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21st Oct 2021 **#Morse Evaluation Report**

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Executive Summary

#Morse is a West Mercia road safety intervention that aims to improve referred drivers and riders road user behaviour and, in so doing, improve their safety and the safety of others. Referrals come from a wide number of organisations including the police, youth justice teams and the probation service. The scheme provides targeted support to address both the road behaviour that led to referral and any underlying issues that may be influencing the participant's behaviour.

There is strong evidence that #Morse is successful at improving the participants wellbeing and their views of driving.

Evaluation Method

Participants completed a questionnaire at 3 time-points, on initial sign-up to #Morse (T1), 6 weeks into the scheme (T2) and then again 6 weeks later (T3). The questionnaire contained measures of wellbeing and driving attitudes. Only 30 participants completed all 3 questionnaires. This was supported by 6 online semi-structured interviews.

Results

The measures used in the questionnaire found improvement in the participants views relating to:

Drink driving

Attitudes to drink driving were assessed by use of the alcohol sub-scale contained in the Drive Attitudes Questionnaire (Parker et al., 1992). This identified a statistically significant (p<.05) improvement at T3 compared to T1. Whilst there was also an improvement at T2 this was not significant.

Violation

Attitudes to driving violation were assessed by use of the Attitude to Driving Violation Scale (West & Hall, 1997). This scale mainly focuses on speed. A statistically significant (p<.05) change was found at T2 compared to T1. Whilst the score had increased at T3 compared to T1 this was not statistically significant.

Wellbeing

Wellbeing was assessed by use of the Warwick-Edinburgh Mental Wellbeing Scale (Tennant et al., 2007). Statistically significant (p<.05) improvement was found at T2 and T3 compared to T1.

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Participants View

The semi-structured telephone interviews support these positive findings with the level and breadth of support being the overarching theme to emerge. It was very clear that #Morse exceeded the participants expectations.

Summary of findings

These finding are very encouraging and clearly indicate, within the limitations of the method used in this evaluation, that #Morse is having a positive impact.

In particular the improvement in their attitude to drink-driving is encouraging, given that 43% were referred because of an alcohol related offence. There were also similar findings relating to drug driving, but this element of the questionnaire was an addition to the questionnaire and failed to generate a sufficiently large enough sample to allow any meaningful analysis to be completed. However, the mean scores did move in the desired direction. The results for this scale are reported in the main body of this report.

Another highly encouraging area is the improvement identified in the wellbeing scores. As conceptualised by Goals for Driver Education (Hattaka, et al. 1999; update at the NODIC / Japanese conference by Keskinen, et al. 2014) driving is not simply about knowing the Highway Code, it is an expression of how we see and feel about the world and our ability to cope with the stresses and strains of life. Helping someone see the world more positively and giving them new goals and wider life chance is likely to reap a significant road safety benefit.

Whilst overall the results are extremely positive there are some areas for development. Less than 8% of scheme participants identified as being Black or Asian, and this may indicate that the scheme is not attractive to these groups.

There was a reduction at T3 on the Attitude to Driving Violations Scale, and consideration should be given to how the initial improvement identified at T2 can be maintained.

There were significant limitations with the evaluation, most notably that it was not possible to draw any conclusions about reoffending rates.

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Recommendations

- 1. Participants are unsure what #Morse is and how it will support them when enrolling on the scheme and this may be reducing scheme take-up, particularly with disadvantaged groups. It is therefore recommended that consideration is given to how to improve communication and the scheme's identity.
- 2. That consideration is given to how to maximise the impact the scheme has over the longer-term, for example, by maximising the use of the e-learning modules that now form part of the scheme.
- 3. That a longitudinal evaluation is conducted that randomly allocates the participants to either a treatment or control group. This would allow reoffending rates to be considered.

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Background

#Morse is a West Mercia road safety intervention that aims to improve referred drivers and riders road user behaviour and, in so doing, improve their safety and the safety of others. The scheme aims to achieve this by providing targeted support to address both the road behaviour that led to referral and any underlying issues that may be influencing the participant's behaviour. Referrals come from a wide number of organisations including the police, youth justice teams and the probation service.

#Morse is a wide-ranging intervention, and one of the first in the UK to approach poor road user behaviour in a holistic way. This approach sees dangerous road user behaviour as a public health issue that requires a multidisciplinary approach.

