. First, we review studies on the war–suicide link and suggest a more general formulation of Durkheim's political integration theory in

an attempt to explain the findings that have failed to support it. This 'social integration theory' argues that a society consists of different groups that have different expectations in regard to being included in that society or excluded from it. Although wars and other political events generally foster social cohesion, in some countries some groups might fear being excluded from society during these times. These groups are assumed to have higher suicide rates than other groups, which could account for the ambiguous findings on the relationship between war and suicide.

Second, we use the Dutch setting as a test case to examine this social integration theory. Contrary to what would be expected from Durkheim's theory, previous research has found that suicide rates in the Netherlands peaked during the war years 1940 and 1945 (Kruijt, 1960). In this article, we try to explain this paradox, on the assumption that some groups expected to be excluded from social life at the beginning of the Second World War, and other groups, at the end of it. To examine these ideas, we used individual-level data on suicides in the Netherlands for the period 1937–48.

## **Theories and Findings on War and Suicide**

### ***Previous Research: Empirical Puzzles***

Durkheim's *Suicide* and his theory that suicide rates drop in countries involved in national wars have provided a starting point for studies on the relationship between war and suicide (Durkheim, 1951). Durkheim found that during the war of 1866 between Austria and Italy, suicides decreased by about 14 percent in both countries. He found similar drops in suicide rates during the French–German war of 1870–1 and the 1864 war between Denmark and Saxony. Durkheim explained this wartime suicide pattern with his political integration theory, arguing that higher levels of political integration resulted in a lower suicide rate. Political events, such as wars, but also elections and revolutions, were assumed to foster political cohesion, thereby lowering the suicide rate (Wasserman, 1983). This relationship between war and suicide has been a topic of a great deal of research, with findings both supporting and contradicting it.

In looking at aggregate suicide patterns during the First World War (1914–18) and Second World War (1939–45), cross-national time-series studies have found support for Durkheim's theory. Dublin and Bunzel (1933) found that during the First World War, suicide rates in each of the nine belligerent countries under study were lower than in the periods preceding (1911–14) and following (1926–30) it. Sainsbury (1972) showed that suicide rates decreased during the Second World War in 21 of the 22 nations examined. Time-series studies within a single country have also confirmed this wartime drop in suicides. Dublin and Bunzel (1933)

reported that suicide rates in the US states of Massachusetts and Connecticut were lower during the Civil War (1861–5) than in the prewar period (1856–60). Lunden (1947) examined suicides in France between 1910 and 1943, and showed that during the First and Second World Wars, suicide rates were much lower than either before or after the war years. O'Malley (1975) studied the suicide rates of women who were resident in Australia during the Second World War. He measured war involvement by the amount of media coverage of the threat of war and the number of Australian troop casualties, and found that both indicators were inversely related to female suicide rates.

However, despite this evidence, Durkheim's presumed wartime drop in suicides has been questioned. Three arguments stand out. First, it is acknowledged that in the First and Second World Wars, suicide rates were lower in belligerent countries, but at the same time, the suicide rates in surrounding – neutral – countries also decreased (Halbwachs, 1978). For example, in non-belligerent Sweden, the average suicide rate during the First World War was 12.9, which is lower than the prewar figure of 18.1 per 100,000 for 1910–1913 and the postwar rate of 14.5 for 1926–1930 (Dublin and Bunzel, 1933). Likewise, in Switzerland, which also remained neutral during the First World War, the rates were 24.0 for the prewar period, 19.9 for the war years and 25.3 for the postwar period. Similar decreases in wartime suicide rates are found for countries that remained neutral during the Second World War (Rojcewicz, 1971; Sainsbury, 1972).

Second, several studies suggest that while the suicide rates of countries at war tend to be lower, in some war years the suicide rates have peaked and actually exceeded those of the years before and after the war. Kruijt (1960) showed that the suicide rates in the Netherlands for the years at the beginning (1940) and the ending (1945) of the Second World War were the highest for the period from 1936 to 1952. A similar pattern was found in Belgium, France and Norway (Rojcewicz, 1971). In these countries, which were occupied by German forces, suicide rates in 1940 and in 1945, especially, were relatively high.

