

Police Scotland Rider Refinement North 2022: independent evaluation report.

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POLICE SCOTLAND
RIDER REFINEMENT
NORTH 2022
INDEPENDENT
EVALUATION REPORT

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Acknowledgements

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This evaluation would also not have been possible without the administrative support of Police Scotland and the kind co-operation and professional insight of Road Policing Division officers involved in the delivery of Rider Refinement North 2022.

Finally, this evaluation would not have been possible without the assistance of the participants of Rider Refinement North 2022 and their generous co-operation with this project.

Caroline Hood
December 2022



Executive Summary

First launched in 2018, Rider Refinement North is a program aimed at motorcyclists offering classroom and practical based experiences in a day-long course. It is delivered by Police Scotland officers from across the North Area Command region, accompanied by an observer from the Institute of Advanced Motorists (IAM). The course aims to raise awareness of both road safety and the personal consequences of taking risks (Police Scotland 2022). For 2022, the format of RRN was modified under the supervision of Inspector Greg Burns (Road Policing North, Tayside Division).

The aim of this research is to provide an independent evaluation of Police Scotland's Rider Refinement North (RRN) 2022 initiative.

The evaluation has two objectives:

- **Objective 1:** to understand the impact of the redevelopment of RRN
- **Objective 2:** to inform the development of future iterations of RRN.

Overall, the response to the format and content of RRN 2022 has been overwhelmingly positive. Both participants and the Road Policing Division officers involved in the delivery of RRN 2022 have identified the clear value that is derived from offering skills-based training to motorcyclists. Participants' expectations for RRN 2022, from the perspective of skills development, have been met and indications are that this has translated into enhanced rider confidence around critical skills. Furthermore, the focus on skills such as forward observation, cornering, and road positioning rather than solely emphasising risk and overt safety messages, has a proven track record within academic research of being the most effective method of positively impacting road safety.

The newly redeveloped presentation segment of RRN 2022 was well received by both participants and instructing officers, with the use of video examples receiving praise from participants. It also formed an important foundation for the practical element of RRN 2022, equipping participants with knowledge and understanding that could be directly applied under the supervision and observation of officers. It is also evident that participants valued the experience of engaging with Road Policing Division officers. Critically, a significant number of participants have gone on to seek further advanced training opportunities.

Finally, as identified in previous motorcycle safety evaluation work, RRN adopts an innovative and informed approach to rider engagement, rider awareness, and skills building. The RRN 2022 iteration is a welcome extension of this approach.

On this basis, the following evidence-based recommendations are made in fulfilment of **Objective 2**:

- **That the RRN 2022 format is adopted for future iterations of RRN [Recommendation 1].**
- **That an initiative like RRN is rolled out on a national basis, to enable engagement with motorcyclists from across Scotland [Recommendation 2].**
- **That further engagement strategies are developed to encourage a broader range of motorcyclists from across the population to attend future iterations of RRN [Recommendation 3].**
- **That Police Scotland engage in a broader and more diverse media advertising campaign for future iterations or RRN to ensure that as broad a range of motorcyclists are engaged with and to support the implementation of Recommendation 3 [Recommendation 4].**

- That consideration should also be given to running session dedicated to female riders to help support what is a minority group within the broader motorcycling community [Recommendation 5].
- That further research is undertaken to investigate the potential for initiatives such as RRN to be offered as an alternative to prosecution for motorcyclists reports to the Crown Office and Procurator Fiscal Service in connection with certain road traffic offences, with related outputs likely being delivered by third-party suppliers as part of a wider road traffic diversionary course programme [Recommendation 6].

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1. Background & Introduction

1.1. Purpose of the Research

First launched in 2018, Rider Refinement North (RRN) is a program aimed at motorcyclists offering classroom and practical based experiences in a day-long course. It is delivered by Police Scotland officers from across the North Area Command region, accompanied by an observer from the Institute of Advanced Motorists (IAM). The course aims to raise awareness of both road safety and the personal consequences of taking risks (Police Scotland 2022). For 2022, the format of RRN was modified under the supervision of Inspector Greg Burns (Road Policing North, Tayside Division).

The aim of this research is to provide an independent evaluation of Police Scotland's Rider Refinement North (RRN) 2022 initiative.

The evaluation has two objectives:

- **Objective 1:** to understand the impact of the redevelopment of RRN
- **Objective 2:** to inform the development of future iterations of RRN.

1.2. Limitations of the Research

It is important to acknowledge the potential limitations of the research, specifically the 46.7%¹ response rate to the post-participation questionnaire. In common with all qualitative research, caution is required in relation to the generalisability of the research findings. Furthermore, it is noted that the statistical information presented in this report should not be solely relied upon to imply causation and the data set generated by this evaluation requires to be viewed holistically.

All information is correct at the time of publication (December 2022). Any errors that remain are the author's sole responsibility.

¹ Representing 77 RRN participants of the 164 total who completed the course in 2022

2. Methodology

2.1. Overview

The method adopted for this evaluation focussed on the utilisation of online questionnaires to meet the project objectives of: (i) understanding the impact of the redevelopment of RRN; and (ii) informing the development of future iterations of RRN. Further information on the questionnaires is set out below in Section 2.2.

2.2. Questionnaires

Three separate web-based questionnaire surveys were used to obtain original research data for the project. Questionnaires were designed and hosted on the Jisc online platform² and disseminated by email. A copy of each of the questionnaires can be found in Appendix B.

Consistent with accepted approaches in social research methods, in each instance data was coded and analysed using an open-coding process, followed by a thematic analysis (see further Bryman 2016). Appropriate statistical analysis is also included of relevant questions to enable further understanding of participants' responses.

2.2.1. Pre-Participation Questionnaire

A web-based survey was distributed to prospective participants by Police Scotland. In total **194** questionnaire responses were received, with **165** of these individuals participating in a RRN 2022 session. For the purposes of this evaluation, only **164** of these responses were utilised. This is due to one participant attending the classroom-based session but because of a defective motorcycle this individual did not complete the course. This participant's data was removed from the data set and formed no part of the analysis or evaluation process.

A variety of open and closed questions were included in the questionnaire with the purpose of extracting relevant data in relation to participants' expectations of RRN 2022 as well as their attitudes and perceptions towards their own skill level and key road safety themes. The quantitative and qualitative findings are set out below.

2.2.2. Post-Participation Questionnaire

A web-based survey was distributed to participants via email. Participants were contacted directly by the evaluator with an invitation to complete the post-participation questionnaire. In total, **164** post-participation questionnaires were circulated to participants. In total, **77** responses were received, 100% of which were appropriate for inclusion in the research.

A variety of open and closed questions were included in the post-participation questionnaire with the purpose of extracting relevant data in relation to the participants' experience of RRN 2022 and the knowledge and understanding participants believed they had acquired. In addition, questions were included to seek to gain the opinions of participants, focussing on the format of RRN 2022.

2.2.3. Police Scotland Instructor Questionnaire

A web-based survey was distributed with the assistance of Police Scotland to Road Policing Division officers within the North Command area involved in the delivery of RRN 2022. In total **6** responses were received, all of which were appropriate for inclusion in the research and are deemed to be

² This platform is fully compliant with the Data Protection Act 2018.

representative of the officers involved in RRN 2022. **Five** out of the **six** participants had been involved in delivery of RRN previously.

A variety of open questions were included in the questionnaire with the purpose of extracting relevant data in relation to perceptions of RRN 2022, the value to participants, and views on the continued relevance of RRN.

3. Participant Profile – Pre-Participation Data

3.1. Overview

The initial focus of this section is on the statistical information gathered from the surveys that were distributed to participants of RRN (both the pre-participation and post-participation questionnaires). This is to provide appropriate context for the remainder of the report which seeks to utilise the qualitative data obtained from the questionnaires to provide a deeper understanding of participants' experiences.

RRN 2022 attracted participants with a variety of duration of riding experience. Of the 164 participants who completed RRN 2022, individuals had held their full motorcycle licence for between 1 month and 58 years.

While **130 participants (79.3%)** had not completed any form of advanced training, **34 participants (21.3%)** had also completed a form of advanced motorcycle training since passing their motorcycle test. This ranged from the IAM Advanced Rider Course to Bike Safe to additional post-test tuition, and the DVSA Enhanced Rider Scheme³.

Out of the 164 participants who completed RRN in 2022, **9.2% (15 participants)** had previously participated in RRN.

3.2. Course Information

The table below provides a summary of RRN participant numbers at each location across the RRN 2022 campaign.

	Number of Participants	Number of RRN Events	Location
A Division	40	5	Inverurie
	9	1	Elgin
D Division	57	6 ⁴	Perth
N Division	58	6	Dingwall
Total	164	18	

3.3. Pre-enrolment Questionnaire Data

3.3.1. Gender

- **134 (81.7%)** of the respondents identified as male
- **25 (15.3%)** of the respondents identified as female
- **5 (3%)** of the respondents declined to indicate the gender with which they identify

It should be observed that the number of female participants is potentially higher than anticipated. UK Government statistics indicated that between 2015 and 2020, 92% of motorcycle casualties in Great Britain were male and 8% were female (Dft 2020).