As shown in Figure 1, the scheme's concept can be related to the Goals for Driver Education (GDE) (Hattaka, et al. 1999; update at the NODIC / Japanese conference by Keskinen, et al. 2014), a 5-level hierarchical framework that identifies that the Social Environment and an individual's Goals for Life and Skills for Living directly influence the type of journeys undertaken and how the individual deploys their traffic and vehicle skills.



Figure 1: Goals for Driver Education (Keskinen, et al. 2014)

The GDE would support the concept that improving someone's life chances and helping them to overcome difficult periods in their life is likely to lead to a reduction in dangerous driving

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behaviours. To do this successfully would require a wide-ranging intervention that utilised a number of related disciplines.

#MORSE is a multi-agency approach involving YSS, West Mercia Police, Herefordshire and Worcestershire Fire and Rescue Service and the Shropshire Fire and Rescue Service. YSS is a charity that provides support for public benefit, including rehabilitation services for prison leavers and early interventions with families, children, and young people. The scheme is financed by West Mercia's Police and Crime Commissioner.

Evaluation Method

Both quantitative and qualitative approaches were incorporated into the evaluation design. The quantitative element used an in-group design, with the participants being asked to complete an online questionnaire at 3 time-points:

- Time 1 Immediately after the initial meeting with their allocated caseworker
- Time 2 On completion of the scheme (approximately 6-weeks after referral)
- Time 3 6-weeks post completion of the scheme.

Driving attitudes were assessed by use of the Attitude to Driving Violation Scale (ADVS) (West & Hall, 1997). This scale asks the participants how strongly they agree or disagree with 7 statements using a 5-point scale ranging from strongly disagree to strongly agree. An example of the items contained in the scale is 'In towns where there are a lot of pedestrians the speed limit should be 20mph'.

The items contained in the ADVS are mainly associated with speeding, therefore, to give a more specific insight of the participants views of drink-driving, the 5 items contained in the Driver Attitude Scale (Parker et al., 1992) covering this behaviour were included using the same 5-point scale as the ADVS. An example of the statements included in this scale is 'I think the police should start breathalysing a lot more drivers'.

To gain an insight into drug-driving a 7-item scale was developed specifically for the evaluation, and this scale again used the 5-point strongly disagree to strongly agree scale. These drug-driving items were added later in the evaluation process as it became clear that drug-driving was a frequent cause of referral. An example of an item in this scale is: 'Even the smallest amount of cocaine would put you over the limit when driving'.

The key feature that differentiates #Morse from other road safety interventions is its holistic approach that aims to improve the participants life chances and feeling of wellbeing. To assess this The Warwick-Edinburgh Mental Wellbeing Scale (WEMWS) (Tennant et al.,

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2007), was included. This is a 14-item scale that asks the participants to rate themselves on a 5-point frequency scale ranging from 'None of the time' to 'All of the time' for a number of wellbeing items, for example, 'I've been feeling close to other people'.

The Time 3 questionnaire also included open questions about their experience of the scheme, and these were analysed as part of the qualitative element of the evaluation. As well as these open text questions, the qualitative element of the evaluation included six semi-structured telephone interviews with participants.

Sampling

The total sample size at each of the 3 timepoints is given in Table 1. Only 30 participants completed the questionnaire at all 3 timepoints.

Table 1: Number of participants

Time point	Number of participants	
1	92	
2	49	
3	36	

Gender and age

At the T1 point the sample was 80% male and 20% female. The mean age was 35.5 year (SD = 11.257) with the mean age being 35 years for male (SD = 11.567) and 36 years for females (SD = 10.515).

Ethnicity

Of the 92 participants who answered this question most identified as being white, accounting for 92.4% of the sample. This finding is of concern as it would indicate the scheme may not be attractive to minority groups, who accounted for less than 8% of the sample.

Ethnicity	Number of participants	Valid percentage
White	85	92.4
Black / Black British	2	2.2
Asian / Asian British	2	2.2
Mixed	1	1.1

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Driving history

Most participants, 86%, held a full driving licence. The mean time they had held their licence was 16 years (SD = 11.209). Figure 2 shows the distribution. A further 8% only held a provisional licence, with 6% not holding a licence.



Figure 2: Year held licence

Most participants drove regularly (prior to covid or receiving any disqualification that led them to engage with #Morse) with 69% indicating that they drove every day or most days (Table 2).

