

## **Why choose the railway? An exploratory analysis of suicide notes from a sample of those who died by suicide on the railway.**

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### **Abstract**

**Background:** The impact of railway suicide in the United Kingdom is extensive, yet reasons for why people choose this method are not clearly understood and research into the examination of suicide notes in this area is limited. **Aims:** Our study aimed to utilize the unique access to suicide notes written by those who died by suicide on the railway so as to gain a greater understanding of why people chose this method. **Method:** Descriptive and thematic analysis was conducted on 75 suicide notes for those who had died by suicide on the UK railway between 2010 and 2016. **Results:** Demographic findings from the sample were largely consistent with railway UK data trends. Five main themes were identified as being significant: “certain and instant,” “impersonal and non-human,” “ability to be planned,” “a good death,” and “bereavement suicide.” **Limitations:** Findings are based on suicide note authors who died by suicide on the railway in the UK, as such generalizability may be limited. **Conclusion:** Findings suggest that people select the railway for their suicide for the following motives: perception of being instant and certain and viewed as a good death, ability to be planned, belief it causes less of a burden on loved ones (via the perception of the railway as impersonal), and a prior experience of it being fatal (via bereavement suicide). Key implications in relation to prevention strategies and future research are discussed.

**Key words:** Suicide, Rail, Suicide methods, Suicide notes, Suicide Prevention

## Background

Railway suicide accounts for approximately four per cent of suicides across the UK (Williams, 2016). Although it is a relatively uncommon method of suicide worldwide (Krysinska & De Leo, 2008), the impact of a railway suicide can extend far beyond the circle of loved ones.

Railway suicide not only places huge financial stress on the rail industry it also has significant psychological effects on loved ones, rail staff, bystanders and emergency personnel (Marzano, Mackenzie, Kruger, Borrill, & Fields, 2019). In 2019/2020 over 283 interventions were carried out by police, rail staff or the public to help prevent suicide and there were 1881 suspected suicides on the over ground rail network- an increase of 4% from the previous year (Network Rail, 2021). This is in line with overall data trends in which rates of suicides in the UK saw an increase in 2018 for the first time since 2014 and have remained significantly high in 2019 (ONS, 2020).

Studies using witness and survivor accounts have suggested that the perception of certain and quick lethality, as well as accessibility, play an important role in contemplating suicide via this method (Marzano et al., 2019; Mishara & Bardon, 2016). Furthermore, research has indicated that changes to platform screen doors, media reporting and adding barriers have shown to reduce railway suicides, with limited displacement to other methods. (Barker, Kolves, & De Leo, 2017; Too, Milner, Bugeja, & McClure, 2014). This suggests that although rail suicide may not be the most frequent, opportunities for intervention may be possible. As such, research that seeks to better understand the motivations and causes of suicide and opportunities for suicide prevention on the railway are ever more important (Mishara & Bardon, 2016).

Examining suicide notes can be an invaluable tool in suicide research (Namratha, Kishor, Sathyanarayana Rao, & Raman, 2015). Suicide notes offer an insight into the state of mind in the time period before death and can provide the last communication with loved ones, offering an attempt to explain motivations (Callanan & Davis, 2009; McClelland, Reicher, & Booth, 2000). However, only a small proportion (around 25%) of people who die by suicide leave notes (Gunn, Lester, Haines, & Williams, 2012). Consequently, gaining access to suicide notes is difficult and research has previously focused on witnesses perceptions, survivors accounts or from those who have contemplated suicide (Marzano et al., 2019).

The overall aim of this research was to utilise the unique access to suicide notes, written by those that died by suicide on the railway, to gain a greater understanding of why people chose this method. Supplementary aims were to examine any additional insights that could help understand the processes that led to the suicide and any consequent implications for preventative initiatives.

