

The Federation of European Motorcyclists

***Rider training
in Europe***

***The Views and the
Needs of the Rider***

**a report on initial rider training
with recommended Guiding Principles**

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The enthusiasm and commitment of the members of the Working Group have been of crucial importance at all stages of the Project. Their directly relevant experience gave a sound factual base for the Project's work and a sharp focus to its management and the direction.

Particular thanks go to Nich Brown. His professional role as a senior road safety officer for a major public authority in the United Kingdom, has proved to be invaluable. In accepting the responsibility for designing and overseeing the rider survey he combined his professional experience with his personal commitment to protecting and advancing the rights of road riding motorcyclists to very good effect.

Thanks also go to the national rider survey coordinators, to the representatives of the riders' organisations who assisted in the survey and to the many ordinary motorcyclists whom they interviewed who gave their time and shared their experience and opinions.

In the course of the Project it has been necessary to consider the body of recent academic research into rider training and rider accidents. Dr. Derek Rutter of the University of Kent in the United Kingdom, has been of particular assistance in this respect. His research in conjunction Lyn Quine and D. J. Chesham is recognised as being particularly relevant to the Project's work and his openness in meeting and discussing with us has been very helpful. Our contacts with Dr. Rudolf G. Mortimer of the University of Illinois have also been most valuable regarding research into motorcycle safety and the development of rider training in the United States of America.

Finally sincere thanks are recorded for the support and cooperation from the member national organisations of the Federation of European Motorcyclists. Their unhesitating responses to the usually urgent requests for information have always encouraged. Even when the reply has been " Sorry we don't know" it was inevitably followed by "but why don't you speak to . . .".

Bob Tomlins
FEM Assistant General Secretary and Project Co-ordinator

September 1997

Introduction

Riding a motorcycle is an exhilarating experience

Being on a motorcycle allows a rider to combine a feeling of freedom with being directly responsible for his or her actions. A motorcyclist is acutely conscious of being immediately in charge of the machine and having a sense of being part of the environment and its elements. Feelings of achievement come from applying skills and experience and from evaluating and executing what is needed to safely complete a journey. To negotiate a series of bends, to safely complete an overtaking manoeuvre and to ride in heavy urban traffic, can be immensely rewarding. For these and for many other reasons riding a motorcycle can be an exhilarating experience, a satisfying experience and an exciting experience.

The reasons for a person choosing to ride a motorcycle are many and varied. Increasingly those reasons are practical with riders opting for a powered two-wheeler as a cost-effective alternative to infrequent and expensive public transport systems; or as a means avoiding or reducing the effects of the crippling urban congestion that is affecting so many European cities. For young people the powered two-wheeler often is the first real experience of independence and the personal and social responsibility that inevitably comes with becoming an adult. For many entering their mid life a motorbike can offer the chance to relive earlier times or to gain experiences previously missed.

Whilst it is generally accepted that a mature, experienced motorcyclist is not significantly more likely to have an accident than his or her car-encased counterpart, it has to be recognised that the consequences to a rider involved in an accident can be much higher in human and in social terms. The fact that it is often the case that the motorcyclist is not at fault, that the car driver pulled out of a junction without noticing the bike and its rider, does not change that. To be told, "I'm sorry, I didn't see you" doesn't help.

It also has to be accepted that youth and a motorcycle can be a potentially dangerous combination. Even a small motorcycle, with limited power and performance, in the hands of a young person, is statistically more likely to be involved in an accident than is the superbike ridden by an older person. This fact can, understandably, cause a parent untold worry.

"Training is the answer to the problem" is the most often voiced response. Be it the worried parent, the concerned road safety expert, or the politician or legislator, "better trained riders means fewer accidents" is a widely held belief.

The efficacy of rider training within the European Union, indeed the very existence of rider training in a number of Member States, are areas of consideration that have manifested as a consequence of the development of a harmonised European driving licence. With the advent of the Second European Driving Licence Directive there came not only common licence categories but in Annexe II common basic criteria that should be satisfied in order to obtain a licence.

Whilst the means by which a person acquires the knowledge and skills to satisfy the defined criteria was not addressed in the Second Directive, it was an area of considerable interest to the Federation of European Motorcyclists. Following some initial investigations a proposal was put to DG VII of the European Commission for the Federation of European Motorcyclists to undertake a project aimed at identifying rider training up to the standard required to pass an official test of competency that was

applying in Member States; categorising and evaluating the various distinct approaches; assessing research into rider training; ascertaining riders' views on the quality of their training and identifying ways in which training could be improved. After consultation DGVII agreed to support the Project.

This document is the report of how the Federation of European Motorcyclists undertook the Project; of the information that was obtained; of the conclusions that were drawn and the recommendations that are being made with the object of improving rider training.

How riders have been trained in Europe

The need to answer this question and to understand the different and distinct approaches adopted in Member States were the starting point of the Project. Two detailed surveys were undertaken in all European Union Member States through the Federation of European Motorcyclists' member national organisations. The first focused on the differences in national licensing arrangements and the second looked at the structure and content of national rider training arrangements. These were supported by a survey undertaken by ACEM which looked at how the various derogations and options within the Second European Driving Licence Directive were being adopted by the Member States.

From these surveys we were able to identify that there were three distinct approaches to rider training in the European Union. The information gained and the conclusions reached were published in an initial report entitled "Rider training in the European Union". Copies of that report can be obtained from the Federation of European Motorcyclists and the main points of it are set out below.

With a little help from my Friends

The first approach was where a trainee rider received no formal or professional training although basic advice or instruction was often given by a family member or a friend. Professional instructors or a structured programme were, however, rarely used. Surprisingly this approach still applies in a significant number of Member States. Countries such as Ireland, Italy, Greece, Portugal and Spain have had no legal requirements for a novice rider to take training, so consequently little or no formal training takes place.

In some of these countries there were professional training facilities available. Their limited take-up however, was explained as being either due to them not being widely available, for example Ireland, or being prohibitively expensive with unqualified and generally incompetent instructors, for example Greece and Italy.

Paying the Professionals

The second approach was where professional instruction was sought and the trainee rider was under the control of an instructor from the commencement of training right up to passing the official test of competency. The requirement to seek professional tuition was either a direct or implicit legislative condition, as a rider would not be permitted to ride unaccompanied on public roads without passing the official test of competency.

Austria, Denmark, Germany and Holland and Sweden are countries which have adopted this approach, with Belgium and Finland offering it as an option. With the application of the Second European driving Licence Directive it will, of course, become the standard approach in all Member States who apply the Direct Access provisions of the Second Directive.

The minimum amount of professional tuition that has to be taken varies considerably from country to country. In Germany, in addition to the two six-hour theoretical lessons, 20 units or 15 hours of training and eight units or six hours of supervised practice would

have to be taken before the rider can take the official test of competency. The amount of supervised practice is at the discretion of the instructor who determines when the rider is ready. If the rider fails the test of competency then he or she is required to take a further 10 units or seven and a half hours of professional tuition.

In Belgium by comparison, the trainee rider opting to take the fully professionally-trained approach to obtaining a motorcycle licence has, dependant on his or her aptitude, only to pay for a minimum of eight hours supervised training, having previously obtained the required theoretical certificate.

The practical training is not broken down into specific elements although the criteria that needs to be satisfied in the official test of competency, such as riding across a raised plank of wood, are concentrated on. It would not be unusual for a rider to pass the official test of competency having only had two or three hours supervised experience on public roads.

Basic skills to build upon

As was previously stated Belgium and Finland offer a choice to a person wishing to obtain a motorcycle licence. In addition to the fully professionally-trained approach referred to above, it is possible to take a compulsory course of basic training and then to gain experience through riding unaccompanied on public roads before taking the official test of competency. In Belgium this is allowed for up to ten months and in Finland for up to three months. In Finland, however, the trainee has to take four hours practice in the company of the professional instructor.

In the United Kingdom gaining experience through riding unaccompanied on public roads after completing a compulsory course of basic training is the norm. Whilst some riders seek to complete their training in one concentrated course from the compulsory basic training element through to taking the official test of competency, the vast majority only undertake compulsory basic training. With a certificate confirming that it has been satisfactorily completed, a provisional motorcycle licence or a full car licence acting as a provisional motorcycle licence will be validated, allowing holders to ride on public roads unaccompanied. Provisional motorcycle licence holders are required to pass the official test of competency within two years. The compulsory basic training certificate, however, is valid for three years. The compulsory basic training course is normally completed in one day and includes a mandatory minimum of two hours on public roads in the company of an instructor.