There is a third criticism of Durkheim's theory. The main argument is that Durkheim failed to take into account important macro correlates of war, most notably economic activity, which is assumed to be related positively to involvement in war and negatively to the risk of suicide (Marshall, 1981). In a time-series study of suicide data in the US between 1910 and 1933, Wasserman (1989) found that after taking changes in the national business cycle into account, suicide rates were indeed not lower during the First World War. Marshall (1981) examined the suicide rates of white adults in the US between 1933 and 1976. Although he showed that there was a decrease in the number of suicides during the Second World War, he found that this could be explained by the impact of the

national unemployment level on suicide. In a replication of Marshall's study, Lester and Yang (1991) measured war operationally as the size of the military in relation to the population. They found that in the US between 1933 and 1986, the unemployment level was a stronger correlate of national suicide rates than the size of the military forces. Only for those aged 45–64 was there a decrease in numbers of suicides when there were higher levels of military participation. In summary, aggregate studies using data from the US have not confirmed Durkheim's political integration theory; rather, they have suggested a protective effect from the higher economic activity during wartime.

### **Explaining the Empirical Puzzles: Durkheim's Theory Refined**

How should these contradictions about the pattern of suicides during wartime be interpreted? The three empirical puzzles for Durkheim's theory can be formulated as follows:

1. Why were the suicide rates in European countries that remained neutral during the First and Second World Wars lower during the war than before or after the war?
2. Why did suicide rates in several European countries that were occupied peak at the beginning and end of the Second World War?
3. Why was, after taking levels of economic activity into account, the suicide rate in the US not lower during the two world wars?

In order to explain these puzzles, we reformulate Durkheim's political integration theory in a more general way in this section. Subsequently, in the next section, we test implications of our refined theory by looking at suicide during wartime in the Netherlands.

As a starting point for revising Durkheim's theory, we consider that Durkheim proposed his political integration theory for *neighbouring* countries that were *at war* (i.e. Austria and Italy, France and Germany, Denmark and Saxony). These were great national wars, which created the kind of nationalism and patriotism that brings society together. However, the First and Second World Wars were more diverse, including not only countries that were directly involved in fighting (such as England) but also countries that were far from the field of battle (such as the US), countries that remained neutral (such as Switzerland) and countries like the Netherlands that were occupied. The general 'social integration theory' we propose in this article takes this more complicated scenario into account. It argues that *the more strongly people believe that they will be excluded from society, the greater their risk of suicide*. It refines Durkheim's political integration theory in two important ways.

First, Durkheim's political integration theory has to incorporate

people's *expectations* of the future (O'Malley, 1975). Although several European countries remained neutral during the First and Second World Wars, the fighting took place in neighbouring countries, so the political integration in the neutral countries was probably as high as in the countries at war. Countries are often involved in war involuntarily, and the label 'neutrality during the war' can only be concluded by hindsight, so the citizens of these neutral countries might have feared becoming involved in the war as well. Not surprisingly, then, lower suicide rates have been found not only in belligerent countries, but also in European countries that remained neutral in the First World War (Dublin and Bunzel, 1933; Halbwachs, 1978) and the Second World War (Rojcewicz, 1971; Sainsbury, 1972). Thus, by considering people's expectations of the future, puzzle (1) is explained.

Consider, in contrast, the situation in the US, which came into the First World War towards its end (i.e. 1917) and into the Second World War two years in (i.e. December 1941). There were no civil casualties, and except for the Japanese attack at Pearl Harbor in 1941, the actual fighting was thousands of miles away. It is possible to assume, then, that the involvement of the US in both wars was less threatening for US citizens than it was for citizens in the European countries that remained neutral (Stack, 2000). Hence, it is not too surprising that the involvement of the US did not have a direct effect on the suicide rate in that country. This argument explains puzzle (3).

Our second refinement of Durkheim's political integration theory states that *social integration* is more general than political integration. This idea is partly suggested by Durkheim himself in *Suicide* (Durkheim, 1951: 209), where he argues that 'suicide varies inversely with the degree of integration of the social groups of which the individual forms a part'. Durkheim mentions religious, domestic and political groups and shows that integration in each of these groups confirms the predicted inverse relation with suicide. However, Durkheim failed to consider situations in which integration in one group might diminish integration in other groups and, in turn, lower overall social integration (see also Wasserman, 1989: footnote 1).