## Method

### *Research design*

Suicide notes (n= 75) of individuals who died by suicide on the railway between 2010 - 2016 and were made available to British Transport Police (BTP), were analysed using a qualitative approach. Together with the suicide notes, where available, inquest reports on the authors of the suicide notes (n=25), which included witness statements from emergency personnel, general public, health professionals and loved ones were also examined. Access to BTP's fatality database (2010-2016) was also utilised.

BTP's fatality database provided a record of all fatalities that occurred across the UK railway network between 2010 and 2016. Each fatality was coded against a number (n=116) of different categories (e.g. demographic details, date, time, location, point of access, train speed etc). This enabled comparison of background details between the note authors and those who did not leave a note. The research was carried out in accordance with BTP's research approvals process and ethical guidelines.

### *Data Analysis*

As the research was primarily exploratory, Thematic Analysis (TA) was applied to the data (Boyatzis, 1998). This process followed a six-phase approach as outlined by Braun and Clarke (2006): 1) familiarising yourself with the data; (2) generating initial codes; (3) searching for themes; (4) reviewing themes; (5) defining and naming themes; and (6) producing the report.

Initially the researchers immersed themselves with the data, reading and re-reading the suicide notes for different themes using words, phrases and sentences that occurred. The data were then coded manually using an iterative process based on emerging findings and refined throughout the study. Both researchers reviewed the codes and themes as they were emerging to ensure any preconceived ideas did not influence the findings. The resultant set of analyses were then compared, and commonalities and differences identified. The final identification of themes was determined on an agreement discussion between the two researchers. Themes were chosen based on their universality, richness and prominence of their presence in the notes. The 25 available inquest reports on the note authors were also explored using TA. As these inquest reports contained extensive information the researchers used a coding framework with the following categories to make analysis more manageable: demographics, incident details, type of suicide note, and evidence to support the choice in suicide method. The data gathered from these were then used to help triangulate the themes established from the suicide notes.

Finally, demographic data were explored using crosstabulations and chi square comparing the suicide note authors (3.5%) with non-authors (96.5%; BTP Fatality Database). For analysis purposes the suicide note authors were removed from the BTP fatality database so that comparative analysis could be conducted. Only those fatalities that were officially classified by BTP as suicide were included in the analysis.

## Results

### *Note Type*

Of the 75 notes analysed, the majority (88%) were handwritten, with a few in the form of a text or via email/on the computer (12%). Most were addressed to loved ones (92%), however a small number (8%) were written to staff members and/or police. See table 1 for a full breakdown.

**Table 1.** Characteristics of suicide notes and authors vs. BTP's Railway Fatality Database

Characteristics	Suicide Note Group		BTP Fatality Database	
	N	Per cent	N	Per cent
Communication Method				
Letter	66	88	-	-
Electronic (Text/Computer)	9	12	-	-
Total	75	100	-	-
Recipient of Letter				
Loved ones	69	92	-	-
Staff/Police	6	8	-	-
Total	75	100	-	-
Age Group (yrs)				
17-24	12	16	288	14
25-34	20	27	383	18
35-44	12	16	375	18
45-54	14	19	471	22
55-64	7	8	309	12
65-74	8	11	179	9
75+	2	3	106	5
Total	75	100	2111	100
Gender				
Female	23	31	373	17
Male	52	69	1827	83
Total	75	100	2200	100
Ethnicity				
White European	67	89	1898	89
Asian	8	11	121	6
African	0	0	84	4

Other	0	0	32	1
Total	75	100	2135	100
Location of Suicide				
Station/Platform	36	48	848	42
Lineside	31	41	933	47
Foot Crossing	3	4	78	4
Level Crossing	5	7	202	5
Bridge	0	0	30	1.5
Total	75	100	1998	100

### *Age*

Most notes were written by those in the age category 25-34 (27%), with a smaller representation from the older age categories (8%, 11% and 3%). These percentages were largely consistent with BTP's fatality database, however more representation from 25-34-year olds in the note group was evident (27% vs 18%). Crosstabulations and Chi-Square were performed but no significant differences were found:  $\chi^2(6, N = 2186) = 6.336, p = .387$ .