The required knowledge and skills

The surveys identified that the range of knowledge and skills required by the trainee rider to be able to pass the national official test of competency in European Union Member States varied immensely from country to country. Whilst it is fair to say that what the trainee rider needs to know and do, are influenced by the criteria that need to be satisfied in the national test of competency, the relationship was not always a precise one.

Where the national official test of competency requires that the rider demonstrates only basic balance and machine control skills, in Greece for example, the rider can obtain a motorcycle licence without going through a structured training programme or enlisting the help of a professional instructor. In Germany, to take an example of the other extreme, it is likely that even if professional training were not compulsory, a person wanting to learn how to ride a motorcycle up to the standard required to pass the official test of competency, would struggle without professional support and guidance.

It is clear from the responses to the surveys that the various national training programmes and official tests of competency concentrated on machine operating skills. Manoeuvring, balance and braking are the core, and in some cases the entirety, of what was taught and what was tested. Areas such as hazard awareness were rarely addressed and the importance of attitude, particularly among young riders, was not mentioned in response to the requests in the surveys to explain the national approach to rider training and to detail the training programme and test criteria.

Whilst the range of theoretical knowledge that needed to be demonstrated in order to obtain a licence was less variable than that of the rider's practical skills, it was noticeable that in all instances it was only the trainee rider's knowledge of road traffic regulations and their associated road markings and signs that had to be tested. To the best of our knowledge theoretical courses and tests never sought to develop or ascertain a rider's understanding of risks and hazards associated with certain riding conditions, of manoeuvres and road situations and weather conditions. Indeed the reasons for road traffic regulations were rarely covered as, in most instances, they were taught by rote and tested by response and not by explanation.

The price of a Licence

Information on another aspect of learning to ride a motorcycle was gleaned from the surveys, namely the cost of obtaining a motorcycle licence in the European Union. When the average national costs, including licence and test fees and tuition charges are calculated, not surprisingly a wide variation can be seen. The least expensive licence could be obtained by the rider in Italy who chose not to take professional training where a full licence would cost under 10 Ecu (20,000 Lire). If professional assistance were to be sought the cost of a licence would rise to around 340 Ecu (600,000 Lire). In Ireland a citizen living outside of the major conurbations, where no professional training is available, would usually have to pay in the region of 33 Ecu (£125). Even if the Irish rider had access to professional training and chose to take the two available courses, the cost of obtaining a licence would rise to 135 Ecu (£100). This is a little more than the usual cost to the rider in Greece, who would have to pay 82 Ecu (25,000 Drachma).

The three countries referred to in the preceding paragraph are all countries where the rider usually learns "with a little help from friends". Understandably they offer the least expensive option to the prospective motorcyclist. When an example of the "basic skills to build upon" approach is considered it can be seen that the costs are not significantly higher. In the United Kingdom, where this approach is the norm, it would cost a typical rider in the region of 190 Ecu (£140) to obtain his or her licence.

These costs can be compared with the most expensive country, Germany, where the cost of obtaining a full licence would result in the average rider being some 1,130 Ecu (2,200 DEM) poorer. In the Scandinavian countries where the training requirements are almost as extensive as in Germany, the cost of obtaining a licence is significantly less. In Finland, for example a rider would have to pay in the region of 700 Ecu (3,500 FMK).

Whilst we did not include Norway in the surveys because they are not a European Union member state, we were advised of their training arrangements by the national riders' organisation. Interestingly the cost of a licence to a Norwegian rider is usually over 1,200 Ecu (nearly 10,000 NKR) and often as high as 1,550 Ecu (12,750 NKR). To the best of our knowledge this makes the Norwegian motorcycle licence the most expensive. Interestingly this state of affairs seems to be generally supported by riders in that country and the national organisation believes that its support for their expensive national training arrangements gives them considerable credibility and influence in their dealings with their government.

The effectiveness of Rider Training

The value of the initial report was that it gave for the first time, a comprehensive overview of how riders were, or were not, trained in the European Union. What it did not do, indeed did not seek to do, was to compare the effectiveness of the very differing approaches. This was the next phase of the Project.

In attempting to evaluate the effectiveness of rider training within the European Union we entered into a very difficult, complex and sensitive arena. What had been obtained through the surveys and their subsequent analysis and evaluation, was a basis on which comparisons could be made. What had to be decided was what criteria could be applied in making judgements and subsequent recommendations.

As was recognised in the introduction to this report, rider training and rider safety are directly linked in the minds of most concerned people. In considering the criteria for evaluating the effectiveness of rider training, this area was seen as being a key consideration. Another key consideration was the views of the riders themselves. If any group should be able to objectively evaluate the quality and effectiveness of rider training it should be the trained riders themselves.

Rider training and rider safety research

When the FEM was seeking the support of DGVII of the European Commission for this Project our initial proposal included a survey of road accident statistics in Member States. The purpose was to obtain directly comparable national statistics on road traffic accidents involving two-wheeled vehicles. DGVII explained that the wide variation in how governments collected and presented their statistical data meant that it would be virtually impossible to make meaningful comparisons.

As the Project progressed we found that could not leave the issue unconsidered. If, we reasoned, there were such wide variations in national rider training arrangements surely there must be some evidence of either the different approaches to training, or the varying intensity of training, influencing the likelihood of a rider being involved in a road traffic accident? We therefore asked our affiliated organisations if they could provide us with information on the incidence of two-wheeled road traffic accidents in their country.

The resulting responses showed that DGVII was right. It was virtually impossible to make any statistically accurate analyses let alone reach defensible conclusions. They did, however, enable a suspicion about the relationship between rider training and rider accidents to develop. That suspicion was that there appeared to be no tangible relationship between the extent to which a rider was trained and the likelihood of that rider having an accident. Even where a change in national training arrangements has been followed by an improvement in accident rates, such as in the United Kingdom with the advent of compulsory basic training, other factors, such as the dramatic reduction in the number of applications for provisional licenses, particularly among younger people, questioned whether the conclusion that better training means safer riders was correct.

In passing we would comment that the inability to compare national road traffic accident statistics is a state of affairs that cannot be tolerated if we are to see a continuation of the harmonisation of European road traffic laws and policies. If, as is likely, the European Union is to be the primary source of regulating how we ride and drive in the future, it is imperative that we have accurate and appropriate statistical information. Without this information the debate about the need for and the form of those rules and regulations cannot take place in an informed and responsible manner.

Faced with the general suggestion that no matter how extensively a rider was trained within current European practices it did not seem that he or she would be less likely to have an accident, we realised that ways must be found to see if the suggestion could be dispelled or developed into an opinion that could be reasonably held and defended with logic and fact, or at least with logic and common-sense.

After some thought we realised that if our suspicion was in any way well founded then it would surely have been the subject of academic research. Whilst the motivation and credibility of researchers into motorcycling matters are questioned by some in riders' organisations, we believed that if a consensus of opinions emerged from what would be our overview then this could be helpful. A search of academic papers using the key words "motorcycle training", "motorcycle safety" and "rider accidents" was undertaken and this resulted in a significant body of relevant work being identified.

We found 16 academic research papers, dating from 1979 to 1996, which considered the relationship between rider training and rider accidents. Of those eight concluded that the training did not reduce the likelihood of the rider being involved in an accident, seven said the effect was positive and one was neutral.

Of the papers which concluded that rider training was likely to reduce rider accidents it was acknowledged that a number of them suffered from a methodological problem, namely that they did not differentiate between riders who chose to take training and those who did not. Also all but one of the studies which considered training to have a positive effect did not seek to evaluate whether the beneficial effect was maintained beyond the short-term.

The exception was a study by McDavid, Lohrmann and Lohrmann, who in 1989 concluded that rider training was a significant indicator of involvement in all categories of motor vehicle accidents in the following five years. However the value of the training diminished when the long-term (two to five years) experience was considered separately from the short-term, (one year). The researchers identified that the beneficial effects of training decayed, stating that "the largest differences in accident levels between trained and untrained riders occur shortly after trained riders get their licenses and diminish over the subsequent four years".

The conclusion from this body of research that rider training has a negative effect or at best a short-term positive effect, was supported by a paper published by Pergamon in 1996. In this paper D. R. Rutter and L. Quine stated that "It is well known that casualty rates among formally trained riders are higher than among those who are untrained" and quoted seven other academic sources in support of that contention.