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Frequency of	Frequency	Percentage	Valid
driving			percentage
Every day	50	51.5	54.3
Most days	14	14.4	15.2
A few days a	5	5.2	5.4
week			
Once a week	2	2.1	2.2
Less than	21	21.6	22.8
once a week			
Total	92	94.8	100
Missing	5	5.2	

Table 2: Driving frequency

Points and disqualification

Sixty-two percent of the sample indicated they had no licence points. Figure 3 contains a breakdown of licence points with those who indicated they had no points removed. This analysis identified that 25 participants had 6 or more points on their licence and of these 7 participants had 13 points with 3 participants having 15 or more. This would suggest that many of the participants are repeat offenders, a finding supported by another question in the questionnaire that asked if they had been previously disqualified from driving prior to any offence that led them to be referred. 44.3% indicated they had been previously disqualified. These findings would suggest that #Morse is successful at targeting repeat offenders.

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Figure 3: Number of licence points

Reason for referral

Based on data supplied by YSS the main reasons for referral are related to alcohol or drugs use. Out of 276 referrals, 120 (43%) were for alcohol and 106 (39%) for illegal drugs. Other offences included driving whilst disqualified, taking a vehicle without consent and document fraud accounted for the remaining 18% of referrals.

Results

Attitude to Driving Violation Scale (ADVS)

The mean scores for this scale are given in Table 3 and are shown in Figure 4. A repeatmeasure ANOVA determined the ADVS scores differed significantly across the three time points (F(2, 52) = 6.159, p = .001). A post hoc comparison using a Bonferroni correction found that the increase between time 1 and time 2 were statistically significant (p = .017). However, the improvement seen from time 1 to time 3 narrowly missed the level needed to be significant (p = .06), a score of less than .05 is normally regarded as statically significant.

Table 3: Result	s - Attitude	to Driving	Violation Scale
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Time	Mean =	SD =	N =
1	24.48	4.070	27
2	26.70	4.259	27
3	26.37	3.982	27

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Figure 4: Mean scores - Attitude to Driving Violation Scale

Driving Attitude Questionnaire Drink Driving scale (DAQDD)

A repeat-measure ANOVA determined the DAQDD scale scores improved across all 3 time points (F(2, 54) = 6.720, p = .002). A post hoc comparison using a Bonferroni correction found that the increase between time 1 and time 2 was not significant (p = 0.61). However, the improvement seen from time 1 to time 3 was significant p = .003. Mean scores are given in Table 4 and are shown in Figure 5.

Table 4: Results - Driver Attitude Questionnaire Drink Driving Scale

Time	Mean =	SD =	N =
1	17.82	2.695	28
2	19.21	3.189	28
3	19.39	2.726	28

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Figure 5: Mean Scores - Driver Attitude Questionnaire Drink Driving Scale

Drug Driving Scale (DDS)

Analysis for the scale relating to drug driving proved inconclusive as the sample size across the 3 timepoints was very low (N=6). The most likely reason for this is that the scale was a later addition to the questionnaire as it became apparent this was a common reason for referral. The mean scores are reported in Table 5 and shown in Figure 6. The mean score had moved in the desired direction across all timepoints.

Table 5: Results - Drug Driving Scale (DDS)

Time	Mean =	SD =	N =
1	24.17	2.639	6
2	28.00	4.195	6
3	28.67	4.802	6

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Figure 6: Mean scores - Drug Driving Scale

Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)

The mean scores moved in the desired direction at all time points. A repeat-measure ANOVA determined the WEMWBS scale scores differed significantly across all time points (F(2, 54) = 11.082, p = .001). A post hoc pairwise comparison using a Bonferroni correction found that the increase between T1 and T2 was significant (p = .012) as was the move from T1 to T3 (.003). The mean scores are reported in Table 6 and shown in Figure 7.

Table 6: Results - Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)

Time	Mean =	SD =	N =
1	41.96	12.775	28
2	48.86	10.043	28
3	51.14	11.423	28

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Figure 7- Mean scores - Warwick-Edinburgh Mental Well-Being Scale Results

Open questions

The T3 questionnaire contained 3 open text questions. The first question asked them to consider what they felt they had achieved from being involved with #Morse. The themes that emerged were improved levels of wellbeing, great awareness of the danger of impairment and the impact their behaviour has on others.