³ Previous participation in RRN or BikeSafe was discounted from this analysis

⁴ The session due to be held on 17th September was cancelled due to the death & funeral of Her Majesty the Queen.

3.3.2. Age

Age Range	Participants
Under 25	4 (2.44%)
25-34	10 (6.10%)
35-44	35 (21.34%)
45-54	53 (32.32%)
55-64	45 (27.44%)
65-74	16 (9.76%)
Over 75	1 (0.60%)
TOTAL	164 (100%)

3.3.3. Type of Motorcycle

Participants were asked to provide details of the make and model of any motorcycle(s) that they owned. For ease of reference, these have been grouped into categories as follows:

Style	Number of Participants Selecting a Bike in this Category ⁵
Sports Tourer	63 (28.5%)
Naked	45 (20.3%)
Sports	29 (13.1%)
Adventure	43 (19.5%)
Cruiser	9 (4.1%)
Retro	23 (10.4%)
Offroad	2 (0.9%)
Other	7 (3.2%)
Total	221 (100%)

3.3.4. Riding Habits – Road Use

To provide insight into the riding habits of participants, they were also asked to specify the type of roads they would typically ride on. Participants were presented with a range of options to help build a picture of their riding environments. This was intended to assist in building a picture of risk, in common with reported KSI statistics and geographic location of RTCs involving motorcyclists.

The results reflecting the choices of more than 10% of participants⁶ are set out below to help provide a clearer picture of the types of routes participants typically engaged with:

Road Type	Number of Participants
Single track; Two-way carriageway – urban; Two-way carriageway – rural	20 (12.2%)
Single track; Two-way carriageway – urban; Two-way carriageway – rural; Dual carriageway	19 (11.6%)
Single track; Two-way carriageway – urban; Two-way carriageway – rural; Dual carriageway; Motorway	28 (17.1%)
Two-way carriageway - rural	33 (20.1%)

⁵ Some participants owned multiple motorcycles, accounting for this figure

⁶ Representing 100 participants (61% of all participants)

The reported road usage showed a variety of road use patterns and there was no clearly consistent pattern of usage across the 164 participants. However, **156 participants (95.1%)** indicated that they did ride on the rural road network which is significant with respect to common locations of RTCs with most fatal and serious collisions occurring on major roads in non-built-up areas (Motorcycle Safety and Transport Policy Framework 2016; Sexton 2006).

3.3.5. Prior Involvement in a Road Traffic Collision (RTC) as a Motorcyclist

Participants were asked whether they have previously been involved in a RTC as a motorcyclist. Out of the 164 respondents, **44 (26.8%)** declared prior involvement in an RTC. The nature of these RTC events is as an anticipated and in line with the literature examining common characteristics of motorcycle collisions, specifically:

- Failure to negotiate bends, especially on country roads
- Other vehicles pulling out into the path of motorcyclists
- Collisions at junctions
- Collisions while overtaking
- Loss of control, due to poor road surface or high speed (RoSPA 2020)

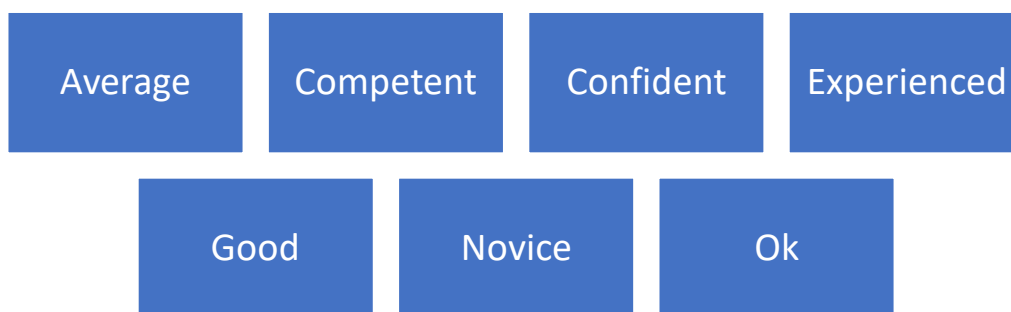
For further context, self-reported details of the nature of the RTC are set out in Appendix A.

3.3.6. Self-Assessment of Skills

Prospective participants were asked to provide an assessment of their riding skills. The questions and responses are set out below. First, participants were asked to describe their riding ability in general terms before moving on to specific skill sets.

In general terms, how would you describe your riding ability?

This was a free text answer in the survey, and participants could describe their riding ability in their own words. The common themes identified were as follows:



Participants were quite honest in their assessment of skills, and many had an awareness of perceived weaknesses in their riding even when expressing confidence in their abilities:

<p><i>"It's a depreciative skill, confident rider before lockdown but forgotten a lot of the skills during the last 2 years." – Participant 7</i></p>	<p><i>"Has potential but nerves kick in, particularly on right bending corners." – Participant 30</i></p>
<p><i>"Consciously aware of my limited riding exposure due to length time off road bike until a year ago. Attempting to slowly build up my experience and ability." – Participant 39</i></p>	<p><i>"Competent & alert. Fully aware I don't know it all & there is always something to learn." – Participant 44</i></p>

<i>"Beginner, trying to improve cornering, building confidence." – Participant 54</i>	<i>"On the whole good but with room for improvement. Would like to improve skills and confidence." – Participant 92</i>
<i>"I've been riding for almost a year now and been out a lot, so I would say I'm a competent rider but there's always something to learn in order to improve and build more confidence." – Participant 114</i>	<i>"Capable prior to COVID and also having baby. Just feel like I've lost my mojo with the bike. Self-doubt has crept in." – Participant 124</i>
<i>"Cautious and courteous. Getting back into motorcycling after a break and with a bike I just bought. Still building muscle memory..." – Participant 149</i>	<i>"Reasonably confident, but there's always more to learn when riding, especially when you ride with professionals." – Participant 155</i>

How would you describe your motorcycle handling skills?

Self-Assessed Skill Level	Number of Participants
Excellent	0 (0%)
Very Good	14 (8.54%)
Good	84 (51.22%)
Average	63 (38.41%)
Below Average	3 (1.83%)
TOTAL	164 (100%)

How would you describe your competence at overtaking?

Self-Assessed Skill Level	Number of Participants
Excellent	3 (1.83%)
Very Good	28 (17.07%)
Good	75 (45.73%)
Average	51 (31.1%)
Below Average	7 (4.27%)
TOTAL	164 (100%)

How would you describe your ability to corner?

Self-Assessed Skill Level	Number of Participants
Excellent	0 (0%)
Very Good	19 (11.59%)
Good	56 (34.14%)
Average	79 (48.17%)
Below Average	10 (6.1%)
TOTAL	164 (100%)

How would you characterise your anticipation, observation, and planning skills?

Self-Assessed Skill Level	Number of Participants
Excellent	4 (2.44%)
Very Good	45 (27.44%)

Good	79 (48.17%)
Average	34 (20.73%)
Below Average	2 (1.22%)
TOTAL	164 (100%)

3.3.7. Skills Development

Participants were asked to identify the skills they wanted to develop as riders. There were several themes identified from participants responses focussing on enhancing handling skills as well as knowledge and understanding of general riding skills. For example:

<i>“Generally, gain more knowledge about advanced riding, improve my existing skillset, confidence and to get rid of any bad habits I may have fallen into” – Participant 13</i>	<i>“General improvement of skills and control of the bike” – Participant 88</i>
<i>“Overall improvement in ability and confidence” – Participant 94</i>	<i>“Get back into the good habits of roadcraft and have better observation skills” – Participant 124</i>

Across the responses, there were five main recurring themes around skills development, and these are set out in further detail below:

- **Cornering** was a significant theme in the responses, with **37.8% (62 participants)** noting this in their response
- **Anticipation/observation** was another main theme in responses, with **20.1% (33 participants)** noting this in their response
- **Confidence** was also identified as a theme in the responses, with **18.3% (30 Participants)** noting this in their response
- **Slow/low speed manoeuvres** was identified as a skill for development in **13.4% (22 participants)** of responses
- **Road positioning** was identified as a skill for development by **8.5% (14 participants)** of responses

3.3.8. Understanding of Motorcycle Safety

To help interpret the level of knowledge and understanding around motorcycle safety, participants were asked to consider: (i) who they think is most at risk of being involved in an RTC; (ii) who they think is most at risk of being involved in an RTC; (iii) what they perceive to represent the greatest hazard to motorcyclists; and (iv) which roads they perceived as representing the greatest hazard to motorcyclists. Analysis of the responses to each of these questions is set out below:

As a motorcyclist, who do you think is most at risk of being involved in a road traffic collision?