This paper addressed the question of age and experience in rider safety and concerned itself with two principal issues: the disproportionately high accident rate amongst young riders and whether accidents are associated with particular patterns of behaviour and if so are they related to riders' beliefs. They concluded that "youth plays a much greater role than inexperience and accidents are associated with a particular pattern of behaviour, notably a willingness to break the law and violate the rules of safe riding". They also noted that typical rider training programmes were "skills based" and paid little attention to factors such as "why particular behaviours are important, what are the likely consequences of unsafe riding and why training matters".

An earlier paper by D. J. Chesham in conjunction with D. R. Rutter and L. Quine, which was presented to a seminar in September 1992, recognised that rider training "focuses largely on the acquisition of technical and machine-operation skills". It suggested that there were two possible reasons for the ineffectiveness of rider training. "Firstly, this . . .

could be due to the fact that conventional training has no impact at all on the attitudes of riders; or, secondly, that it provides only peripheral changes in the attitudes of riders which are more likely to decay over time and are less likely to influence subsequent behaviour." They advanced the hypothesis that "the effectiveness of an argument to change a person's behaviour relies on the impact that message has on the person's thoughts". This is described as "central route persuasion" as distinct from "peripheral route" where attitudes have been changed without impinging on a person's thinking, are unlikely to influence subsequent behaviour and are subject to short-term decay.

Another paper which seen as being particularly relevant to the consideration of this question was the research by P. Bellaby and D. Lawrenson, which when published in 1993 considered the question of the whether or not motorcyclists, and in particular young motorcyclists, were by definition higher risk takers than their car driving counterparts. In viewing the issue from both Realist and Humanist perspectives they concluded that "The major motivations for taking up motorcycling are that it provides cheap and effective transport for work and leisure" and that "The serious accidents that occur to motorcyclists are in the main to do with collisions involving non-motorcyclists". They stated in summarising the Humanist perspective that "Motorcyclists are not attracted to risk. They are attracted to freedom and are adverse to those who would constrain their freedom."

Our consideration of the academic research into rider training and rider safety resulted in three main conclusions being reached. Firstly, we are of the general opinion that many of the current training arrangements within the European Union do not result in safer riders. Secondly, we believe that this is due to a large extent to the emphasis given to machine operation skills. Thirdly we believe that the issues of rider attitudes and the need to bring about changes to rider behaviour are of major importance.

To ensure that our understanding of the work undertaken by the various researchers was correct and to discuss the conclusions that we had drawn, meetings were held with Dr. Rutter and Dr. Quine at the University of Kent in the United Kingdom and Dr. Rudolf G. Mortimer of the University of Illinois, who visited our office in Brussels. These contacts were very valuable inasmuch as they gave us a confidence in our thinking and a number of ideas for consideration as the Project progressed.

Seeking the riders' opinions

When the FEM first contemplated this Project we did so in the belief that the view of the rider was rarely heard in any debate about rider training. All too often decisions on how riders should be trained were taken by politicians, who were influenced by road safety groups and training organisations. The objectivity of both of these lobbies we viewed with some suspicion, recognising that often the pronouncements of some leading road safety experts were ill-informed and that some training organisations were motivated by the desire to extend their influence and profits. In making the latter criticism we readily acknowledge that many training organisations and their instructors recognise that their responsibilities for, and their relationships with, the novice rider go far beyond a commercial contract aimed at passing a competency test. Also excluded from the criticism are riders' organisations who had taken on the responsibility for training riders.

We ensured that the riders' views were central to the work of the Project by undertaking a survey of riders in five countries. Belgium, Finland, Great Britain, Greece and Holland were chosen on the grounds that they were representative of the distinct approaches to rider training identified in the initial report and offered a reasonable geographical spread.

The survey itself sought to elicit a range of responses which would enable us to evaluate their judgements on the training that they received and incorporate them into the conclusions of the Project and accommodate them in the recommendations that we would be making.

The first section established the interviewees' sex, age and nationality, if they had taken any training, passed any tests or gained any certificate. The age when they started riding, if it was on public roads and when they commenced riding on public roads. Whether or not there had been a significant break in their riding experience, the distance ridden each year and the purpose and frequency of use. Finally it addressed the size, make and model, power and age of the machine ridden.

The second section sought the reasons for learning to ride, how they had learned, their feelings and what they considered to be the most useful thing learned. The most common hazards faced and whether they had fallen off, their experience of riding off-road and the perceived value of so doing and the reasons for taking training and the accessibility of training were questioned.

Their attitudes towards the training were then addressed with questions on the most and least enjoyable aspects of their training and the most and least useful things they were asked to learn. The extent to which the training equipped them to cope with hazards on the road and whether or not they considered the time and money well spent were questioned.

The respondents were then asked if there was anything that had been omitted from their training and what it was that they considered to be the most useful thing learnt since they had started riding. Whether or not they believed that they rode faster, took more risks or were more likely to have an accident since their training were then addressed. The interview then concluded with questions on whether or not rider training should be compulsory and the comparative importance of rider and driver training.

The riders' judgement

In total the European Rider Training Survey resulted in 247 riders being interviewed: 67 in Belgium, 54 in Finland, 53 in Great Britain, 50 in Greece and 23 in the Netherlands. In each country the surveys were under the control of a national coordinator who selected and instructed a small number of interviewers, each of whom was an active motorcyclist. Consistency was achieved through all the national coordinators participating together in a seminar at which the objectives of the Project and the details of the rider survey were presented and discussed at length.

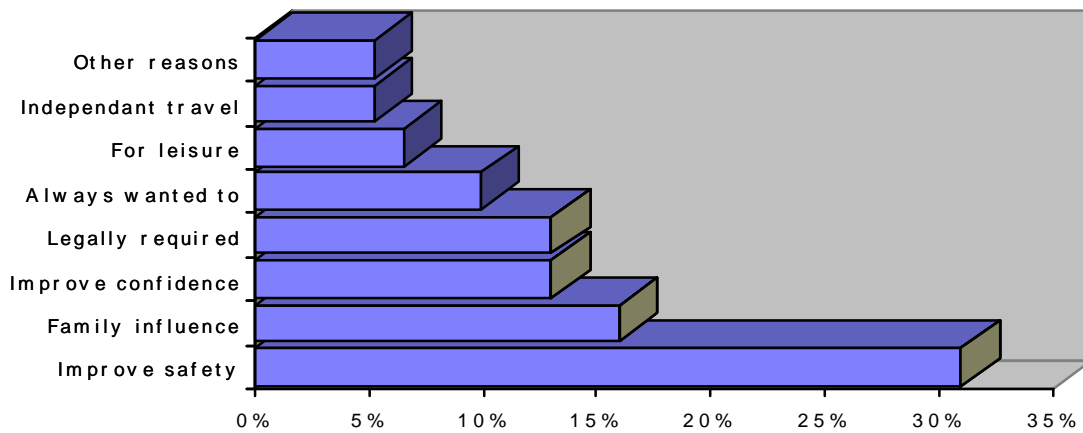
The ages of those interviewed ranged from 17 to 58, with two main concentrations. The first being from 20 to 32 years of age and the second and smaller group, being from 36 to 45 years of age. Of the riders who were interviewed 24% were female.

The overall findings from the combined survey results are summarised below. The complete report of the European Rider training Survey is available on request from the Federation of European Motorcyclists.

The mixture of responses to the questions which sought to ascertain the reasons for learning to ride a motorcycle and the reasons for taking rider training, reflected the dual function of training in most of the countries. Undertaking rider training not being only a means of acquiring skills and knowledge to safely ride a motorcycle, but also a legal or practical requirement to gain a licence or access to the use of a motorcycle.

Reasons for learning to ride and reasons for taking training

percentages of responses



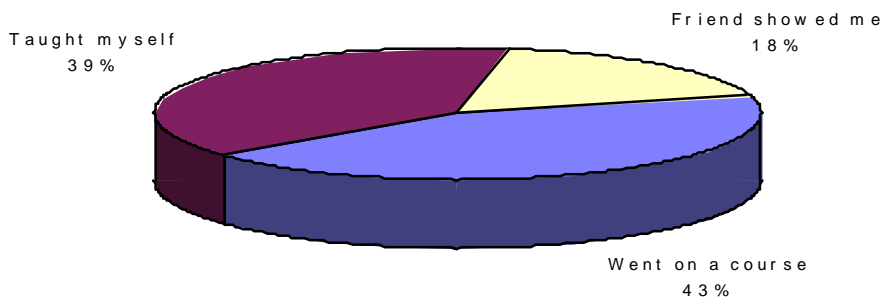
Over one-fifth of those interviewed (21.2%) responded to the question by giving their reasons for wanting to ride a motorcycle, with just under 10% stating that "they always wanted to". When the answers of those who responded to the questions in terms of the reasons for taking training almost one-third of the total of those interviewed cited a desire to improve their own safety, which, when coupled to the reason being to improve their own confidence, gave no less than 44.2% who understood rider safety as being a matter of personal responsibility.