This notion has important consequences for our assumptions about the relationship between war and suicide. Durkheim hypothesized that higher levels of political integration always lower the risk of suicide. O'Malley (1975: 348), after adding the idea that people have expectations of the future, formulated this explicitly: 'an increase in the perceived threat to a group, from an external source, will result in an increase in the integration of the group, and hence a decrease in its suicide rates'. However, we argue that a perceived threat from an external source increases the political involvement of a group but it only lowers the risk of suicide if it is associated with social integration more generally.

Societies consist of different groups that have different expectations about being included or excluded from the broader society. Although wars and other political events generally foster social integration in countries, in some situations, a war might cause certain groups to fear being excluded from society, and this fear could result in higher suicide rates among these groups.

This refinement of Durkheim's political integration theory can account for the peaks in suicide rates observed at the beginning of the Second World War in countries that were occupied, such as Belgium, France and the Netherlands. In 1940, these countries had sizeable Jewish communities. It can be assumed that in these countries, many Jews expected to be excluded from society as the German forces took over. The German Nazi Party was established in 1920, seized power in 1933 and started war against Poland in 1939. By 1940, the anti-Semitic ideology of the Nazi Party was known to a certain extent among the Jews in the occupied countries (de Jong, 1995). This could have led Jews in these countries to expect to be excluded from society, which could, in turn, have resulted in an increase in suicides in the Jewish community at the beginning of the German occupation.

In a similar way, the social integration theory is capable of explaining the peaks in suicides in the occupied countries at the end of the Second World War. It is well documented that some people collaborated with the German invaders during the war. This ranged from membership in pro-German parties, to assisting German actions, to hunting for Jews in hiding, to fighting on the side of the German forces. At the end of the war, when these 'political delinquents' lost the protection of the occupying German forces, they might have feared social exclusion and, consequently, committed suicide. In summary, extending Durkheim's theory by considering social exclusion of specific groups explains puzzle (2).

The second refinement provides another look at findings about the impact of the First and Second World Wars on suicide rates in the US. As mentioned earlier, during both wars, suicide rates in the US were lower than either before or after, and previous studies have found that these dips could be entirely attributed to increased economic activity (Lester and Yang, 1991; Marshall, 1981; Wasserman, 1989). We have argued that the social integration theory explains the absence of a direct (political) effect on suicide from war in the US, assuming that US civilians did not have strong expectations of becoming involved in the war. The impact of economic activity on suicide also fits the social integration theory. Unemployment, or economic inactivity in general, is an important aspect of social exclusion, and the association between employment and suicide therefore supports the social integration theory. Integrative political and economic forces therefore need not be regarded as alternative explanations, for they are both determinants of social inclusion.

### **Testing Durkheim's Refined Theory: New Hypotheses**

In order to make theoretical progress in general, it is not only necessary that the new theory explains the empirical contradictions with the older theory, it is also important to derive and test novel hypotheses from the new theory. In this article, we use the Dutch setting in the Second World War as a case study to examine our refinements of Durkheim's political integration theory. The Netherlands is a special case of the more general empirical challenge formulated as puzzle (2): why did suicide rates in several European countries that were occupied peak at the beginning and end of the Second World War? The Netherlands was occupied by German forces from May 1940 to May 1945, and the Dutch paradox for Durkheim's proposed wartime decline in suicides was that in the two war years 1940 and 1945, suicide rates peaked (Kruijt, 1960). Can the social integration theory we propose explain this contradiction? In the following, we propose a series of hypotheses derived from this theory.

First, consider the 1940 peak in suicides. In 1933, active measures were initiated against the Jews in Germany, resulting in a migration of about 16,000 German Jews to the Netherlands between 1933 and 1940 (de Jong, 1995). By 1940, Jews in the Netherlands were already aware of Nazi ideology and practices to a certain extent. When the German forces took over the Netherlands, there was widespread fear and panic among the Jews, and hundreds of them escaped to England. The historian de Jong (1995) mentions the suicides of several famous Jews in May 1940 but maintains that no one knows how many Jews killed themselves. We predict that suicides among Jews in the Netherlands peaked in 1940 (Hypothesis 1).