In answering this question, most participants (**75.6% or 124 participants**) noted in their response that they believed motorcyclists were most at risk. For example:

“A biker will generally come off worse. I believe that as a percentage, bikers are involved in more accidents” – Participant 55

“New riders. Riders who use the road as a racetrack. Non confident riders” – Participant 68

“Guys on sports bikes! Bikers that insist on overtaking every chance they get no matter how twisty or busy the road is. Bikers that don't read the road and the road conditions or that drive too fast for the road and road conditions.” – Participant 80

However, some responses indicated that participants believed that in addition to motorcyclists, other road users were also at high risk of being involved in a RTC (**39.6% or 65 responses**). For example, one participant observed that:

“Those riders who ride beyond their skill level, not reading the road, lack of observation etc. Road users being under the influence” – Participant 12

Similarly, another participant commented that:

“Bad road skills from both drivers and bikers expose them to risk of collision” – Participant 19

What do you believe are the factors contributing to road traffic collisions involving motorcyclists?

In answering this question, participants identified what they believed to be contributory factors that can be grouped into three categories:

- **Rider error** was mentioned by **143 (87.2%) of participants** in their response
- **Other road users** were mentioned by **99 (60.4%) of participants** in their response
- **Other external factors** were mentioned by **18 (11%) of participants** in their response

Factors associated with **rider error** focused on areas such as in appropriate and/or excessive speed, overestimation of ability, failure to anticipate, lack of forward observation, inexperience, and handling errors.

The role of **other road users** in participants’ responses focused on areas such as lack of awareness and understanding of motorcycles and motorcyclists, failure to observe motorcyclists on the road, and distractions such as mobile phones.

Finally, **other external factors** identified by participants included road conditions, iron works, road surface conditions, environmental factors connected to weather conditions, and wildlife/farm animals.

The following quotes are illustrative of the types of responses received:

<p><i>“Visibility of the rider, attention of other road users, rider complacency, rider speed, rider ability, rider road position, unforeseen circumstances (e.g., a deer jumping across road)” – Participant 2</i></p>	<p><i>“Lack of awareness and safety consideration from car drivers about motorcycles. Drivers not seeing motorcycles until it's too late, or not at all. Motorcyclists riding too fast. Motorcyclists unable to control the bike in emergency conditions. Motorcyclists unaware of potential dangers in busy traffic.” – Participant 155</i></p>
<p><i>“Not prepared for corner speed and car users not paying attention or aware of your presence” – Participant 27</i></p>	<p><i>“Drivers failing to see or respect a motorcyclist. Motorcyclists riding beyond their ability.” – Participant 37</i></p>
<p><i>“Lack of control (not driving to the conditions), observation of motorcyclist and other road users and lack of experience and road sense.” – Participant 53</i></p>	<p><i>“Poor planning into corners, panic braking or putting the bike into hazardous areas without planning escape routes” – Participant 85</i></p>

<i>“Over confidence of the rider, the riders’ inability to read the road conditions, other road users’ inability to observe the rider. Weather, poor vehicle maintenance” – Participant 109</i>	<i>“Riders overconfident in their abilities and car drivers not paying attention” – Participant 21</i>

Which roads to you perceive as representing the greatest hazard to motorcyclists?

Responses to this question can be broken down into two themes: (i) location; and (ii) infrastructure design.

In their response, most participants (**70.7% or 116 participants**) identified the road’s location as being a key factor in determining the hazard. Examples cited included single carriageway rural routes (with specific mention of A and B roads and routes with 60mph speed limit), with some limited reference to urban routes too.

Some of the participants (**20.7% or 34 participants**) focussed on the design of infrastructure/roadside features in their responses, with specific aspects constituting the perceived risk. For example, blind corners, routes with multiple corners and changes of direction (“twisties”), routes with multiple junctions, routes with overgrown vegetation, and routes subject to irregular or poor maintenance.

3.3.9. Expectations for RRN 2022

Finally, participants were asked to consider what they hoped to gain from participating in RRN. This was to help gauge what expectations were for RRN 2022, and whether it met the aspirations of participants.

The comments made by participants in relation to this can be categorised into three themes: (i) acquisition of practical skills; (ii) acquisition of knowledge and understanding; and (iii) building confidence as a rider.

In relation to **acquisition of practical skills, 50.6% or 83 participants** mentioned a general desire to build and develop their skills base and to improve their riding and handling techniques. Specific examples included developing improved cornering techniques, overtaking skills, appropriate utilisation of speed and effective road positioning. The following quotations are generally representative of the responses received:

<i>“A betterment of my skills as a rider” – Participant 7</i>	<i>“A broader range of practical skills to help me become a more competent rider” – Participant 23</i>
<i>“I hope to improve my skills, and have a greater awareness of what ‘good’ looks like” – Participant 41</i>	<i>“I’d like to improve my general skills as a motorcyclist and become a safer more skilled rider” – Participant 107</i>

On the theme of **acquiring knowledge and understanding, 65.2% or 107 participants** referred to enhancing forward observation, improving their hazard perception and risk awareness, ...The following quotations are generally representative of the responses received:

<i>“Better forward planning and observation” – Participant 15</i>	<i>“Insight into higher-level observation and awareness skills” – Participant 19</i>
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<i>"To improve my road skills and observations. To be a safer rider and pick up useful tips" – Participant 28</i>	<i>"Improve my understanding of the risks and how to mitigate them" – Participant 43</i>
<i>"Knowledge and riding tips to keep me safe" – Participant 71</i>	<i>"A more advanced knowledge of how to be as safe a rider as possible, for myself and other road users" – Participant 92</i>

In relation to **building confidence as a rider, 28% or 46 participants** discussed building confidence in general terms and in relation to some specific skills. The following quotations are generally representative of the responses received:

<i>"Greater control of the bike cornering and at slow speeds. I'm still nervous since coming off last year." – Participant 21</i>	<i>"More confidence in riding my bike, making sure I am safe on the road." – Participant 54</i>
<i>"Better skills in control over bike and more confidence in slow speed manoeuvres" – Participant 60</i>	<i>"Increased confidence from improved skills" – Participant 77</i>
<i>"I hope to regain some of my lost confidence and skill and get back on track with feeling safe on my motorcycle." – Participant 124</i>	<i>"I would like to gain more confidence in cornering and also top up all of the skills needed to become a safer/more-aware rider" – Participant 161</i>

Finally, some participants also acknowledge a need to rectify "bad habits" and hoped that RRN 2022 would provide them with the opportunity to address this issue too.

4. Post-Participation Data

Mirroring the pre-participation questionnaire, RRN 2022 participants were asked to provide an assessment of their riding skills. The questions and responses are set out below. First, participants were asked to describe their riding ability in general terms before moving on to specific skill sets.

4.1. Self-Assessment of Skills

In general terms, how would you describe your riding ability?

This was a free text answer in the survey, and participants could describe their riding ability in their own words. The common themes identified were thematically similar to those discussed in Section 3.3.6 above. However, some participants did identify that as a direct result of participating in RRN, they felt their riding ability had improved:

<i>“Since taking the course- improved. I’d say I’m now experienced and confident but know my own limits.” – Participant P32</i>	<i>“Before the course, I thought my riding good. After the course it has definitely improved.” – Participant P44</i>
<i>“Much improved and more confident after the course” - Participant P54</i>	<i>“Good apart from right hand bends. (Which was fixed by the instructor)” – Participant P64</i>

Participants were then asked a series of questions, as in the pre-participation questionnaire, to allow further self-assessment of their riding ability across a range of areas. As follows:

How would you describe your motorcycle handling skills?

Self-Assessed Skill Level	Number of Participants
Excellent	2 (2.6%)
Very Good	18 (23.4%)
Good	39 (50.6%)
Average	17 (22.1%)
Below Average	1 (1.3%)
TOTAL	77 (100%)

How would you describe your competence at overtaking?

Self-Assessed Skill Level	Number of Participants
Excellent	3 (3.9%)
Very Good	26 (33.8%)
Good	33 (42.8%)
Average	12 (15.6%)
Below Average	3 (3.9%)
TOTAL	77 (100%)

How would you describe your ability to corner?

Self-Assessed Skill Level	Number of Participants
Excellent	0 (0%)
Very Good	19 (24.7%)
Good	33 (42.9%)

Average	21 (27.3%)
Below Average	4 (5.1%)
TOTAL	77 (100%)

How would you characterise your anticipation, observation, and planning skills?

Self-Assessed Skill Level	Number of Participants
Excellent	6 (7.8%)
Very Good	35 (45.5%)
Good	33 (42.8%)
Average	3 (3.9%)
Below Average	0 (0%)
TOTAL	77 (100%)

4.2. Feedback on RRN 2022 Presentation

Participants were asked a series of questions to gather specific feedback on the presentation element of RRN 2022. These questions and their responses are set out below.

A key component of the RRN experience is the presentation provided during the morning session. How informative did you find the presentation?

Participants were asked to rate the presentation on a scale of 1 to 5, with 1 being “Not Informative” and 5 being “Very Informative”.

1	2	3	4	5
0	1	8	17	51
0%	1.3%	10.4%	22.1%	66.2%

As can be seen from the table above, most participants determined the presentation element of RRN 2022 to be “Very Informative”.

Please describe what you thought of the presentation?

Reviewing the open text responses to this question, it has been determined that **98.7%** of the comments made in relation to the presentation were positive, with only **11.7%** of the responses containing a comment that was determined to be negative.