Amongst those who had taken training, the main reason given for so doing was that it was a legal requirement (43,2%). However 38.8% said that they wanted to do it and 18% said that they were influenced by friends and family.

Overall the reasons given showed that learning to ride and undertaking rider training were influenced by a variety of very positive reasons. The fact that so many riders embrace the need to learn safety skills as an integral part of their riding technique suggests a broadly rational and responsible attitude to motorcycle use from an early stage.

How riders first learn to ride

percentages of responses



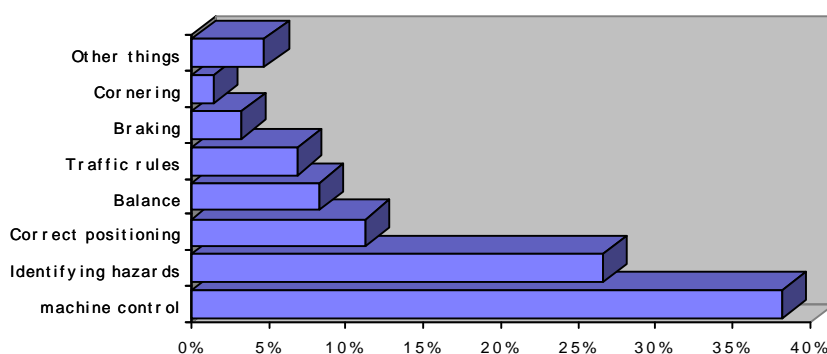
When considering the sources from which knowledge was obtained by novice riders, 18% of the respondents said that they had relied on informal tuition from family or friends and 38.8% considered themselves to be self-taught. This is a surprisingly high figure given that Greece was the only country of the five surveyed without some level of formal rider training being obligatory. It is explained, however, when it is realised that compulsory rider training is a recent development in most countries. For example Compulsory Basic Training was only introduced in the United Kingdom in 1990 and the practice of giving a full motorcycle licence to anyone who passed a car test only ceased in Belgium in 1988.

This consideration is also relevant when the responses of the 43.2% of those interviewed who said that they had been on a course are examined. Over one half of them had done so without being required to do so by the law, indeed 40% of all of the respondents who had taken training did so because they wished to do so for themselves, regardless of either legal or familial pressures

When considering the responses to the questions designed to ascertain the riders' opinions as to the usefulness of the training that they had received, it is clear that most of the courses concentrated on the basic functions of machine control and, to lesser and varying degrees, to road sense and traffic regulations.

Key skills learned at an early stage of learning to ride

percentages of responses

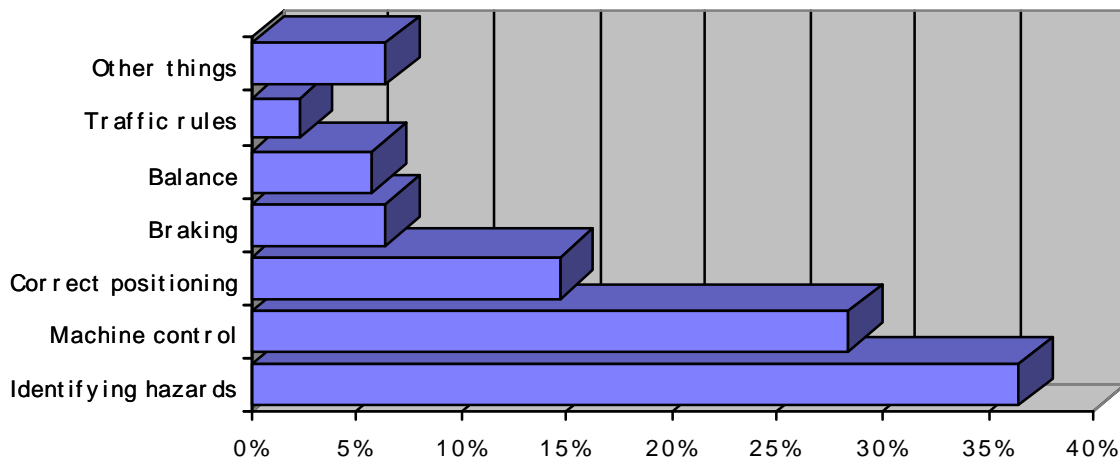


Obviously by far the most useful skills when first learning to ride, whether through formal training or not, are those associated with machine control and given that the control systems of a motorcycle have few corollaries in everyday experience, it is not surprising that learning how to operate them was considered as being the most important by 38.2% of the respondents who had not taken any formal training. However, other basic aspects of motorcycle riding which feature heavily in most training courses, such as balance, braking, cornering and traffic regulations, were not rated as highly useful by this group compared to, for example, correct positioning on the road. They stated that observation skills and the ability to identify and avoid potential hazards were particularly important, with 26.6% saying that they considered them to be the most useful thing learned.

The riders' view of the importance of hazard awareness and avoidance was reinforced when the views of those respondents who had taken formal training are considered. Among them observation and defensive riding skills were rated as being even more important than machine control skills.

The most useful aspects of training received

percentages of responses

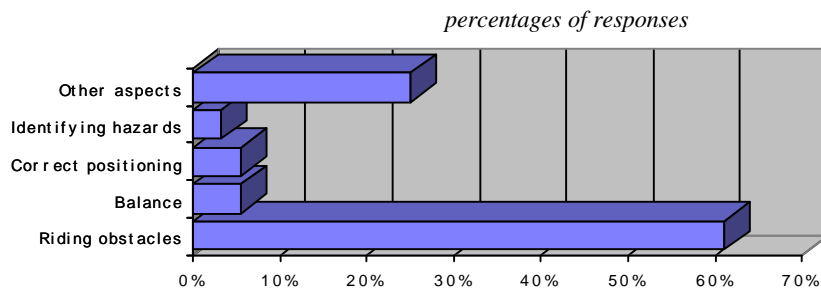


When the differences in the national responses to these questions are considered however, it is apparent that the emphasis given to hazard awareness and avoidance in rider training programmes varies considerably. In Holland for example, only 30% of respondents stated that identifying hazards was the most useful thing learned when taking training, compared to 43.6% in Belgium and 70% in Finland.

The lack of importance attached to traffic rules within the learning process is particularly noteworthy. Just 6.8% of the riders interviewed who had not taken formal training said that traffic rules were the most useful thing that they had learned. When those who had taken formal training were questioned only 2.3% considered it to be so! When the least useful things learned in training are considered, road traffic rules do not even warrant a specific heading and are lost within the multiplicity of other aspects.

Under the heading of least useful things learned, almost two-thirds (61%) of the riders who had taken training said that basic machine control exercises such as riding around cones, executing U-turns and some controlled braking exercises, were the least useful part of their formal training experience. This apparent contradiction with the importance placed on machine control by the respondents to the two previous questions can only be explained in terms of the perceived or the actual relevance of the exercises. It is either a question of overkill, or the exercises not helping in the development of machine control skills, or the trainee rider not understanding their importance. The fact that riding obstacles is the major element, indeed in some cases the only element, in certain rider training courses, can further explain this anomaly.