Fear of being excluded from society can also explain the 1945 peak in suicides. In the Netherlands, a sizeable group had collaborated with the German invaders. It seems reasonable to assume that towards the end of the war, members of the pro-German Dutch National Socialist Movement (NSM) expected to be excluded from Dutch society (Belinfante, 1978). Many of them were imprisoned in camps for political delinquents after the war and many lost their jobs (Groen, 1984). De Jong (1995) mentions the suicides of two prominent members of the NSM in June and December of 1945. How many more political delinquents committed suicide is not known (Groen, 1984). We predict that in the year the Netherlands was liberated (1945), there was a high suicide rate among political delinquents (Hypothesis 2). However, because political delinquents could have expected to be excluded from society shortly before and after the liberation of the Netherlands, we have investigated these political suicides over the period 1944–7.

Breaking down the figures for suicides among political delinquents by month provides a more detailed look at the application of the social

integration theory. The Netherlands was not liberated all at once. The southern part was liberated first, in September 1944, creating tremendous enthusiasm among the general Dutch population, who all expected to be freed from German occupation soon. Conversely, it contributed to increased fear among NSM members, who expected a 'day of reckoning', when they would face punishment for collaborating with the occupying forces (Belinfante, 1978). Many NSM members left their homes; trains were full of NSM members fleeing to the northern part of the Netherlands and to Germany. At the end of 1944, about 65,000 political delinquents had escaped to Germany (de Jong, 1995). However, it was not until April 1945 that the eastern part of the Netherlands was liberated and May 1945 before the German forces completely surrendered. We would therefore expect to find two peaks in the number of suicides: one in September 1944, when the southern part of the Netherlands was liberated, and another in April and May 1945, when Germany surrendered to the Allied Forces (Hypothesis 3).

We also examine the setting in which political delinquents committed suicide. Did suicide take place before, during or after they were taken into custody? The social integration theory predicts that people are more likely to commit suicide when they fear exclusion from society. In the case we study, imprisonment not only meant exclusion from society for political delinquents, but it was also a social stigma. Therefore, NSM members were socially excluded both at the time they were imprisoned in barracks for political delinquents and after they were released. The social integration theory predicts that political delinquents would have feared this and that many would have committed suicide even before they were imprisoned (Hypothesis 4).

We further investigate the impact of war on the 'non-excluded' population in the Netherlands. After controlling for the suicide rates of Jews and political delinquents, was the suicide rate in the Netherlands lower during the time of the country's involvement in the war? The social integration theory predicts that it was. Anti-German sentiments were strong, resembling the great national enthusiasm Durkheim spoke of. Some Dutch citizens openly and violently resisted the German forces. Most of the Dutch followed the progress of the war and celebrated German defeats in other countries. The German suppression of the Dutch created a national enemy and strengthened social bonds. We thus hypothesize that the suicide rate of the non-excluded population in the Netherlands during the war years (1940–5) was lower than either before (1937–9) or after (1946–8) the war (Hypothesis 5).

## Data

The data on suicides for the Netherlands during this period are in the form of individual records on standardized counting cards, preserved at the Central Bureau of Statistics Netherlands (CBS, 1999). Individual-level data on suicide are unique and avoid the problems associated with aggregate-level studies on suicide (e.g. Lester and Yang, 1991; Marshall, 1981; Wasserman, 1989), in which macro–micro relationships are studied with macro-level data (e.g. war, unemployment rate, suicide rate). Many researchers have therefore pleaded for individual-level studies on suicide (Breault, 1994; Burr et al., 1994; Ellison et al., 1997; van Poppel and Day, 1996; van Tubergen et al., 2005). A potential limitation of individual-level data on suicide resides not so much in these data, but in the unavailability of appropriate data for the population at risk. Whereas our data for suicides could be broken down after Jewish/non-Jewish and yes/no political delinquents, as well as individual controls such as age and sex, no such breakdowns are available for the population at risk.