The following quotes are generally representative of participants’ perceptions of the presentation:

<i>“Interesting and informative. Found the video clips very useful - both the instructional ones, as well as the real footage of the eejits” – Participant P9</i>	<i>“The presentation has been well thought out and has some great advice and demonstrations” – Participant P16</i>
<i>“Presentation was good the slides were helpful, and the explanation given by the PC is what kept people’s attention, if you were left to just watch it don’t think it would have been as good.” – Participant P24</i>	<i>“Very professional and knowledgeable. The Police Riders made everyone feel comfortable in a room full of likeminded people.” – Participant P38</i>

<i>"The videos were excellent. The discussions that ensued helped to digest and reflect on the points made. It was easier to do this in the classroom instead of trying to absorb everything while riding."</i> – Participant P42	<i>"The presentation was well thought out using video and question and answer sessions. All information was of great use when out on the road"</i> – Participant P55
<i>"A very professional presentation, with interesting points about rider safety, theoretical riding and informative videos"</i> – Participant P74	

In terms of the more critical feedback received in relation to the presentation session, in the interests of transparency, this is presented in full below. As follows:

<i>"A bit clunky at times as the officer struggled with the videos, but good points made and a good length"</i> – Participant P30	<i>"Okay, but repetitive perhaps. Too many 'old story / black cat' interruptions from audience but I guess this not really included in the presentation content."</i> – Participant P32
<i>"Although valuable information was received, I felt it could have been more in depth."</i> – Participant P34	<i>"The video presentations could perhaps be updated."</i> – Participant P37
<i>"Useful presentation but some obvious technical glitches."</i> – Participant P41	<i>"Not bad but I had heard / seen the same or very similar as part of the direct access course I did to obtain my licence"</i> – Participant P48
<i>"Presentation content and videos were good and informative, however the presenter struggled with the IT equipment available."</i> – Participant P51	<i>"I thought the presentation could have went [sic] into more depth about the content of the days training. I have done this three times and found the morning briefing not very informative."</i> – Participant P65

As can be seen, the observations relate to: (i) technology issues; and (ii) the expectations of participants as to how much depth subjects could be covered.

Please describe which (if any) elements of the presentation that you found useful

The following graphic sets out the elements of the presentation that participants found to be most useful:



4.3. Understanding of Motorcycle Safety

What do you believe are the factors contributing to road traffic collisions involving motorcyclists?

As in Section 3.3.8 above, in answering this question, participants identified what they believed to be contributory factors that can be grouped into three categories:

- **Rider error** was mentioned by **66 (85.7%) of participants** in their response
- **Other road users** were mentioned by **45 (58.4%) of participants** in their response
- **Other external factors** were mentioned by **9 (11.7%) of participants** in their response

Echoing responses in the pre-participation survey, factors associated with **rider error** focused on areas such as in appropriate and/or excessive speed, overestimation of ability, failure to anticipate and/or identify hazards, lack of forward observation, inexperience, and handling errors. Reference was also made in several responses to road features such as bends and corresponding poor cornering techniques.

Similar to responses in the pre-participation questionnaire, the role of **other road users** in participants' responses focused on areas such as failure to observe motorcyclists on the road, and other road users' failure to concentrate.

Finally, **other external factors** identified by participants included road conditions, road surface conditions and environmental factors connected to weather conditions. There was also mention of lack of accessibility to further training as a potential contributory factor.

The following quotes are illustrative of the types of responses received:

<i>"Excessive speed, not reading a developing situation, panicking and "freezing", looked but didn't see" – Participant P7</i>	<i>"Over confidence. Excessive speed. Lack of observation and awareness of others. Road conditions. Poor road skills" – Participant P15</i>
<i>"Speed, lack of anticipation, lack of reading the road" – Participant P20</i>	<i>"Risk taking, we all like to acceleration of the bikes and all want to make progress, but you do see some iffy overtakes." – Participant P24</i>
<i>"Poor use of speed awareness, poor awareness of potential danger and poor awareness by other road users." – Participant P31</i>	<i>"Limited advanced rider training available/affordable. Poor road surface conditions and road signage in poor condition or obscured. Other road users lack of observational skills" – Participant P34</i>
<i>"Lack of observation from riders and other road users, taking chances, road conditions (maintenance, debris and climatic)" – Participant P62</i>	<i>"Motorcyclists themselves approaching bends and corners too fast for their skill level" – Participant P71</i>

As a motorcyclist, how do you feel that you can manage your own risk of being involved in a road traffic collision?

Overall, responses to this question focussed on skills such as forward observation, road positioning, riding defensively, and speed management. The following quotes are generally representative of the types of responses received:

<i>“Maintain correct road positioning to minimise potential collisions, use appropriate speed, be as visible as possible, attempt to anticipate potential dangers as far in advance as possible to avoid them.” – Participant P3</i>	<i>“Need to think for other road users, as well as yourself. Being in the right on the road does not make hospital food taste any better. Need to constantly take information and try to predict what other road users are intending to do. Make yourself as visible as possible.” – Participant P9</i>
<i>“By reducing speed where necessary, being more visible, being more aware of the dangers” – Participant P16</i>	<i>“Good observations. Good forward planning. Defensive but confident riding.” – Participant P22</i>
<i>“Better observation, road positioning, managing speed, and planning overtakes” – Participant P30</i>	<i>“Maintain safe following distances, anticipation of hazards, and planning ahead before carrying out manoeuvres.” – Participant P47</i>
<i>“Positioning to see and be seen. Reducing speed if scenario risk increases. Provide lateral movement approaching SMIDSY scenarios.” – Participant P63</i>	<i>“Alertness, planning and adjusting riding style based on the conditions can mitigate potential collisions” – Participant P74</i>

4.4. Development of Skills

To assist in the evaluation of RRN, participants were asked to assess how their riding had been enhanced through participation. The following questions seek to explore this theme in further detail and relevant quotations are set out for illustrative purposes.

As a result of participating in RRN, what skills do you feel that you have developed as a rider?

Participants outlined skills that they felt had been developed as a result of their participation in RRN 2022. These can be broadly summarised as follows: (i) forward observation; (ii) road positioning; (iii) confidence; (iv) overtaking skills; (v) improvements to handling; (vi) cornering techniques; (vii) anticipation/hazard perception abilities. The following quotes are generally representative of the responses received:

<i>“More confidence in overtaking. Better road positioning in order to see further, and to be seen from further away. Always looking ahead for the next set of ever-changing risks that are presenting (or going to present) themselves in front of me” – Participant P9</i>	<i>“Several little things that I wouldn't have thought of. such as using rear brake only at less than 20mph, so that your front wheel doesn't slip out from under you. Watching vehicles wheels rather than the driver's eyes of vehicles wanting to pull out from side roads etc. Scanning the road back, and constantly looking for possible hazards ahead. Better positioning while riding on the road. Avoiding paint & metalwork on the road surface, never compromise safety for position.” – Participant P11</i>
<i>“Slightly changed approach to road position. Prior to RRN I would have been more fixed,</i>	<i>“Observation reading much further ahead instead of concentrating on the next bend.</i>

<i>following the course I move around more in my lane to increase visibility and safety” – Participant P18</i>	<i>Reduce the comfort braking before coming into a bend.” – Participant P24</i>
<i>“Better road positioning through corners, feel that I am smoother and selecting lower gears through the corner making the bike more stable when cornering. Also trying to look much further out into the distance for hazards” – Participant P45</i>	<i>“Road positioning when going round corners. Positioning when behind slower vehicles to ease overtaking when the opportunity arises.” – Participant P58</i>
<i>“I am now more aware that I have a bit of target fixation that I have been working on and improving. I am now choosing a safer positioning on the road and learned how to observe my surroundings to anticipate what lies ahead.” – Participant P61</i>	<i>“100% fixed my issue of right-hand bends. Improved my awareness of correct road position. Improved my hazard perception. And now I talk to myself more to make me more aware of my surroundings, potential risks etc.” – Participant P64</i>

4.5. Participant Assessment of RRN 2022

What do you feel was the most valuable part of the day?

As may be anticipated, the ride out portion of RRN 2022 was selected by **89.6% (69 participants)** as being the most valuable part of the day:

“...Most valuable, if not priceless, were the observed ride outs. Felt I possibly gained more when I was in position 2 or 3 (not upfront being observed) I was able to watch the rider in position 1 being observed, form my own opinion of their position & actions, and then listen to what the observer was saying. Whilst only 1/3 of the time was spent upfront, actively being observed, the other 2/3 of the ride out was just as informative and a valuable learning experience... It was a bit of a triple whammy.” – Participant P9

A further **7.8% (6 participants)** noted the entire experience as being of value.

Has participating in RRN motivated you to investigate further rider training?