The least useful aspects of training

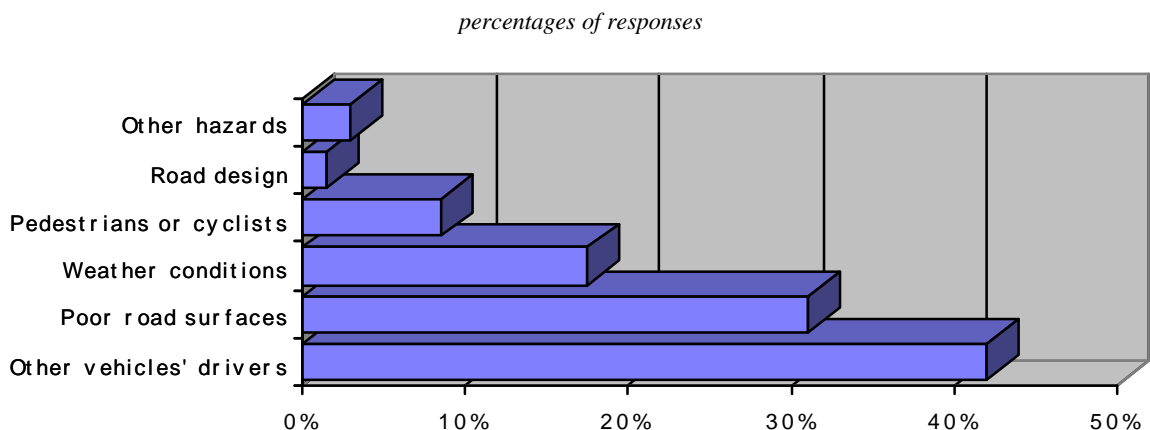


Whilst learning to ride is a serious business, especially when viewed from a personal safety stand-point, most respondents began riding for a range of highly positive reasons, mostly concerning independence and enjoyment. It is generally accepted that the most effective and efficient learning situations are those where the students are well-motivated and find the experience enjoyable. The questionnaire sought, therefore, to ascertain what were the most and the least enjoyable aspects of the training that was received.

The aspect of training that most respondents found enjoyable was machine control (28.5%). Other respondents cited camaraderie and the experience of riding on the road, suggesting that what they really enjoyed the most was the riding itself. Feelings of confidence and achievement through passing a test and gaining a licence (21.8%) also featured significantly. Conversely, for those trainee riders who were less successful, either through a lack of their ability or deficiencies in the training that they received, a sense of failure and feeling less-than-confident comprised almost half (45.6%) of the negative responses.

Poor training systems and poor instructors accounted for 19.2% of all the negative responses. The competence of instructors, who did not have a motorcycle licence themselves and who instructed from cars, or had no qualifications and were poor communicators, were particularly commented on in Greece and Belgium.

The most common hazards when riding



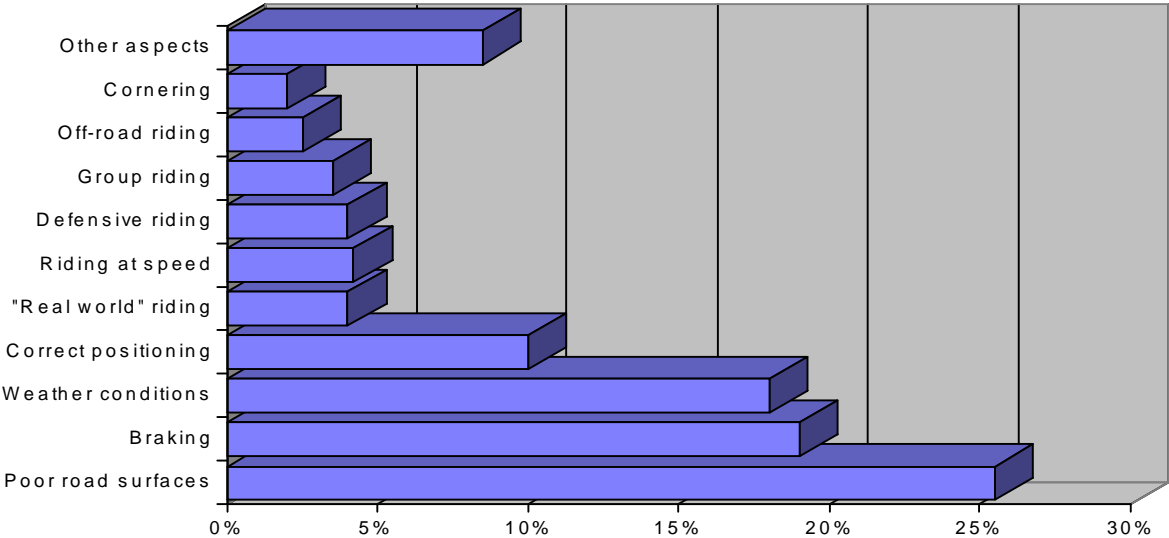
As an indication of the relevance of the training that they received, the interviewees were asked about their subsequent riding experience and asked to identify the types of hazards that they most commonly encountered on the road. Overwhelmingly the drivers of other vehicles, particularly car drivers, were cited with 42% stating that they were the most common hazard faced. Other road users in the form of pedestrians and cyclists were seen as a comparatively minor hazard, being identified by only 8.4% of the respondents. The was surprising when the statistics show that generally motorcyclists injure more pedestrians than car drivers do. (Over twice as many in the United Kingdom). The poor condition of the road surface and to a lesser extent poor road design and spilt diesel from heavy-goods vehicles, featured in 31.2% of the responses and adverse weather conditions in 17.2%.

In relation to this area of consideration the survey sought to ascertain the riders' views in how well the training that they received had equipped them do cope with the hazards they faced on the road. Whilst 63.7% said fairly well, only 14.3% said very well and 21.9%, said that their training had not equipped them very well or badly.

The response to the question what was missing from the training that they had received elicited the greatest number of identifiable groups of subjects or aspects. No fewer than ten distinct categories of answers were received. Whilst we had recognised the question as a key one when designing the survey we were nonetheless surprised by both the breadth and importance of the perceived omissions.

Virtually all the riders interviewed said that based on their subsequent experience of riding on public roads, there were some aspects that should have been covered by the training that they had received. The four categories of omissions which received the greatest number of responses, riding on poor surfaces (25.4%), braking techniques (18.8%), riding in poor weather conditions (18.3%) and correct road positioning (9.9%), are all crucial skills. These responses, representing in total very nearly three-quarters of the riders' interviewed, are in themselves a damning indictment of the inadequacies of many rider training programmes, as each of the four areas of knowledge and skills are essential requirements for a rider on today's roads.

Missing from the training
percentages of responses

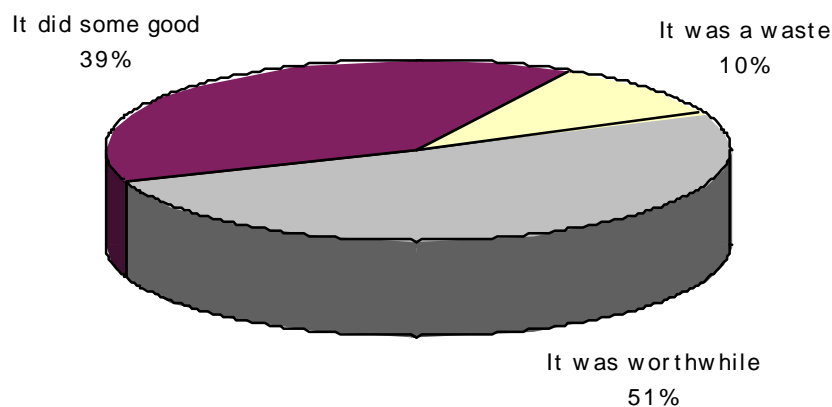


The identification of the importance of poor road surfaces, as shown in the responses to both the hazards faced when riding and what was missing from the training questions, is particularly noteworthy. This was not just a problem in a country such as Greece, where riders would be expected to cope with unmetalled roads in rural areas, but also in countries such as Belgium and the United Kingdom, where cut-backs in public spending programmes have affected road repairs with particular problems for motorcyclists.

Some of the other responses to this question, such as defensive riding and riding at speed, are also indicative of the training not preparing the rider for life on the road as subsequently experienced. When the riders being interviewed were asked if they thought that the training that they had received was time and money well spent over half, 50.6%, said that it was worthwhile. A further 39% said that it did some good, with 10.4% saying that it was a waste.