We classified suicides among political delinquents in three ways: first, by relying on official descriptions in the records about motives. If, during the period 1944–7, we found such descriptions as ‘fear of arrest’, ‘political reasons’, ‘member of the NSM’ or something similar, we interpreted this as a political suicide. Second, the occupation of the deceased sometimes indicated a political suicide. Designations such as ‘militiaman’ or ‘SS soldier’ unequivocally refer to occupations of political delinquents. Third, we looked at the place of suicide. Officials often recorded the suicide as having been committed in ‘barracks’, ‘internment camp’, ‘a school for political delinquents’ or similar venues. The data we used for Jewish suicides during the period 1937–43 had been published earlier (Speijer, 1948).

To estimate suicide rates (the total number of suicides per 100,000 persons), we collected information on the size of the general population. Annual figures for the entire Dutch population in the period 1937–48 were obtained from CBS (2003). Exact yearly statistics on the number of Jews in the period 1937–43 are unknown, but most authors estimate the total Jewish population in 1940 to have been about 140,000 in the Netherlands (see de Wolf, 1946). Between 1940 and 1945, about 100,000 of the 140,000 Dutch Jews were killed by the Germans (de Jong, 1995). Because of large-scale deportations to concentration camps in 1942 and 1943, the suicide rates we present for these years are underestimated.

Precise information on the number of political delinquents is not well documented either. The maximum number of Dutch inhabitants who were members of the NSM is estimated at 150,000 (de Jong, 1995; de Jonge, 1968). This figure includes about 4000 SS soldiers, as well as a sizeable

group for whom the label of political delinquent is less clear. The average membership of the NSM was actually considerably lower than 150,000 and fluctuated heavily over time. For example, the total number of NSM members increased from 50,000 on 31 December 1940, to 78,000 on 31 December 1941, and decreased to 69,000 on 30 June 1942 (de Jong, 1995). Hence, the number of political delinquents at risk in the period 1944–7 was probably considerably lower than 150,000; the suicide rates we present here for political delinquents are correspondingly underestimated.

## Results

Table 1 shows the findings on suicide for the entire Dutch population for each year during the period 1937–48, with separate suicide figures for Jews, political delinquents and all others. It is important to emphasize that because our information pertains to the entire Dutch population, tests of significance are redundant (van Tubergen et al., 2005). The table shows that in 1940, the number of suicides in the entire population peaked at 1074 and, in 1945, peaked again, reaching 1009. According to Hypothesis 1, the 1940 peak should represent Jews who feared exclusion by the German occupation. Table 1 shows that the suicide rate among Jews in the Netherlands did indeed increase considerably, from around 20 in the period 1937–9 to 167 in 1940. In the year the Germans took over the Netherlands, 234 Jews killed themselves, about eight times as many as in the preceding period, with a suicide rate (167.1/9.7) 17 times higher than

**Table 1** *Absolute and Relative Suicide Figures among the Total Population, Jews, Political Delinquents and All Others in the Netherlands, 1937–48*

Year	Total population		Jews		Political delinquents		All others	
1937	745	(8.7)	33	(23.6)	–	–	712	(8.5)
1938	833	(9.6)	25	(17.8)	–	–	808	(9.5)
1939	742	(8.5)	28	(20.0)	–	–	714	(8.3)
1940	1074	(12.2)	234	(167.1)	–	–	840	(9.7)
1941	645	(7.2)	38	(27.1)	–	–	607	(6.9)
1942	875	(9.7)	249	(177.9)	–	–	626	(7.1)
1943	826	(9.1)	165	(117.9)	–	–	661	(7.4)
1944	666	(7.3)	–	–	11	(7.3)	655	(7.3)
1945	1009	(10.9)	–	–	88	(58.7)	921	(10.2)
1946	849	(9.1)	–	–	7	(4.7)	842	(9.2)
1947	701	(7.3)	–	–	7	(4.7)	694	(7.4)
1948	698	(7.2)	–	–	0	(0)	698	(7.2)

Source: CBS (1999).

Note: Suicide rates per 100,000 are shown in parentheses.

the part of the Dutch population that did not fear racially motivated exclusion. As can be observed from the table, 1942 and 1943 also showed high suicide rates among Jews. In these years, social exclusion of the Jews in the Netherlands became complete, as large-scale deportations to concentration camps began (Ultee et al., 2001).