- **74 % (57 participants)** said that participating in RRN 2022 had motivated them to investigate further training
- **10.4% (8 participants)** said that participating in RRN 2022 had NOT motivated them to investigate further training
- **15.6% (12 participants)** said that they would maybe considering participating in further training as a result of participating in RRN 2022

Of the participants who explained their reasons for being **motivated to seek further training**, the following quotes are generally representative of the responses received:

<i>“Yes. I have already joined IAM as a direct result of the course” – Participant P15</i>	<i>“Yes, definitely now a consideration, the course was non-judgemental and aimed at improving skills leaving me feeling that further training</i>
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	<i>would be a good way forward” – Participant P28</i>
<i>“Yes, I would like to give something back while doing something I enjoy so plan to do a IAM course and hopefully volunteer with the H&I blood bikers.” – Participant P36</i>	<i>“Yes, I have applied for the Advanced driver training. It is a dangerous hobby for me and the more I can develop my skills the more enjoyment I will get out of my hobby” – Participant P67</i>

Of the participants who chose to explain their reasons for **not seeking further training**, the following reasons were provided:

<i>“No. Too costly” – Participant P4</i>	<i>“No. Do not have time” – Participant P42</i>
<i>“No, as I am already an IAM rider which i passed many years ago, however every day I can learn something new” – Participant P71</i>	<i>“The level of skill taught on the RRN is sufficient in my view to bring any rider up to an acceptable level of ability and safety awareness without the need to train further, although I would happily take the same training opportunity again as a refresher in a year’s time.” – Participant P49</i>

Would you recommend RRN to a friend or colleague?

In response to this question, **98.7% (76 participants)** would recommend RRN to a friend or colleague. When asked to explain their decision, the following quotes are a selection of the responses received:

<i>“Yes and have already done so. It is a good introduction to advanced motoring and gives a low cost, low risk opportunity to find out more about it” – Participant P15</i>	<i>Definitely. This should be rolled out nationally since riding challenges vary across locales.” – Participant P20</i>
<i>“Yes, I’ve recommended the course to friends. Invaluable experience and knowledge from professionally trained riders” – Participant P27</i>	<i>“Yes! and I already have. I find this course so informative and enjoyable. I feel it is a very important resource that should be kept available to ensure more motorcyclists can safely enjoy doing what they do.” – Participant P34</i>
<i>“Yes - it is an important road safety step. Ongoing training is vital for motorcyclists.” – Participant P43</i>	<i>Yes, as well as being informative, the course both in the classroom and on the road was very informative and beneficial in identifying my shortfalls. – Participant P53</i>

Finally, participants were asked if they had **any further comments about RRN 2022**. The following quotes are a selection of responses received:

"I'm not sure what sort of content is on the speed awareness courses (not having been on one, and I hope that doesn't change) ... but for bikers ... could elements of this course be fed in - or the bikers be encouraged to attend (or be sent on one). Rather than wag the finger at the naughty speeding boys (& girls) ... get them observed, feedback and engage. Some might continue to ride over the limit (but hopefully safer) - but the content may make them think more about their riding style. Are Speed awareness course a bit of a box ticking exercise, and a way to reduce financial & points penalties? A rider awareness course can really hit home about riding more safely." – Participant P9

"Please keep the programme going. Making sure bikers know that it involves only a short time in the classroom. As I had several bikers who were under the impression it was all classroom teaching" – Participant P15

"Thanks to those responsible and worry that in many ways those attending were self-selected as the least likely to need it perhaps. Maybe make something like this more easily available e.g., via motorcycle dealerships. Would have paid more as compared to other costs it was cheap." – Participant P30

"I did feel a bit excluded, can't tell if it was because I was the only female, or my riding wasn't as good as the others. I work in a male dominated industry and never had issues before. It was a bit like intruding a boy's club" - Participant P61

"The course was great the instructors where all very friendly and informative, they clearly knew what they were talking about, it's probably one of the first training courses I've been involved with where no person in the class argued an instructor's opinion or advice. Well done and I hope that these courses can continue into the future" – Participant P16

It should also be noted that participants used this section to report some further feedback about RRN 2022. There were some areas that are worth highlighting for future development, as follows:

- Technical issues with bike-to-bike comms (Participant P75)
- Delays to provision of rider feedback (Participant P37, Participant P49)
- Advertising and publicity surrounding the course could have been improved (Participant P23, Participant P46)

5. Professional Perspective – RRN 2022 Instructor Feedback

An important component of this evaluation is ensuring that the professional perspective of RRN 2022 instructors was incorporated into this report. Out of the six instructors surveyed, five had previously participated in previous iterations of RRN.

Presented below are the observations of Road Policing Division officers involved in the delivery of RRN 2022 on: (i) opinions of RRN 2022; (ii) benefits to participants of RRN 2022; (iii) engagement of participants with RRN 2022; (iv) observations in relation to previous iterations of RRN.

In interests of transparency and creating as comprehensive an evaluation as possible, their responses have been replicated in full below.

5.1. Opinion of RRN 2022

What is your opinion of the RRN 2022 campaign?

<i>“Excellent base level introduction for advanced riding” – Participant PS1</i>	<i>“It has been received extremely well by those that have participated” – Participant PS2</i>
<i>“Great idea giving some of the motorcycle riders an insight into being seen and seeing things in advance allowing time to react.” – Participant P3</i>	<i>“The Rider Refinement North 2022 campaign is an excellent way of interacting with members of the public and encouraging safer riding skills.” – Participant PS4</i>
<i>“An extremely valuable course in helping new and established riders improve their skillsets and open the thought process in improving themselves and furthering their own ability and training through future advanced riding coaching.” – Participant PS5</i>	<i>“Really worthwhile, it bridges the gap between normal and advanced riding and provides a platform where participants can access advanced tuition at an affordable price and see what advanced lessons could help.” – Participant PS6</i>

What (if anything) would you change about the content of RRN 2022 for future deliveries of the initiative?

<i>“I think the content must remain current with motorcycle KSI causation factors, as such if KSI figures alter, the presentation must follow suit. As such I would keep the content the same at present.” – Participant PS1</i>	<i>“Not sure” – Participant PS2</i>
<i>“An additional part of checking over and looking at bike. This highlighting the need to check tyres and carryout general checks.” – Participant PS3</i>	<i>“Nothing, course is well designed and well structured” – Participant PS4</i>
<i>“If anything, I think participants would benefit from more than one day, perhaps make it a two-day course.” – Participant PS5</i>	<i>“Nothing” – Participant PS6</i>

If you have previously been involved in the delivery of RRN, how do you feel the 2022 version compares with previous iterations of RRN?

<i>"Far easier to follow and easier to comprehend which encourages engagement." - Participant PS1</i>	<i>"It is more up to date but to police officers it looks like every other Police presentation." – Participant PS2</i>
<i>"Presentation is better and more appropriate for general public." – Participant PS3</i>	<i>"Better presentation" – Participant PS5</i>
<i>"The presentation has evolved and rightly so, it is fresh and current" – Participant PS6</i>	

5.2. Participant Benefits & Engagement

What aspects of RRN 2022 do you feel participants benefits from the most?

<i>"The short to the point easy to understand presentation resulting in additional valuable road time tuition" – Participant PS1</i>	<i>"Using their observations more and cornering" – Participant PS2</i>
<i>"Cornering and positioning" – Participant PS3</i>	<i>"Participants benefited the most from instruction on positioning themselves and their motorcycles during cornering especially on right hand corners where people tend to apex the corner getting closer to the centre of the roadway." – Participant PS4</i>
<i>"Most riders appear to benefit from the coaching provided in respect of observations and road positioning in making them a safer all-around rider." – Participant PS5</i>	<i>"Classroom tuition and on the road demonstrations and putting into practice what was taught." – Participant PS6</i>

What aspects to you feel participants engaged with the most?

<i>"The initial presentation, due to it being set at an appropriate level to comprehend and engage." – Participant PS1</i>	<i>"Observations." – Participant PS2</i>
<i>"Practical part of the course." – Participant PS3</i>	<i>"Participants engaged during the whole course, but I feel they engaged the most during the demonstration ride and their assessment rides probably due to being involved practically." – Participant PS4</i>
<i>"Participants most engaged with the Police riders and the feedback provided by them." – Participant PS5</i>	<i>"On the road part." – Participant PS6</i>

What aspects (if any) do you feel participants engaged with the least and why?

Most respondents felt that participants engaged well with the course. However, one officer observed that:

“Classroom input. The participants are still unsure and on edge about being with the police. This could be structured differently with a check over of bikes and a few ice breakers prior to make participants feel at ease.” – Participant PS3

Finally, officers were asked if they had any further comments about RRN 2022. These are reproduced in full below:

<i>“Excellent product which can be used as a portable product in the close season.”</i> – Participant PS1	<i>“It would make sense to roll it out nationally as it has been very evident that a lot of the participants have travelled great distances to attend”</i> – Participant PS2
<i>“A possible input about appropriate protective clothing may be of benefit. Not all clothing is suitable for everyone.”</i> – Participant PS3	<i>“I was given the opportunity to attend and deliver RRN 2022 as a guest from a different area of Police Scotland. Having not been involved in RRN, I was impressed as to how organised and well structured the programme was.”</i> – Participant PS4

6. Findings

The first purpose of this section is to fulfil **Objective 1** of the evaluation and present the main findings as interpreted from the qualitative data gathered from all three questionnaires. This is further supported using statistical information generated from the same questionnaires. Combined, this will enable the impact of the redevelopment of RRN to be further understood.