Was it time and money well spent?

percentages of responses

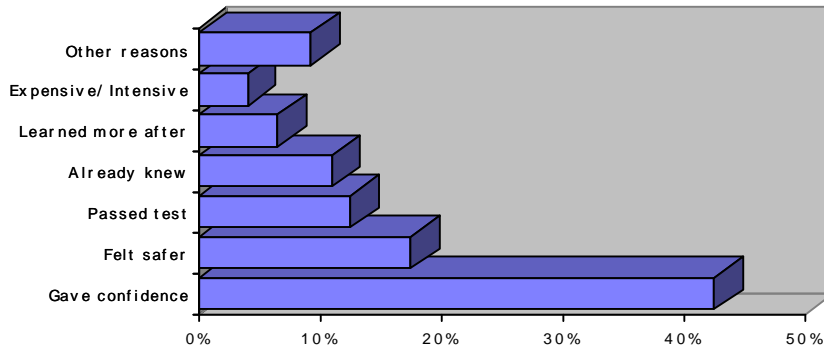


Asked to explain the reasons for their answers, 42% cited the gaining of confidence and road sense. 18.8% said they felt safer and 15% valued the fact that they had obtained a licence and could now ride a motorbike. On the negative side 13.8% considered that they had been taught what they already knew and a further 8.8% reported that they were disappointed because they had learned more after their training. Among the other negative responses 3.8% of riders said that they found the training that they had received to be too expensive and/or intensive.

All the riders interviewed irrespective of whether they had undergone formal training or not, were asked to identify what they had learned since their early riding or training experience. The greatest response was road positioning. 31% said that as novice riders they rode close to the nearside edge of the road because they felt intimidated or had been instructed to do so. They realised that this was unsafe and had learned the value of a less submissive position.

Why did they feel that way?

percentages of responses

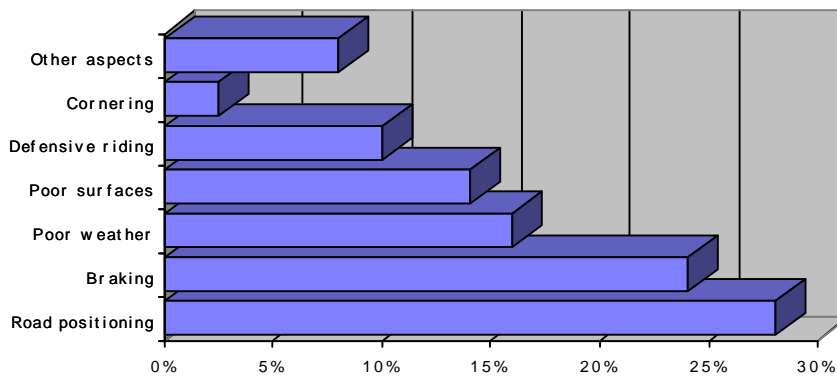


Braking techniques featured in 26.3% of the responses. This is particularly significant when it is remembered that only 3.2% said that braking technique was the most useful thing that they had learned when beginning to ride. Also amongst the 61% of respondents who said that machine control exercises were the least useful aspects of their training, a significant number included some of the controlled braking exercises.

One-third of the responses stated that the techniques for riding on poor road surfaces or riding in adverse weather conditions had been subsequently learned and 10% said that they had subsequently learned "defensive" riding techniques.

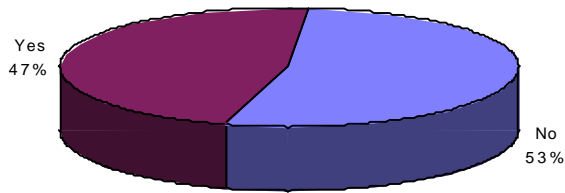
What is learned with experience

percentages of responses



Should rider training be compulsory?

percentages of responses



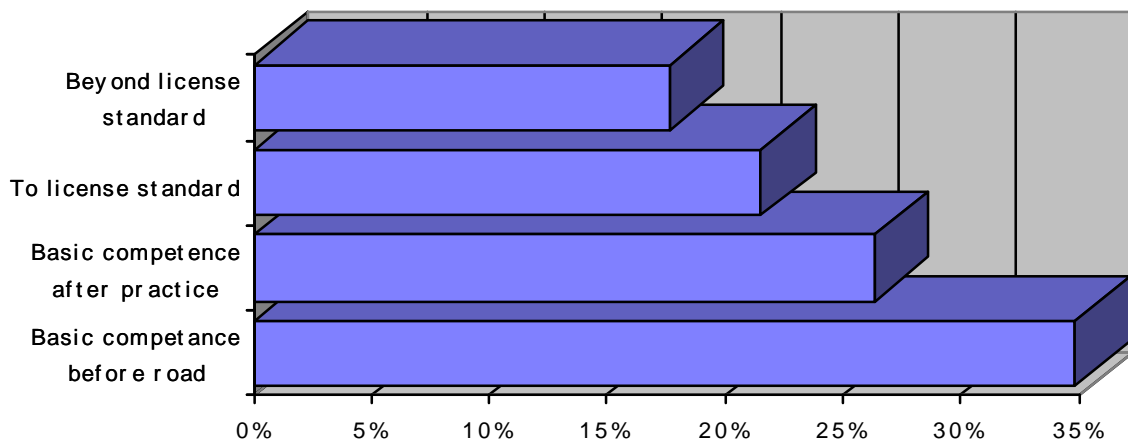
It can be seen from the responses to the FEM European Rider Training Survey that learning to ride is in itself a generally positive choice on the part of the rider, based on the desire for an independent travel capability, a sense of freedom or as a leisure or sporting activity. The attitude is similar towards formal rider training with many novice riders considering high quality training that is relevant to their subsequent riding experiences in an equally positive light.

In countries where training is now compulsory to a greater or lesser degree there is evidence that riders would seek training if not compelled and that in countries where training is not available riders would like to have the opportunity.

Overall respondents to the survey were not in favour of compulsion with 53% against and 47% in favour. When asked to what extent compulsory training might be acceptable the greatest support was for basic competence training prior to riding on the road with 34.8% of the respondents favouring such an arrangement. 26.3% favoured training to a level of basic competence after a period of riding on public roads with 21.5% supported training to licence standard. Indeed 17.6% of the respondents stated that if there were to be compulsory training then they would support it even beyond the standard necessary to pass a test of competency and gain a licence.

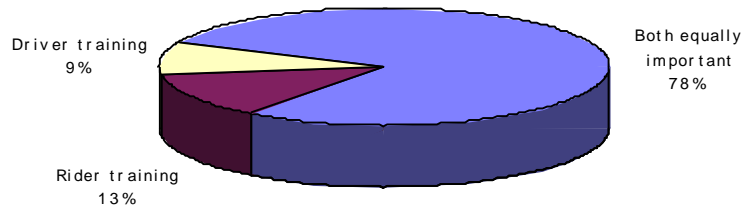
If so, to what level?

percentages of responses



Which is most important for rider safety

percentages of responses



The final question asked of the riders who were interviewed sought to ascertain their views on the extent to which they or other road users were responsible for the safety of motorcyclists. The overwhelming point of view, 78%, was that the training of both drivers and riders was equally important to riders' safety. 13% thought rider training was more important and 9% considered driver training to be even more important than rider training in ensuring rider safety.

The significance and the implications of the interviewees' responses to this question are important. It shows that a significant proportion of riders have a positive attitude towards training regardless of legal compulsion. It also shows that most riders do not see their safety on the road as something that can only be addressed within a rider training programme. This is clear evidence of riders recognising that they and indeed, all other road users, should be aware and should act to ensure that their behaviour does not endanger others. It should not be interpreted as a case of riders seeking to shift the responsibility for their safety on to others.

From it can be drawn the conclusion that all driver and rider training programmes should address the particular needs and characteristics of other road users and their vehicles. A rider should understand that an articulated heavy goods vehicle cannot keep within the defined traffic lanes when negotiating many roundabouts and bends and that when travelling at speed the turbulence that a lorry creates can cause problems for an overtaking motorcyclist. Similarly a car driver should understand that the cornering and braking needs of a motorcycle are different from those of a car and are particularly affected by factors such as the condition of the road surface.

Conclusions from the Rider Survey

As was expected the attitudes of the riders participating in the survey were supportive and responsible and their responses to the questions asked were considered and coherent. From the responses it has been possible to draw a number of conclusions and make associated recommendations.

It is clear that a significant proportion of motorcyclists have a positive attitude toward rider training, irrespective of there being any legal requirement. The main motivation being a belief that training will improve their own safety, a perspective that is often reinforced by friends and family. Related to this belief is that training helps to gain confidence. This is a particularly important when the question of the need for rider attitudes and behaviour to be addressed within a training programme is considered.

Whilst in most of the countries where riders were surveyed it was clear that both machine control skills and hazard awareness/observation/defensive riding skills were being addressed within a rider training programme, it was apparent that machine control skills were being given the most emphasis.