### *Gender*

A total of 23 notes (31%) were written by females and 52 notes (69%) were written by males. On average the notes written by females were longer in length (three pages) compared with males (one page). In comparison to BTP's fatality database slightly more females were represented in the suicide note group. Crosstabulations and Chi-Square showed significant differences:  $\chi^2(1, N = 2275) = 9.49, p = .002$ . Females accounted for a higher percentage in the suicide note group (31%) in comparison to the BTP fatality database group (17%).

### *Ethnicity*

In terms of ethnicity, 67 notes were written by those from White European backgrounds (89%) with eight written by those from Asian backgrounds (11%). These figures were largely consistent with BTP's fatality database. No significant differences were found between the groups:  $\chi^2(1, N = 2094) = 2.732, p = .098$ .

### *Location of Suicide*

The most common location of suicide recorded within the suicide note group was via the station/platform (48%). The second was lineside (39%) with some choosing the foot (4%) and level (7%) crossing as other locations. This was consistent with BTP's fatality database, which recorded lineside (47%) and station/platform (42%) as the most common locations of suicide. No significant differences were found between the groups:  $\chi^2(4, N = 2073) = 2.291, p = .68$ .

## Results of Thematic Analysis

Five main themes emerged as key factors in why individuals may have chosen the railway as a method for suicide. These themes were present evenly across the whole group and were named: 'Ability to plan', 'Impersonal and non-human', 'Certain and instant', 'A good death' and 'Bereavement suicide'.

### *Ability to plan*

This theme encompassed two levels of planning; the suicidal act itself and the aftermath plans. When considering the act itself, some of the note authors stated intricate details such as the location, time of death and train route chosen to die by suicide: "I choose this spot as it is somewhere where trains pass through very fast", "I have chosen a quiet stretch of line".

Further exploration of the notes (n=5), alongside the inquest reports (n=6), suggested that several of the note authors researched train routes, locations and times, and joined online groups specific to railway suicide: "I joined a group on Facebook about train suicide...". In some cases the inquest reports stated that the authors had prior discussions with others about planning their suicide: "she told X that she was going to jump in front of a train on the exact line of route that she did it on", : "X discussed going to the station to watch trains and contemplate suicide".

When considering the aftermath of the suicide, many of the notes (n=25) contained detailed post-mortem arrangements. This included authors leaving details on what to do with finances, personal items and funeral plans: "...please can I have my wake in a park or forest", "...please sell my car and give that money to...".

The ability to plan through the researching of train routes and locations, alongside the detailed instructions within these notes, suggests that a certain level of planning might occur for railway suicide in terms of note authors.

### *Impersonal and non- human*

Several of the authors (n=11) implied that the reason for choosing the railway was because it felt "impersonal" and would not "burden" their loved ones. Some of the notes were even addressed to staff or police: "police look up by the bridge... do not let my wife up", "don't tell my friends until the 26th July so the news doesn't burden them...". Despite some authors stating that they understood the distress they would cause to some: "thank you all and my apologies for the inconvenience caused", "I've tried to avoid causing a major inconvenience to angry commuters by choosing a quiet stretch of line", this was outweighed by the perception of trains and the

railway as impersonal. For some authors it was implied that they chose the railway because they felt that they would be found by those better equipped (e.g. rail staff and police) to deal with the aftermath of their suicide: “I didn’t want to slit my wrists because I didn’t want to scar some poor innocent if they found my body”. The perception that railway suicide is impersonal suggests that for some, the impact of their suicide on rail staff, police, passengers and others is disregarded when choosing to take their lives via this method.