It is noted that the statistical information, although useful, should not be solely relied upon to imply causation and the data set generated by this evaluation requires to be viewed holistically.

This section then concludes with making relevant recommendations, in fulfilment of **Objective 2** of this evaluation.

6.1. Participant Profile

This typical profile of a RRN 2022 participant is:

- Male (Section 3.3.1)
- Over 45 years of age (Section 3.3.2)
- Likely to own a Sports Tourer or Naked style of motorcycle (Section 3.3.3).

It is suggested that when planning for future iterations of RRN, emphasis is placed on recruiting a more diverse range of participants to engage with a broader group of motorcyclists. Considering feedback received from one female participant (see **Section 4.5**), thought should also be given to running session dedicated to female riders to help support what is a minority group within the broader motorcycling community.

6.2. Self-Assessment of Skills and Skills Development

6.2.1. Self-Assessed Skill Level Before and After Participation in RRN 2022

There was little difference in the common themes identified through analysis of the free text answers to the question, **how would you describe your riding ability?** In both the pre-participation and post-participation questionnaires, participants responses could be grouped thematically into the categories of average, competent, confident, experienced, good, novice, and ok (see **Sections 3.3.6** and **4.1**).

The following table displays the pre-RRN 2022 responses and post-RRN 2022 responses for the same 77 participants to the question, **how would you describe your motorcycle handling skills?**

Self-Assessed Skill Level	Number of Participants	
	Pre-RRN 2022	Post-RRN 2022
Excellent	0 (0%)	2 (2.6%)
Very Good	9 (11.7%)	18 (23.4%)
Good	35 (45.5%)	39 (50.6%)
Average	33 (42.8%)	17 (22.1%)
Below Average	0 (0%)	1 (1.3%)
TOTAL	77 (100%)	77 (100%)

Next, the following table sets out the pre-RRN 2022 and post-RRN 2022 responses for the same 77 participants to the question, **how would you describe your competence at overtaking?**

Self-Assessed Skill Level	Number of Participants
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	Pre-RRN 2022	Post-RRN 2022
Excellent	2 (2.6%)	3 (3.9%)
Very Good	15 (19.5%)	26 (33.8%)
Good	34 (44.1%)	33 (42.8%)
Average	23 (29.9%)	12 (15.6%)
Below Average	3 (3.9%)	3 (3.9%)
TOTAL	77 (100%)	77 (100%)

Moving on to another skill set motorcyclists were asked to reflect upon, the following table sets out the pre-RRN 2022 and post-RRN 2022 responses for the same 77 participants to the question, **how would you characterise your ability to corner?**

Self-Assessed Skill Level	Number of Participants	
	Pre-RRN 2022	Post-RRN 2022
Excellent	0 (0%)	0 (0%)
Very Good	11 (14.3%)	19 (24.7%)
Good	23 (29.9%)	33 (42.9%)
Average	38 (49.3%)	21 (27.3%)
Below Average	5 (6.5%)	4 (5.1%)
TOTAL	77 (100%)	77 (100%)

Finally, the following table sets out the pre-RRN 2022 and post-RRN 2022 responses for the same 77 participants to the question, **how would you characterise your anticipation, observation, and planning skills?**

Self-Assessed Skill Level	Number of Participants	
	Pre-RRN 2022	Post-RRN 2022
Excellent	1 (1.3%)	6 (7.8%)
Very Good	26 (33.8%)	35 (45.5%)
Good	35 (45.4%)	33 (42.8%)
Average	15 (19.5%)	3 (3.9%)
Below Average	0 (0%)	0 (0%)
TOTAL	77 (100%)	77 (100%)

As can be seen, there has been a general upward adjustment in the self-assessed skill level in participants' responses after their completion of RRN 2022. This is also reflected in the post-participation data where participants discussed their riding ability in general terms and felt that as a result of participating in RRN 2022, their riding ability (and therefore confidence) had improved (see **Section 4.1**). The theme of confidence also occurred in the pre-participation questionnaire in relation to skills development, with **18.3% (30 participants)** noting that they were seeking to build their confidence as riders.

It is suggested that this adjustment in skill perception seen in the tables above is related to rider confidence that has occurred through the positive experience of building skills and knowledge and understanding. As explored in previous research (Hood 2021; Fosdick and Smith 2019), confidence in a rider should not be construed negatively.

6.2.2. Skills Development

Ahead of their participation in RRN 2022, participants were asked to identify the skills they wanted to develop as riders. As noted in **Section 3.3.7**, there were five main recurring themes around skills development of: (i) cornering, anticipation/observation, confidence, slow/low speed manoeuvres, and road positioning.

When participants completed feedback in relation to the skills they felt they had developed as a rider as a result of participation in RRN 2022 (**Section 4.4**), several distinct areas emerged. These can be broadly summarised as follows: (i) forward observation; (ii) road positioning; (iii) confidence; (iv) overtaking skills; (v) improvements to handling; (vi) cornering techniques; (vii) anticipation/hazard perception abilities. As can be observed there are commonalities across both the pre- and post-RRN 2022 questionnaire data.

Both these desired and acquired skills also compare favourably to recommendations in the literature around further training for motorcyclists. As noted in previous research (Hood 2021 p.15), these include:

- Skills training (Elliot et al 2003; Sexton et al 2006), including cornering techniques (Clarke et al 2007)
- Forward planning and anticipation (Clarke et al 2007)
- Promotion of 'safe' goals (Sexton et al 2006)

Therefore, in addition to equipping motorcyclists with a range of desirable skills, it can also be concluded that in terms of expectations, RRN 2022 met both the needs and the aspirations of participants.

6.3. Understanding of Motorcycle Safety

Reflecting on both the pre-participation data set out in Section 3.8, and the post-participation data set out in Section 4.3, there is very little difference in perceptions and understanding of motorcycle safety. Participants were aware of the role that rider error plays in RTCs, along with the role that other road users, and external factors, have as potential contributory factors.

As set out in previous research, motorcyclists do not underestimate the risks involved in motorcycling (Hood 2021; Sexton et al 2006). The method of risk conceptualisation adopted by motorcyclists means that they rely on their own lived experiences and reliance on systems of control to mitigate and regulate risk (Hood 2021). The approach of RRN 2022 in building on the lived experiences of motorcyclists and developing riders' skills is therefore potentially more effective than over-emphasis of risk.

6.4. Participant Perceptions of RRN 2022

6.4.1. RRN 2022 Presentation & Ride Out

An important element of the RRN 2022 format was the revised presentation format. As can be seen from the data set out in **Section 4.2**, participants responded positively to the format. The majority of participants (**66.2%**) indicated that the presentation was "Very Informative" and in the open text responses, **over 98%** of the comments were positive. The video examples were identified as being the most useful element of the presentation, followed by road position, hazard perception, observation, and cornering technique. Again, these themes mirror the areas discussed in **Section 6.2.2** in

connection with skills development, pointing to how RRN 2022 has sought to address the needs of motorcyclists.

Of the negative feedback received, these primarily related to: (i) technology issues; and (ii) the expectations of participants as to how much depth subjects could be covered. It is suggested that these are not criticisms which are overly troubling, and it is anticipated that technological issues can be addressed in future iterations of RRN. The point raised about the depth of content is also not deemed to be of concern as one of the objectives of RRN is to encourage participants to undertake further advanced training where this depth of exploration could be achieved.

As noted in **Section 4.5**, the ride out portion of RRN 2022 was selected by **89.6%** of participants as being the most valuable part of the day. This is not unexpected and confirms previous research into the role of the motorcycle itself in engaging with motorcyclists (Hood 2021). The Road Policing Division officers involved in the delivery of RRN 2022 have the advantage of being perceived as part of the motorcycling community and this commonality allows for effective engagement with participants (see further Hood 2021).

The overall positive nature of the feedback received about RRN 2022 is further consolidated by the **98.7% (76 participants)** who would recommend RRN to a friend or colleague (**Section 4.5**).

Finally, participants were given the opportunity to add any other comments that they wished at the close of the questionnaire. It should also be noted that participants used this section to report some further feedback about RRN 2022. There were some areas that are worth highlighting for future development, as follows:

- Technical issues with bike-to-bike comms (Participant 75)
- Delays to provision of rider feedback (Participant P37, Participant 49)
- Advertising and publicity surrounding the course could have been improved (Participant 23, Participant P46)

It is suggested that these points are taken into consideration when planning future iterations of RRN, particularly in relation to advertising and publicity of RRN.

6.4.2. Further Training

An important ambition of RRN has been to encourage greater numbers of motorcyclists to engage with further advanced training. As noted in Section 4.5:

- **74 % (57 participants)** said that participating in RRN 2022 had motivated them to investigate further training
- **10.4% (8 participants)** said that participating in RRN 2022 had NOT motivated them to investigate further training
- **15.6% (12 participants)** said that they would maybe considering participating in further training as a result of participating in RRN 2022

Reviewing the feedback provided by participants, RRN 2022 provided significant motivation to engage with such further training and many participants had contacted IAM and/or investigated the financial aspects of participating in further training. From this perspective, RRN has been successful in realising the objective of encouraging motorcyclists to engage with further advanced training.