Whilst this is understandable in terms of the immediate needs of the novice rider, the responses to the questions that sought the judgement of the riders based on their subsequent experience on the road, justify the contention *that hazard awareness/observation, defensive riding skills should be given at least equal emphasis as the teaching of machine control skills within any rider training programme.*

The often used methods for teaching and assessing machine control skills, such as riding around cones and completing figures of eight, clearly need reviewing in the light of the opinions expressed in the survey where nearly two-thirds of those who had taken training saying that they were the least useful aspect learned. Where riders reported positive aspects of machine control training it was generally in the context of them having gained experience of riding. It follows, therefore, *that the teaching and assessing of machine control skills must be taught in ways that clearly relate to road riding conditions and experience.*

The survey indicated that a rider's sense of achievement or failure and the enjoyment or otherwise of the training experience, are good overall indicators of a training programme. Where dissatisfaction was expressed it was often coupled with responses that questioned the relevance and scope of the training received and the structure of the programme. This underlines *the importance of the need for good training practices that ensure that basic skills are taught in a progressive and meaningful manner, enabling riders to adopt and retain them as good riding practices.*

Whilst the relevance of the training received to the riders' subsequent road experience was characterised as being adequate by a majority of riders, one quarter of those who undertook a training course reported a lack of instruction in riding on poor road surfaces. Almost one in five reported that tuition on braking techniques was lacking and a similar proportion said that riding in poor weather conditions was inadequately covered. Given the importance of maintaining machine stability, in relation to the high proportion of accidents arising from other vehicles crossing a riders' path and in single vehicle accidents, where road and weather conditions may be a decisive factor, these widely reported deficiencies in current training programmes give significant cause for concern. The conclusion can be drawn, therefore, *that all aspects of training should be relevant to the riders' subsequent road experience, with emphasis being placed on specific skills to minimise rider risk in common accident situations.*

Although half of trained riders felt that their training had been worthwhile and only one in ten damned their training as a waste of time and money, the remaining four in every ten riders clearly felt that the training that they had received could have been far better. The major benefits reported by riders who had taken training related to gaining confidence, feeling safer and passing a test of competency. These outwardly positive responses, however, do not guarantee that riders are being properly equipped for life on the road. When asked what skills they had developed since the early stages of learning to ride, the range of responses given broadly matched those aspects previously reported as missing from the training or requiring further emphasis. *Rider training programmes should ensure a high level of rider confidence, both during training and after, whilst ensuring relevance to subsequent road experience.*

Whilst a majority of riders were opposed to compulsory training, one-third indicated that that if there was to be a legal requirement it should be for training prior to riding on public

roads, one-quarter said that basic training should be given after a period of road riding experience. Just over one in five supported training up to the standard required to pass a test of competency and almost one in six were of the view that if there was to be compulsory training it should even go beyond the test-pass standard. From this it can be seen *that a significant proportion of riders are receptive to the need for and are aware of the importance of training and that even without compulsion riders will elect to take training.*

Finally the responses to the survey demonstrated that motorcyclists are aware the training of other road users is as important in ensuring their safety as is their own training. Over three-quarters of those interviewed said that the training of car drivers was of equal importance and only one rider in ten saw rider training as more important. From this it can be concluded *that improvements in the skills and awareness of other road users, particularly car drivers, will result in significant improvements to the safety of motorcyclists.*

Summarising the weaknesses

Following the completion of the FEM European Rider Training Survey we were faced with a mass of information, from the initial report, from the academic research, from our own investigations, from the deliberations of the Working Group and from the rider survey itself.

To enable this information to be evaluated and prioritised a consultative seminar was arranged. Participating in it were the members of the Rider Training Project Working Group, the national coordinators of the FEM European Rider Training Survey and selected invitees from national riders' organisations who had a particular responsibility for or interest in rider training.

The approach adopted by that seminar was to first identify what were believed to be the significant weakness in existing European Union rider training arrangements. In so doing, it must be stressed, it was recognised that whilst all national training arrangements suffered from some of the identified weaknesses, not all of them suffered from all of the weaknesses.

In the order that they were identified or considered by the work of the project and not in any descending order of importance, they are:

- Sometimes inaccessible;
- expensive, sometimes prohibitively so;
- not producing safer riders;
- machine operation skills oriented;
- ignoring the attitude of riders and the need to change behaviour;
- often using instructors who are unqualified, non-motorcyclists or poor communicators;
- rarely explaining traffic laws and regulations in the context of the reason for them;
- sometimes using inappropriate, even intimidating practical exercises; and
- often giving little or no attention to the rider's awareness of hazards.

Guiding principles for rider training

Having investigated, surveyed, examined, consulted and reached conclusions on what we believed were the strengths and weaknesses of rider training arrangements within the European Union, considered the position in Australasia and looked at recent developments in North America, it was a comparatively easy task to reach conclusions and to make recommendations on what should be covered within an initial rider training programme.

In looking at how those conclusions and recommendations could be presented we identified a number of options. An academic report, a manual of best training practice, a booklet for novice riders, were all considered. We finally decided that the best form would be a report which presented the work that we had done, the conclusions that we had reached and which contained recommended guiding principles for rider training up to the standard necessary to pass an official test of competency.

This we believe is the best approach because despite the requirements set out in Annex II of the Second European Driving Licence Directive, we cannot visualise a meaningful harmonisation of the national tests of rider competency in the foreseeable future. Indeed a uniform approach would be a prerequisite for our conclusions and recommendations to be presented in the form of either a manual of best training practice or a novice rider's handbook.

The Eight Principles

The FEM's eight guiding principles for rider training programmes up to the standard required to pass a national test of competency to obtain a motorcycle licence are:

Affordable

All rider training programmes, be they required by national law or left to the individual rider to choose to undertake, should be affordable. A small motorcycle or moped is often the first form of personal motorised transport for many young people and its acquisition has often stretched their financial resources to the limit. Similarly for many citizens of Europe a motorcycle is often the only affordable form of personal transport, or in a family it is the only affordable alternative to a second car. The cost of training should not be at a level where the novice rider either decides not to take training, or not to purchase a motorbike, or to ride illegally.

Training for a whole range of activities is subsidised in many European Union Member States. Recognising the high social and personal costs of rider accidents it could be argued that the government subsidies for effective rider training programmes would be cost-effective.

There are other ways of containing or reducing the cost of training to the novice rider. For example training courses run by motorcycle enthusiasts through national and local riders' organisations, where the instructors normally only seek to get their expenses met and the trainee is allowed to use his or her machine, have worked well in several countries.

In other countries, the United States of America for example, imaginative approaches have been adopted to ensure that rider training is affordable. In the State of Illinois \$8 fee of the motorcycle registration fee is used to fund the training scheme run by trained motorcycle rider instructors. Taking and passing one of their courses is accepted as an alternative to the State's official test of competency and a young rider who has successfully completed a course can get a licence up to two years earlier than normally allowed.

Accessible

There should be effective and affordable rider training courses within reasonable travelling distance of all prospective riders. In rural areas where a novice rider would have to travel a considerable distance to attend a training course, training organisations and or riders' organisations should seek to establish training programmes that operated at intervals in the locality, possibly on a rotating basis.

Again in the United States of America they have found the answer to the difficulties in providing rider training across sparsely-populated areas, often with great distances between relatively small centres of populations. In a number of States trailers equipped as classrooms have been funded from the levy on registrations and are used by the riders' organisations to take the necessary equipment and experience to riders in outlying areas. A similar arrangement also exists in Switzerland.

The role of riders' organisations in providing good quality initial rider training, particularly where the numbers of trainee riders cannot meet the profit need of a commercial company, cannot be overestimated. In Greece the riders' organisation MOTOE has, with the cooperation of the FEM and highly-skilled and experienced advanced riding instructors from the United Kingdom, been training a cadre of experienced motorcyclists who will form the foundation for the first effective initial rider training programme in their country.

Competent and qualified Instructors

The relationship between the instructor and the novice rider is a most important one. It is not simply a matter of one imparting and the other receiving information. They are, usually, and if they are not they most certainly should be, part of the same culture and a form a peer group.

All instructors should be experienced motorcyclists. They should be able to present a positive image to the trainees based on respect for their experience and knowledge. They should have good communication skills and the ability to analyse the personalities and attitudes of their charges and adapt their approach accordingly.

All instructors should be qualified by undertaking a comprehensive course approved by the appropriate government agency in their country. Such courses should always be developed in consultation with the riders' organisations and other interested parties.

The course should require them to demonstrate their riding ability to advanced motorcycle rider standards, show a comprehensive knowledge of road traffic rules and regulations in the context of the need for their existence and should assess the attitude and inter-personal skills of the aspiring instructor.