#### *Certain and Instant*

Previous studies have found that a key reason for choosing the railway was the perception of high lethality and a recurrent association that taking one’s life on the railway would be certain and quick (Marzano et al., 2019; Mishara & Bardou, 2016). This theme was evident in some (n=7) of the suicide notes analysed in this study. Several authors stated that they interpreted their suicide on the railway to be “instant and certain” and that “the train is the only certain way to commit suicide”. Others suggested that they chose this method of suicide as they believed it to be a “painless” and “simple suicide” and the “least likely to go wrong”. This was clarified further by one of the note authors suggesting that they had chosen railway suicide as they believed other methods may not be fatal: “I toyed with the idea of pills but there was the risk of someone finding me and carting me off to hospital...”.

When exploring the inquest reports it became apparent that some authors (n=5) had previously attempted suicide via a different method which had been non-fatal. According to witnesses in the inquest reports (n=2), it was believed that they had chosen the railway because: “...they didn’t know a certain way other than the train” and they felt that “...it was the only way left to die that was certain”.

#### *A good death*

Some of the suicide notes analysed (n= 10) suggested that the author interpreted their suicide via the railway as a “good death” and one that they were “looking forward to”. One note author specifically stated that other suicide methods were not seen as appealing: “I shuddered at the idea of hanging or drowning myself”. Several note authors suggested that the decision to take their own lives via the railway had left them feeling “at ease” and had given them an “inner feeling of calm and peace...”. The perception of a railway death as a “good death” was often present in the same notes as the theme ‘certain and instant’: “I have after all met what I interpret as a good death, the final moment is of course instant and certain...”. As such, the perception that railway suicide is seen as a good way to die may have had an impact on the authors choice of the railway as a method of suicide.

*Bereavement suicide*

Finally, a few authors (n=5) mentioned that they had lost loved ones prior to their own suicide and in some cases this had been due to suicide carried out via the railway: “that girl I was seeing killed herself, she jumped in front of a train”. From exploring the inquest reports further it was confirmed that several (n=8) of the suicide note authors had lost loved ones due to suicide: “tragically her boyfriend took his own life via the railways”. This finding could suggest that previous bereavement or experience of railway suicide may have had an influence on the authors decision to choose the railway as a suicide method.

**Discussion**

Suicide on the railway is an incredibly complex issue, and the impact of railway suicide in the UK is extensive. Previous research has often focused on witness testimonies or accounts of those that have attempted or contemplated suicide (Marzano et al., 2019). Yet research into the examination of suicide notes, which can provide a different perspective into the motivations of railway suicide, has been limited (Callanan & Davis, 2009; McClelland et al., 2000).

This research sought to broaden our understanding of why some choose the railway as a method and utilised access to a sample of suicide notes from those that had died by suicide on the railway between 2010-2016. Whilst there are many railway specific suicide preventative measures already in place, this research adds value to the existing work. Several tentative recommendations can be extrapolated from these findings.

Our findings show that many of the authors viewed the railway as a certain and instant method in which to die and this perception played a significant part in planning their suicide. This research is in line with previous work (Marzano et al., 2019; Mishara & Bardon, 2016), which suggests that attempts to debunk the perceived lethality, certainty and swiftness of suicide by this method, may have practical applications in reducing deaths on the railways. Figures reported by BTP (2019) suggest that one in four attempted suicides end in survival on the rail network. Although this fatality rate may still be considered high, it does not support the perception that being hit by a train will automatically end in an instant, painless and certain death. Efforts to change this perception would have to be cautiously considered and would require a sensitive approach. However, an attempt to promote stories of survival – including those involving life-changing injuries – on the railway network may challenge existing perceptions. Previous research has suggested that changing signage and announcements to decrease the attractiveness of the railways as a lethal method may contribute to a reduction in suicides (Ladwig, Ruf, Baumert, &

Erazo, 2009; Lukaschek, Baumert, Erazo, & Ladwig, 2014). However, these types of interventions and strategies, if utilised, would need to be carefully evaluated.