Out of the 43 participants who responded to this first question, well-being was mentioned 18 times. The following 3 comments capture this theme:

'New direction in life with the inspiration to carry on living'. Participant 3

'I have achieved a hell of a lot just to have someone to talk to that treats me with respect and honesty it has been completely non judgmental. I have taken so much from the programme that will take me on in every aspect of my life'. Participant 46

'I feel like it has made me grow as a person. It has given me a lot of knowledge that I didn't know before. It has been a comfortable learning experience which has made me

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open my eyes to things I wasn't aware of before. I use what I have learnt and apply it to other areas of my life too'. Participant 18

The second theme that emerged was the danger of impairment which was associated with 13 participant comments. Five of the comments directly mentioned alcohol, for example:

'I have learned a lot and dismissed some popular misconceptions about drinking and driving'. Participant 45

'a better knowledge of the effects' Participant 19

The final theme that emerged related to consequences which was mentioned 5 times. The following statements capture this concept:

'I have learnt a lot about myself. I have also learnt about the impact on driving and that it doesn't only affect me but others around me (ripple effect)' Participant 21

'To make wiser choices in the future and think about the consequences'. Participant 47

The second open text question asked the participants to consider what they felt was the most useful element of #Morse. In this case the main theme that emerged was emotional support. This was mentioned 14 times out of 37 replies. Typical responses included:

'weekly telephone calls offering help and support' Participant 3

'Having someone there to talk to who has really cared and helped me so much' Participant 17

'Talking- emotional support all of this physical support with my passport and help with various things. You pulled me out of dark place. At the beginning of the year I was dreading the calls from various people but now I look forward to the catch-ups' Participant 38

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Whilst emotional support was a strong theme road safety was also strong, comments included:

'The alcohol and driving sessions' Participant 6

'Makes you look at situations on the road makes me want to be a more safer driver by sticking to law. I will be less of an aggressive driver and use my new skills and strategies before and during driving' Participant 7

'The Elearning modules. I found them really interesting and I go back and watch them again. I learnt a lot from these and making a plan has helped to remain focused' Participant 37

The final question asked about how the course could be improved. No clear theme emerged, most of the comments were very positive towards the course:

'Absolutely nothing it's been absolutely great with all help throughout the whole thing' Participant 5

The only clear theme was the lack of personal contact due to Covid, which was mentioned 3 times:

'I can't think of anything it's been really good it would have been nice to see the lady who supported me not just speak to her. I had a worker before who was able to come out but Covid stopped that' Participant 17

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Participant interviews

Seven semi-structured interviews were conducted with participants. The participants agreed to the interview when completing the T2 questionnaire. The term 'Interview Participant' has been abbreviated to IP for reporting. The interviews were completed and recorded online and then transcribed. A themed analysis was then completed. Three themes emerged:

- The breadth and level of the support offered by scheme
- Improving behaviour
- Scheme identity.

Breadth and level of support

This theme emerged repeatedly from the interviews. Examples given included finances, housing, mental health issues and addiction. Some typical quotes are given below relating to support the participants had received from #Morse:

'They've done quite a lot for me, sorry, they're doing quite a lot for me' IP 1

'It's a really good service, they are really helpful all the difference avenues they can help you'

IP 2

'But ultimately things like housing'. IP 3

'Well the keyworker just helped me, helped me sort out the finances, all sorts, given me phone numbers for various, everything, everything that you think they think I needed they helped me with'. IP 4

I'd gone through a lot health wise and I was struggling to deal with things because of probation because of my driving ban then doctor's appointments, ridiculous amounts of medication and xxxx[caseworker name] and everything and my driving, my Drive Smart course, xxxx [caseworker name] just seemed to get it sorted. IP 5

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It was clear the participants felt the caseworkers were highly approachable, for example interviewee 7 said, 'There's no judgement there...'. When discussing their caseworker IP 2 highlighted that 'She was a diamond, yes, she's been great'. IP 5 said 'She's just a nice person and she actually phones me out of hours sometimes'

The participants felt that #Morse had provided an extremely high level of service.

'I was very sceptical because you get a load of jargon, you know, people who, oh we can do this and that. I've never had a better service in all honesty so I started off with, you know, a pessimistic view about it but then slowly but slowly realised, no, this is good, this is a good service.' IP 5

This section has only provided a few quotes supporting this theme. It is very clear from these and other comments that the IP universally felt that the scheme had offered them a very high level of support.

Improving behaviour

When asked to consider what they hoped to gain from engaging with #Morse a strong theme was 'help not to repeat the offence'. IP 5 captured when speaking about a drug driving offence: 'To nip that in the bud'. IP 1 said: 'I'll be truthful, I'm fed up of going to jail and losing everything' and then went on to say later in the interview 'I actually stop and think about stuff now instead of just going willy-nilly, jumping in and doing it'. IP 5 captured this concept well:

'Instead of being a naïve kid. I'm thirty-seven years old, you know and you know, I was just burying my head in the sand. It's [#Morse], made me like, man up, listen, stand up to your mistakes, learn from them'.