Of the participants who had not sought to engage with further training, factors such as time and financial constraints were noted. This is in common with previous research (Hood 2021).

6.5. Professional Perceptions of RRN 2022

6.5.1. Overall Perception of RRN 2022

Section 5 contains feedback from Road Policing Division officers involved in the delivery of RRN 2022. As can be seen from the data set out in this section, the overall opinion of the RRN 2022 campaign is positive. Officers emphasised the importance of RRN 2022 in offering motorcyclists the opportunity to develop their skills but also in providing a gateway to further advance rider training (Section 5.1). Furthermore, it was observed that it provides officers with the opportunity to engage with members of the public to promote motorcycle safety (Section 5.1, Participant PS6).

When asked to compare the revised RRN 2022 format with previous iterations of RRN, officers mentioned the presentation element as a specific area of improvement (Section 5.1). In particular, the duration and comprehensibility of the presentation allowed “additional valuable road time tuition” (Participant PS1).

6.5.2. Participant Benefits & Engagement

Respondents identified several key areas they felt were of benefit to participants in RRN 2022. The opportunity afforded by the practical ride out sessions are highlighted as opportunities for applying information gained in the classroom session and to enhance their cornering and road positioning skills.

As noted in Section 5.2, most of the officers believed that participants engaged well with the format of RRN 2022. A variety of responses were received in relation to which aspects of the day participants engaged with the most. However, there was more consensus around the impact of the practical element of the day and the level of engagement with the ride out. Officers did not feel that there was a lack of engagement during the day by participants, however, it was observed that:

“Classroom input. The participants are still unsure and on edge about being with the police. This could be structured differently with a check over of bikes and a few ice breakers prior to make participants feel at ease.” – Participant PS3

It is suggested that if feasible, this could be incorporated into discussions with participants ahead of the initial classroom session to enable participants to have the focus of their own motorcycle to assist in placing them at ease. This could potentially enhance engagement in the classroom session further, if participants are more comfortable around officers.

6.5.3. Future Delivery of RRN

Officers were asked to identify any changes they would like to see for future delivery of RRN. There was general satisfaction about the content of RRN at present. However, two specific suggestions were made:

- Increasing the course length to two-days (Participant PS5)
- Including visual inspection of the motorcycle and the importance of carrying out general checks and checking tyres (Participant PS3)

It is acknowledged that the first point relates to resource allocation within Police Scotland, and even if resources permitted such an adjustment this would likely reduce the number of motorcyclists engaged with and number of RRN days offered. It is therefore not recommended that this is pursued at this time.

In relation to the second point around including physical checks of the motorcycle and importance of such checks, this is covered in **Section 6.5.2** above. If feasible, it is suggested this could be incorporated into discussions with participants ahead of the ride out. However, it is acknowledged that this may already occur on an informal basis throughout the course of the day.

6.6. Conclusion & Recommendations

The first purpose of this section was to fulfil **Objective 1** of the evaluation and present the main findings as interpreted from the qualitative data gathered from all three questionnaires, supported by relevant statistical information. The second purpose of this section was to fulfil **Objective 2** and inform the development of future iterations of RRN. This is achieved below through several evidence-based recommendations.

Overall, it can be observed that the response to the format and content of RRN 2022 has been overwhelmingly positive. Both participants and the Road Policing Division officers involved in the delivery of RRN 2022 have identified the clear value that is derived from offering skills-based training to motorcyclists. Participants' expectations for RRN 2022, from the perspective of skills development, have been met and indications are that this has translated into enhanced rider confidence around critical skills. Furthermore, the focus on skills such as forward observation, cornering, and road positioning rather than solely emphasising risk and overt safety messages, has a proven track record of being the most effective method of positively impacting road safety (see further Hood 2021).

The newly redeveloped presentation segment of RRN 2022 was well received by both participants and instructing officers, with the use of video examples receiving praise from participants. It also formed an important foundation for the practical element of RRN 2022, equipping participants with knowledge and understanding that could be directly applied under the supervision and observation of officers. It is also evident that participants valued the experience of engaging with Road Policing Division officers. Critically, a significant number of participants have gone on to seek further advanced training opportunities.

Finally, as identified in previous motorcycle safety evaluation work, RRN adopts an innovative and informed approach to rider engagement, rider awareness, and skills building. The RRN 2022 iteration is a welcome extension of this approach.

On this basis, the following recommendations are made (**Objective 2**):

- That subject to regular review of KSI statistics and contributory factors to RTCs involving motorcyclists, **it is recommended that the RRN 2022 format is adopted for future iterations of RRN [Recommendation 1].**
- As observed by one of the instructing officers (Participant PS2), several participants had travelled significant distances to attend a RRN 2022 course. This is further confirmed when analysing the post code data of participants⁷. Therefore, **it is recommended that an initiative like RRN is rolled out on a national basis, to enable engagement with motorcyclists from across Scotland [Recommendation 2].**

⁷ This data was not included in the evaluation as it had the potential to enable identification of participants. However, the author can confirm that participants had travelled significant distances to attend courses.

- Given the current profile of RRN participants (Section 6.1), **it is recommended that further engagement strategies are developed to encourage a broader range of motorcyclists to attend future iterations of RRN [Recommendation 3].**
- Based on feedback derived from participants about the advertising campaign surrounding RRN 2022, **it is recommended that Police Scotland engage in a broader and more diverse advertising campaign for future iterations of RRN to ensure that as broad a range of motorcyclists are engaged with [Recommendation 4].**
- Based on feedback derived from participants, **it is recommended that consideration should also be given to running session dedicated to female riders to help support what is a minority group within the broader motorcycling community [Recommendation 5].**
- Reflecting on the perceived contribution of RRN initiatives to enhancing and developing motorcycle safety and the benefits participants derive, **it is recommended that further research is undertaken to investigate the potential for initiatives such as RRN to be offered as an alternative to prosecution for motorcyclists reports to the Crown Office and Procurator Fiscal Service in connection with certain road traffic offences, with related outputs likely being delivered by third-party suppliers as part of a wider road traffic diversionary course programme [Recommendation 6].**

Appendix A – Self-Reported RTCs

<p><i>“Minor collision. Filtering through traffic on Anderson Drive, Aberdeen and a vehicle pulled across my path to change lanes without first checking their mirror. Glancing blow with my motorcycle, but I stayed upright and didn't receive any injuries.” – Participant 3</i></p>	<p><i>“Car pulled out when it was crossing a dual carriageway [sic]” – Participant 9</i></p>
<p><i>“30 years ago. Filtering alongside stationary traffic, driver did U-turn in front of me. Lack of observation on both sides.” – Participant 10</i></p>	<p><i>“09/15, on the road to the Lecht, blind corner, a bit too fast and target fixation on oncoming vehicle” – Participant 13</i></p>
<p><i>“2000 - Crown Street, Aberdeen - both vehicles travelling at speed limit in opposite directions - me on a bike travelling North - car travelling South - the car was within a few meters of me when it suddenly crossed lanes in front of me as it turned into Dee Place (it was about to drive the wrong way into a one way st, so I “doubly” didn't expect it) and I hit the car head on.” – Participant 14</i></p>	<p><i>“Van pulled out in front of me” – Participant 16</i></p>
<p><i>“Was on CBR125R on a CBT last year, riding in group on back roads, learner in front of me hit gravel on a bend and went down, my options were hit her or go wide and hit gravel/grass. I went wide and put bike down on right hand side and slide with leg under it. Battered and bruised but no broken bones. Bike was bit squint but rode it home slowly. Still have limp. I was too close to an inexperienced rider and inexperienced enough myself not to be able to anticipate/avoid.” – Participant 21</i></p>	<p><i>“Around 40 years ago, when I was young and stupid! I hit a sheep on the road, but never came off the bike. The sheep wasn't so lucky!” – Participant 28</i></p>
<p><i>“September 2019, B999 Tarves to Pitmedden, older driver pulled out from junction into main carriageway causing collision” – Participant 31</i></p>	<p><i>“Riding left hand bend on rural A road, drunk van driver who attempted to turn right drove straight on wrong side of the road. Bailed out of bike and slide up other carriageway. Bike destroyed under van. Fortunately, no cars coming on other carriageway. Sustained heavy bruising over body but nothing broken due to high quality safety clothing.” – Participant 39</i></p>
<p><i>“November 2017 car pulled out at junction” – Participant 46</i></p>	<p><i>“No other traffic vehicle was involved. Both early winter mornings” – Participant 52</i></p>
<p><i>“Minor, rear ended by a car whilst stationary at the Haudigain roundabout in Aberdeen.” – Participant 56</i></p>	<p><i>“1. Sideswiped by a car in a 2 lane approach to traffic lights. 2. Cyclist jumping red light.” – Participant 59</i></p>
<p><i>“Many years ago, I lost control on a sharp bend, due to wet road conditions and excessive speed.” – Participant 68</i></p>	<p><i>“Partick in Glasgow, heading home and torrential rain, i seen a van pull up towards a roundabout and he turned to go, i checked for oncoming cars approaching the roundabout and the van had went [sic] to a complete stop.</i></p>