The present study suggests that people may select railway suicide because of the perception of it being 'impersonal and non-human' and the belief that this may ease the burden on loved ones. This relates to previous findings in which interviews with survivors suggested that they chose a public spot to attempt suicide due to a desire to spare loved ones from finding them (Owens, Hardwick, Charles, & Watkinson, 2015). Furthermore, the findings suggest that individuals may choose the railway because they felt that those who would be dealing with the aftermath (e.g. rail staff or police officers) were more equipped. This adds weight to previous research in which those that had thought about suicide or attempted suicide were attracted to use the railway due to the training and support that staff were given to deal with suicides (Marzano et al., 2019). As such, prevention strategies that could bring back the human, more personal element to the railway and highlight the impact of suicide on the police service, rail staff, and witnesses etc. may help to change the perception that taking one's life on the railway is less of a burden on others and is impersonal. Again, the sensitivities and consequences of promoting this kind of messaging would need to be carefully considered and evaluated.

The intricate detail in planning the suicide and what to do in the aftermath was evident in many of the notes. This finding is consistent with previous research which found that more people die by suicide via trains that run on schedule (Mishara & Bardon, 2013), and may also indicate a desire to alleviate the burden on loved ones left behind (Namratha et al., 2015). Consequently, there could be opportunities at an earlier stage for prevention or intervention. For those individuals who have got to the stage of research and planning their suicide on the railway, additional measures could be introduced to encourage them to seek help and signpost to support services.

In some cases, individuals used social media sites and internet searching to discuss options around railway suicide, as well as researching the line of route and accessibility points. As such, targeted signposting to support services that reached out to these online groups and limiting the availability of information on railway accessibility points online, may provide further opportunities for intervention.

Our findings indicated that some authors had previously lost loved ones to suicide via the railway or other methods. Although it was not possible to ascertain whether more authors had lost loved ones prior to their suicide, it is a preliminary finding that lends support to existing research on 'bereavement suicide' (Pitman, Osborn, Rantell, & King, 2016). It would be useful for

future research to explore whether previous history of bereavement suicide via the railway has an influence on choosing the railway as a method of suicide.

### **Limitations and Future Directions**

Whilst this approach allowed the researchers to gather in-depth insights into the thoughts and mindsets of those just prior to a fatal suicide, the findings are based on a small number of authors specific to railway suicide in the UK. As such, the findings cannot be generalised to a larger population or to other suicide methods. However, the sample size was comparable to other in-depth studies of suicide notes (Cheung, Merry, & Sundram, 2015; Furqan, Sinyor, Schaffer, Kurdyak, & Zaheer, 2019).

Individuals who write suicide notes may not be typical of all suicides which again impacts the generalisability of the findings. Despite this, the demographics of the suicide note group were largely consistent when compared to BTP's railway suicide group and previous research has shown only small differences between note writers and non-note writers (Callanan & Davis, 2009). However, there was a higher representation of females in the suicide note group and this preliminary finding could be explored further in future research.

This research was originally undertaken whilst the researchers worked inhouse for a police force. The researchers were not involved in the original data collection procedure and therefore did not have the scope to check for any potential biases or missing values that may have occurred during this process. Additionally, to protect the identities of the authors, full quotes from the suicide notes were not included in this paper, instead shorter sentences and words were used to help illustrate the themes. Although the work was carried out by experienced researchers, future research may want to think about furthering this work from a more independent perspective.

Lastly, the researchers had access to 25 inquest reports that accompanied the suicide notes. This research set out to primarily focus on the suicide notes rather than the inquest reports (as not all of them were available to the researchers). As such, future research that can systematically explore the inquest reports further for demeanour, risk factors and behaviour prior to the suicide event, could also provide a deeper understanding into why people choose the railway and effective potential preventative approaches.

## **Conclusion**

Overall, this study highlights unique perspectives by railway suicide decedents and offers insights into their decisions and thoughts prior to a fatal suicide attempt. The research helps to broaden our understanding of why some may choose the railway as a method and the analysis of suicide notes provides a different, though complimentary perspective to existing research. Whilst there are many railway specific suicide preventative measures already in place, this research adds value to the existing literature and can help to guide and enrich existing suicide prevention programs specific to the railway in the UK.

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