Hypothesis 2 predicts that in 1945, when the Netherlands was liberated, suicide rates among political delinquents would increase. Table 1 shows that in this period (1944–7), there were 113 politically motivated suicides. Of these, 81 were determined to have been politically motivated using the motives mentioned by officials in the death records; the remaining 32 were determined using occupation and place of suicide. We found that in 1945, the suicide rate among political delinquents was 58.7, almost six times higher than that among the non-excluded Dutch population, which was 10.2. This confirms Hypothesis 2. Note that the relative suicide rate among Jews in 1940 was 17, about three times higher than the suicide rate of political delinquents in 1945, which was 6. Apparently, the Jews feared the German forces more than the NSM members feared Dutch retribution.

A more specific test of the social integration theory involves examining monthly suicide data. In Table 2 we present suicides by month for 1944 and 1945. Hypothesis 3 predicts that in September 1944 (with the liberation of the south of the Netherlands) and in April and May 1945 (when the rest of the Netherlands followed), suicides among political

**Table 2** *Total Number of Suicides among the General Population and among Political Delinquents by Month in 1944 and 1945 in the Netherlands*

Month	1944		1945	
	Total population	Political delinquents	Total population	Political delinquents
January	48	0	72	0
February	52	0	69	1
March	65	0	74	1
April	62	0	113	17
May	73	0	110	19
June	49	2	89	18
July	49	0	77	8
August	61	1	89	6
September	55	5	84	5
October	42	1	85	3
November	49	0	74	9
December	53	2	63	1

Source: CBS (1999).

delinquents would show an increase. Table 2 shows that the number of suicides for the total population in September 1944 did not exceed that of other months that year; however, suicides among political delinquents clearly increased. Out of 11 political suicides in 1944, five took place in September. Furthermore, three individuals committed suicide in June and August 1944, even before the Netherlands was partially liberated. With respect to 1945, we see an overall increase in the number of suicides in April and May. In April, when the eastern part of the Netherlands was liberated, 17 political delinquents committed suicide. One month later, when the rest of the country was liberated and the Dutch government returned from exile, another 19 political suicides occurred. In June, we count a further 18, confirming Hypothesis 3.

Another test of the social integration theory relates to the setting in which the suicide occurred: before, during or after the individual was taken into custody. Hypothesis 4 predicts that political delinquents would commit suicide even before they were imprisoned. We were able to trace the location of 78 of the 113 politically motivated suicides. For 18 persons (23 percent of the 78), the fear of arrest was enough to cause them to commit suicide. Officials described the motives for their suicides as 'fear of arrest', 'fear of punishment' and so on. Of the remaining 60 suicides, 59 took place in prison. A further examination revealed that 19 suicides were committed in detention rooms and 40 in internment camps. In one case, an NSM member committed suicide after release from custody. The marginal note on the record card, however, reports that the person was no longer accepted in his community. All in all, these findings confirm Hypothesis 4.

A final test of the social integration theory is to consider suicide rates among the non-excluded population. Hypothesis 5 states that the suicide rate of the non-excluded population was lower during the war than either before or after. Re-examining Table 1 (the last column) shows that the mean suicide rate among the non-excluded population in the prewar period 1937-9 was 8.8. In line with the hypothesis, the suicide rate dropped in the war years 1940-5, to 8.1. It is important to emphasize that this decrease in the suicide rate could not be ascribed to improved economic conditions. On the contrary, the Dutch population suffered economic strain during the war, leading to 25,000 people dying from starvation (Kruijt, 1960).

Although comparing wartime suicide rates with prewar figures confirms a decrease in the number of suicides during wartime, the lower suicide rate after the war does not. In the postwar period 1946-8, the suicide rate was 7.9, compared to 8.1 during the war. Why was the suicide rate among the non-excluded Dutch population lower after the war than it was during the war?