	<i>I pulled too much front brake and down i went and ended up sliding underneath the van.” – Participant 69</i>
<i>“Eastham, Cheshire 1976. Riding through roadworks. A van had gone through red light and collided with me. I got a broken leg. Driver didn’t stop” – Participant 76</i>	<i>“1974. Riding up the empty left hand lane of an urban road with a stationary line of traffic in the right hand lane. Hit the front nearside front wing of a car that drove out of a side street through the line of traffic in front of me. Driver said he didn't see me. Minor injury to little finger right hand.” – Participant 78</i>
<i>“November 2020, at Cannich. Sharp right 90 degree bend. I set up for the corner to take it at the right speed, got distracted halfway through the corner, thinking I'd missed my turn off, looked behind me at the turn, then realised I'd run into some wet leaves. Traction control kicked in and stood the bike up, I panicked and ended up on the grass. Bike slipped out from under me on the wet grass and I took the brunt of the impact through the left shoulder, dislocating it. Speed of crash was less than 15mph. No damage to the motorcycle.” – Participant 85</i>	<i>“Car Turning at traffic lights and hit it head on” – Participant 86</i>
<i>“Car pulled in my path causing collision and injury 1986” – Participant 87</i>	<i>“I was reversed into by a motorist at a junction he had overshot while trying to beat a red light.” – Participant 88</i>
<i>“I came off several times when young, twice on diesel on roundabouts in cities.” – Participant 89</i>	<i>“Wet road, to [sic] much throttle applied and bike spun” – Participant 91</i>
<i>“Became distracted as a relatively new rider and due to gravel wash allowed myself to run wide on a right hand bend and then target fixated on the verge and let my wheels touch the grass causing me to lose control and crash.” – Participant 98</i>	<i>“1988/89 - Fell off whilst riding with group of bikes, own mistake - Back road to Nairn.” – Participant 100</i>
<i>“Not a collision - came off going too fast on corner on way to work 1977. A high speed off on bendy Lakeland road - bounced onto wrong side of humpy road, car right in front of me, I put the bike down sideways and avoided hitting car. 1985. Shunted from behind onto wet tramlines, Melbourne, went down, shoulder hit by car 1989.” - Participant 103</i>	<i>“Cars entering the main road turning right without attention to other traffic” – Participant 104</i>

<p><i>"Glenrothes, 1978, unable to comment on what happened as I have no clear memory of the incident" – Participant 105</i></p>	<p><i>"Isle of Man. Rear ended by a car. Pillion passenger when driver lost control. Off road riding on a track." – Participant 108</i></p>
<p><i>"Approx. 2017 Alford to Lumsden road, chuckies on road on bend with no warning caused bike to go into unrecoverable [sic] tank slapper, bike heavily damaged and broken vertebrae for myself" – Participant 111</i></p>	<p><i>"Greasy roundabout, loss of rear wheel traction, superman over the handlebars and landing on head. Happened circa 2010" – Participant 113</i></p>
<p><i>"Couped over all on my own at walking speed most recently." – Participant 115</i></p>	<p><i>"1981 in Glasgow, night time, wet road, blinded by oncoming headlights and lost road position on corner" – Participant 120</i></p>
<p><i>"1998 Fife Fatigue after exercise causing lack of concentration and loss of control of the bike." – Participant 122</i></p>	<p><i>"2012 on George Street Glasgow involving a black cab who wanted to turn left into a taxi rank but I was on the inside lane when he tuned into my path. He collided with me, and I admitted to the Western Infirmary with back and shoulder injuries. Driver was charged with undue care and attention." – Participant 125</i></p>
<p><i>"June 22 Whilst overtaking a car, which I had been following for a while, he pulled out to overtake another motorcycle. He side swiped me but I did not come off." – Participant 137</i></p>	<p><i>"About 15 years ago, my fault, too fast into bend." – Participant 138</i></p>
<p><i>"A van ran into me at a roundabout" – Participant 139</i></p>	<p><i>"2012 back in Poland - driver of a car failed to check the road before joining the traffic and hit me to the side of my bike which resulted in many injuries and hospital stay" – Participant 147</i></p>
<p><i>"Rear ended while stopped at a traffic light on a roundabout (I do wonder if it was on purpose as the car driver had just gave [sic] me way to enter the roundabout). A double decker hit my handlebars twice as we were both setting off from a traffic light (I was in the wrong place, in the driver's blind spot)." – Participant 149</i></p>	<p><i>"Van pulled in front of me and slammed [sic] brakes on. I rear ended it but he admitted liability. Car came across my path on a roundabout and I hit the side of the car. Both incidents over 10 years ago." – Participant 150</i></p>
<p><i>"About 20 years ago, Brixton London, winter time at night in the rain, speed approximately 25 mph. Car in front signalled left pulled over left so I went to overtake on the right then he suddenly did a U-Turn without looking, turning right directly into my path. I had to brake suddenly to try to avoid collision with the car, my bike skidded and both myself and my bike went down on my right side and skidded along the road. I bashed into the curb and my bike carried on a bit further and hit a wall. Also in summer 2016, was rear ended whilst stationary in a traffic jam, by a driver not looking where he was going whilst he talking to the car next to him." – Participant 155</i></p>	

Appendix B – Research Materials

Pre-Participation Questionnaire (Excluding pro-forma consent and personal data)

1. Do you hold a full (Category A) motorcycle licence?
2. Have you previously participated in RRN?
3. How long have you held a full (Category A) motorcycle licence?
4. Have you previously participated in any form of advanced motorcycle training? If yes, please specify
5. Please provide the make and model of any motorcycle(s) you currently own and ride
6. Thinking about your riding habits, what do you use your motorcycle for? (e.g., commuting, general riding, hobby)
7. What type of road do you usually ride on?
 - Single track
 - Two-way carriageway (urban)
 - Two-way carriageway (rural)
 - Dual carriageway
 - Motorway
8. In general terms, how would you describe your riding ability?
9. How would you describe your motorcycle handling skills?
 - Excellent
 - Very good
 - Good
 - Average
 - Below Average
10. How would you describe your competence at overtaking?
 - Excellent
 - Very good
 - Good
 - Average
 - Below Average
11. How would you describe your ability to corner?
 - Excellent
 - Very good
 - Good
 - Average
 - Below Average
12. How would you characterise your anticipation, observation, and planning skills?
 - Excellent
 - Very good
 - Good
 - Average
 - Below Average
13. What skills do you feel you want to develop as a rider?
14. What do you believe are the factors contributing to road traffic collisions involving motorcyclists?
15. As a motorcyclist, who do you think is most at risk of being involved in a road traffic collision?
16. What roads do you perceive as representing the greatest hazard to motorcyclists?
17. Have you previously been involved in a road traffic collision as a motorcyclist?
 - Yes
 - No

- Prefer not to answer
18. If “yes”, can you please provide further information (e.g., date, location, circumstances)
 19. What do you hope to gain from participating in RRN?

Post-Participation Questionnaire (excluding pro forma consent & personal data)

1. A key component of the RRN experience is the presentation provided during the morning session. How informative did you find the presentation?

	1	2	3	4	5	
Not informative						Very informative

- a. Please describe what you thought of the presentation
 - b. Please describe which (if any) elements of the presentation that you found useful
2. In general terms, how would you describe your riding ability?
- a. How would you describe your motorcycle handling skills?
 - Excellent
 - Very good
 - Good
 - Average
 - Below Average
 - b. How would you describe your competence at overtaking?
 - Excellent
 - Very good
 - Good
 - Average
 - Below Average
 - c. How would you describe your ability to corner?
 - Excellent
 - Very good
 - Good
 - Average
 - Below Average
 - d. How would you characterise your anticipation, observation, and planning skills?
 - Excellent
 - Very good
 - Good
 - Average
 - Below Average
3. What do you believe are the factors contributing to road traffic collisions involving motorcyclists?
4. As a motorcyclist, how do you feel that you can manage your own risk of being involved in a road traffic collision?
5. As a result of participating in RRN, what skills do you feel that you have developed as a rider?
6. What do you feel was the most valuable part of the day?
7. Has participating in RRN motivated you to investigate further rider training? Please explain.
8. Would you recommend RRN to a friend or colleague? Please explain.
9. Do you have any other comments?

Instructor Feedback (Excluding pro forma consent)

1. Have you been involved with delivery of Rider Refinement North in previous years?
 - Yes
 - No
 - a. If yes, please provide details
2. What is your opinion of the Rider Refinement North 2022 campaign?
3. In your opinion, what aspects of RRN 2022 do you feel participants benefited from the most?
4. In your opinion, what aspects (if any) do you feel participants engaged with the least and why?
5. What (if anything) would you change about the content of RRN 2022 for future deliveries of the initiative?
6. If you have previously been involved in the delivery of Rider Refinement North, how do you feel the 2022 version compares with previous iterations of RRN?
7. Please use this box for any other relevant comments you have about RRN 2022

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