Scheme identity

The only negative theme that emerged from the interviews related to a lack of understanding of what #Morse scheme was when signing-up and what it could do to assist them. For example, IP 3 said 'I had no idea who or what they were'. IP 5 identified that he was unclear on what they would gain from involvement 'I didn't know what I'd gain'. This is potentially an important finding, and may go some way in explaining the low levels of take-up from underrepresented groups, who may be suspicious of official services.

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Conclusions

Based on the methods and scales used in this evaluation there is strong evidence that #Morse is successful at improving the participants wellbeing and their views of driving. There were statistical improvements in attitudes relating to driving violation attitudes at T2 compared to T1. Whilst the T3 score was below the level needed to be significant the score was still above the T1 score. The scale used to measure attitudes to alcohol showed a statistically significant improvement at T3 compared to the T1 score. This improvement is particularly encouraging given that 43% of referrals are for drink driving offences. The drug driving scale again showed an improvement at T2 and T3 compared to T1 but, due to a low sample size (N=8), it was not possible to draw any firm conclusions. The evidence for improvements in wellbeing is equally strong with statistically significant improvement being found at both T2 and T3 compared to T1.

The analysis of the participant interviews supports these findings. The theme that repeatedly emerged was the breadth of support offered by the scheme. It is clear that #Morse exceeded the participants expectations.

Areas of development

There are three areas of concern, two of which are possibly interlinked.

The first is that the T3 score on the ADVS did reduce at T3 compared to T2. This scale has a strong focus on speeding and consideration should be given to what further support can be given to maintain and, hopefully, further improve their views in this area. #Morse has already taken steps to do this with the development of a speed e-learning module, and consideration should be given to how this can be used most effectively, possible by asking the participants to complete the module nearing the end of the engagement with #Morse. Whilst this reduction of score was not found in the other scales used, consideration should be given to how best these key messages can be maintained also.

The interlinking areas of concern relate to scheme identity. On enrolment the participants did not have a clear understanding of what #Morse is and how it could help them. This lack of clarity may be discouraging people from enrolling generally, and more specifically discouraging minority groups who may have increased levels of concern about engaging with organisations that they may see as being linked to the authorities.

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Limitations

When this evaluation was designed there was no evidence that #Morse would be successful, this evaluation has provided considerable insight. Prior to reaching this point it would not have been sensible to spend large sums on a complex evaluation. However, if the scheme is to be continued, consideration should now be given to the development of an evaluation to address these issues. The main limitations with this current evaluation include:

A lack of a control group, which makes it impossible to say whether the improvement found in this evaluation would not have simply occurred over time with the intervention of #Morse. However, whilst this cannot be dismissed, it is felt that given that the experience of the participants is so positive, this is unlikely.

A second limitation is that the sample size over the 3 timepoints is relatively small at 30.

One final limitation worth mentioning is the short-term nature of the evaluation, making it impossible to say what the long-term effects of the intervention would be, for example on reoffending.

With these limitations in mind, consideration should be given to a more robust larger randomised control trial that will provide answers to these outstanding questions.

Recommendations

- 1. Participants are unsure what #Morse is and how it will support them when enrolling on the scheme and this may be reducing scheme take-up, particularly with disadvantaged groups. It is therefore recommended that consideration is given to improving early communication and improving the scheme's identity.
- 2. That consideration is given to how to maximise the impact the scheme has over the longer-term, for example, by maximising the use of the e-learning modules that now form part of the scheme.
- 3. That a longitudinal evaluation is conducted that randomly allocates the participants to either a treatment or control group. This would allow reoffending rates to be considered.

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References

Hattaka, M., Keskinen, E., Gregersen, N., Glad, A., & Hernetkoski, K. (1999). Results of EU-Project GADGET, WP3

Parker, D., Manstead, A. S., Stradling, S. G., Reason, J. T., & Baxter, J. S. (1992). Intention to commit driving violations: An application of the theory of planned behavior. *Journal of applied psychology*, 77(1), 94.

Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., & Stewart-Brown, S. (2007). The Warwick-Edinburgh mental well-being scale (WEMWBS): development and UK validation. *Health and Quality of life Outcomes*, *5*(1), 1-13.

West, R and Hall, J. (1997) The Role of Personality and Attitudes in Traffic Accident Risk, APPLIED PSYCHOLOGY: AN INTERNATIONAL REVIEW, 46 (3), 253-264

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