The question can be phrased more precisely, because the contradiction arises from the 1940 and 1945 peaks. The mean suicide rate during the intermediate war period (1941–4) was 7.2, which was considerably lower than the mean suicide rates of 8.8 before the war and 7.9 after. This confirms Hypothesis 5. But why, then, was the suicide rate among the non-excluded population so high in 1940 and 1945? We suspect that both peaks represent undercounting of those who feared exclusion. The record cards contain both fixed and open categories for officials to fill in, but there was, of course, no fixed category in which suicides could be classified as ‘social exclusion’ or ‘political’. In addition, historians have documented that not only Jews, but also other groups expected to be excluded from social life at the beginning of the occupation. De Jong (1995) lists three famous non-Jewish intellectuals who committed suicide in May 1940, but less prominent people would have gone unnoticed by historians. Due to the limitations of the data, we were unable to determine the number of non-Jews who feared the German occupation.

What about the 1945 peak? We suspect that the 113 political suicides we found represent only a fraction of the total number of politically related suicides. We relied on two fixed categories (occupation and place of suicide) and one open category (the motive for committing suicide) entered by officials on the records. We feel confident that if an official reported that someone belonged to the NSM, the person in question was indeed a political delinquent. We have doubts, however, about whether officials always recorded a person’s political affiliation in the records. While the limitations of the data do not allow us to say more about this, we do not feel that additional information would contradict the social integration theory, since only more suicides that were motivated by social exclusion would be found, further verifying our theory.

## Conclusion and Discussion

Durkheim’s hypothesized wartime drop in suicides has posed three empirical puzzles. It failed to explain (1) the decline in the suicide rate in European countries that remained neutral during the First and Second World Wars, (2) the peaks in the suicide rate at the beginning and end of several European countries that were occupied in the Second World War and (3) the absence of a wartime drop in suicide in the US, after taking economic activity into account.

In this article, we argue that Durkheim’s political integration theory could explain these empirical problems if it takes into account people’s *expectations* for the future and if it considers the *social integration* of groups. Puzzles (1) and (3) are solved by assuming that people in Europe more strongly expected to become involved in actual fighting than the citizens

in the US, for whom the actual fighting was thousands of miles away. Puzzle (2) is explained by arguing that some groups might be excluded from social life during wartime, instead of assuming – as Durkheim did – that wars and other political events always increase the integration in a country. Incorporating the refinements of Durkheim's political integration theory, we proposed a more general 'social integration theory', stating that the more strongly people expect to be excluded from society, the greater their risk of committing suicide.

We tested our social integration theory by focusing on the Dutch paradox, a specific case of puzzle (2). Why did the suicide rates in the occupied Netherlands peak at the beginning and ending of the Second World War? We assume that Jews feared social exclusion as the Germans took over and that many political delinquents expected punishment from the Dutch as the war ended. To examine these ideas, we analysed standardized records of individual suicides preserved at the Central Bureau of Statistics Netherlands. In accordance with the social integration theory, we found that the suicide rate among Jews was extremely high in 1940. We also found empirical confirmation for the prediction that suicides among political delinquents peaked at the end of the war. During the liberation of the south of the Netherlands, in September 1944, the number of political suicides increased and reached its highest point in May 1945, when the rest of the Netherlands was liberated. We also found empirical support for the idea that NSM members committed suicide even before they were taken into custody. All in all, our analysis suggests that Durkheim's political integration theory should take people's expectations of the future into account and consider patterns of social integration more generally.

Subsequent research could test the social integration theory with detailed individual-level data on the suicide rates in Belgium and France at the beginning and end of the Second World War. Like the Netherlands, suicide rates in these countries peaked at the beginning and ending of the war, and these peaks are presumably due to the social exclusion of Jews and political delinquents, respectively. Another way to test the social integration theory would be to look at the suicide rates of people who are unemployed or fear to lose their jobs (Stack, 2000), and to examine suicide patterns among asylum seekers. Finally, the social integration theory could be tested by examining suicides among people who were renounced, or feared being renounced, by close-knit communities. Phillips (1974) mentioned the suicide of Daniel Burros, a leader of the Ku Klux Klan, who committed suicide after it was revealed that he was Jewish. These and other examples are listed in the media and the scientific literature, and a more systematic treatment of these suicides would be a direct test of the theory proposed in this article.

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