The importance of a comprehensive understanding of hazard awareness and associated riding practices and avoidance measures and the significance of trainee riders' attitudes in establishing and maintaining safe riding practices, should also be demonstrated within the instructors' qualification course.

Instructors should have a comprehensive understanding of the approved syllabus necessary for trainees to obtain a range of skills and knowledge and ride safely on public roads and be aware of best-practice with regard to practical machine control exercises. When accompanying novice riders on public roads they should always ride a motorcycle and be properly equipped. Recognising the importance of good communications between the instructor and the trainee, two-way radio equipment should be used where and when appropriate.

The benefit of instructors taking a refresher course from time to time should be the subject of discussion between the appropriate national government agency and the riders' organisations and other interested parties.

Learning within a comprehensive syllabus

Everybody who wishes to learn how to ride a motorcycle should do so within an agreed national syllabus.

The syllabus should embrace the principles set out within this report and should be developed and agreed in consultation with the appropriate national government agency, the riders' organisations and other interested parties. The syllabus should be comprehensive, supported by necessary aids such as manuals for the instructors, manuals or log books for the trainees and videos.

It should contain in detail all examples and circumstances of the knowledge and skills to be imparted to the novice rider and should be a balanced and appropriate mixture of theoretical sessions, practical exercises and road-riding experience.

Importantly all of the syllabus should be applied by training institutions and instructors. They should not concentrate only on the elements in it that are needed to satisfy the requirements of the national test of competency, as is often the case in a number of European countries. In France, for example, where there is the Programme National de Formation, which is coherent and progressive and covers, in theory at least, most of what is contained in these eight principles, many of the driving schools limit themselves to repeating the exercises and aims which are required to pass the test.

Relevant machine operation skills

Within the syllabus appropriate machine operation skills should be identified and taught.

The practical exercises that are used to develop initial machine control skills and which should not take place on public roads, should be designed so that they are understood by the novice rider as being appropriate to his or her needs when riding on public roads. They should not be seen to simply satisfy apparently irrelevant exercises used in a national test of competency.

The importance of the need for the novice rider to adopt the correct attitude on the road should be recognised within the practical exercises and emphasis should not be put on

fast or aggressive manoeuvres. The fact that being able to operate clutch, throttle, gears and brakes is only a part of being able to safely ride a motorcycle should be stressed throughout the teaching of the machine operation skills. Considerations such as rider focus and road monitoring and road positioning should be introduced and developed in conjunction with the development of the riders' machine operating skills.

The initial off-road exercises should be built upon through an extensive programme of riding on public roads, where the appropriateness of the skills acquired can be recognised through their application and developed through their practice. Where possible the road experience should cover a range of types of roads, weather and traffic conditions.

Where a novice rider is allowed to ride unaccompanied on public roads prior to passing an official test of competency, a programme setting out particular machine control operations in particular situations should be given by the instructor to the trainee to follow and practice.

Where the trainee is under the control of an instructor up to passing an official test of competency the instructor should ensure that the trainee experiences and develops the range of machine control operations necessary in the particular situations.

Whilst it is most important to ensure in all circumstances that the machine control exercises are relevant to the trainee rider's needs when riding on public roads, it is also necessary to ensure that the trainee realises the relevance and importance of the exercises that he or she are undertaking.

Understanding road traffic regulations

The need to teach road traffic rules and regulations in the context of the reasons for their existence should be contained within the agreed syllabus.

The widespread practice of teaching road traffic regulations by rote and teaching them separately from the rider training course, often with no distinction between drivers and riders, can lead to a lack of respect for road traffic rules. A novice rider who lacks understanding of the reasons for their existence can often develop patterns of riding behaviour where non-compliance with road traffic regulations are the norm.

Consideration of road traffic rules, the reasons for their existence and the importance of complying with them, should, therefore, take place at all stages of initial rider training courses. Through the subject being introduced, explained and discussed in the theoretical, practical and road-riding sessions, novice riders should develop an understanding of the need not to only recognise road signs and markings but also to modify their riding behaviour to comply with traffic regulations, based on comprehension and self-interest.

Hazard awareness and avoidance

As with the teaching of road traffic rules and regulations, the development of an awareness of the hazards that the trainee rider is likely to face when riding a motorcycle should take place at all stages within the syllabus of a rider training programme.

The implications of riding in various weather conditions, of riding on different road surfaces, road furniture and markings, of approaching and navigating the range of road

layouts and junctions should be identified within the theoretical sessions of the agreed syllabus. The likely behaviour of other road users, including pedestrians, the characteristics of other vehicles and the effects that they can have on a motorcycle, should also be covered.

Potential hazards having been identified, appropriate avoidance actions should also be explained and discussed in the theoretical sessions. The use of computer games based technology and video equipment should be utilised where practical and possible.

The necessary machine operation skills needed within hazard avoidance practices, such as braking, balance and road monitoring and positioning, should be incorporated into the practical exercises and developed with the road riding experience.

Rider attitude and rider behaviour

As is explained in this report, it is the view of the Federation of European Motorcyclists that an important reason why the development of rider training in Europe has not resulted in a corresponding reduction in rider accidents, particularly amongst young riders, is because it has concentrated on the machine operation skills of the rider.

Initial rider training programmes have generally failed to recognise that it is the attitude of the rider and his or her corresponding behaviour that will primarily determine whether they are more likely or less likely to have an accident.

In focusing on the area of rider attitudes we recognise that it is not the previously missing magical ingredient. A novice rider who has the right attitude to riding on the road and modifies his or her behaviour accordingly, but does not have good machine control skills and a developed awareness of hazards and how to avoid them, is no less likely to have an accident. However we believe that it is possible that a rider with good machine control skills and little or no understanding of the importance of rider attitude and behaviour and a poorly developed sense of hazard awareness is more likely to have an accident.

Through taking a training course a novice rider should be able to understand that their attitude is crucial in ensuring their own safety. That how they behave when riding on public roads will be a prime factor in determining whether or not they have an accident. That it is their own self-interest to always comply with traffic regulations. That they should always ride within their known capability and experience. That they should avoid getting into potentially dangerous situations where it is the action of other road users that will determine the outcome of the situation. That they should modify their behaviour when riding in poor weather conditions and when riding on different road conditions. That they should constantly monitor their own riding: they should think about where they should be on the road; the line they should take through a bend or when approaching a junction; be considering the appropriateness of their speed and noticing and assessing approaching road features and potential hazards as soon as they become visible.

The novice rider should also understand that whilst he or she is being made aware of the importance of attitude and behaviour and of hazards likely to be met and how to them, this is unlikely to be the case with the majority of other road users.

It is this body of knowledge and experience, often known as road craft or defensive riding techniques that will come with experience. Novice riders, particularly young novice riders who are unlikely to have developed some appropriate road craft through driving a car, can be taught it. It should be recognised that they should be made aware

that whilst their knowledge is acquired and has not yet become instinctive, based on their first hand experience, its effectiveness in modifying their riding behaviour is likely to decay. They should be encouraged to constantly reassess how they are riding and reaffirm and apply the knowledge gained through their rider training course until such time as their own experience is sufficient.

The agreed syllabus of all initial rider training programmes should, therefore, give considerable attention to the matter of the trainee rider's attitude and behaviour. It should introduce the subject at a very early stage in the syllabus, return to it as a specific issue for consideration and discussion at appropriate stages throughout the training programme and whenever possible reinforce it by example and illustration in the practical exercises and when riding on public roads.

Instructors should be able to identify those trainees whose attitude and behaviour could put them at particular risk and should give them particular attention and guidance.

In conclusion

The Federation of European Motorcyclists believes that the project that we have undertaken, with the valuable support from DGVII of the European Commission and the invaluable support of our member organisations, will make a significant contribution to the development of rider training.

This report of the project and its recommendations in the form of the guiding principles, seeks to bring about important changes to the way in which prospective motorcyclists are prepared for riding on the public highway. We are confident that the changes we are seeking will be changes for the better because the conclusions that we have reached are based on the experience and considered opinions of hundreds of road riding motorcyclists, together with the findings of many experienced academics, road safety experts and researchers and a great deal of our own hard work.

We are hopeful that the approach to improving initial rider training that we are advocating will be taken up and we will be happy to cooperate with any government agency, riders' organisation or any other interested party who may wish to carry the ideas forward.

We also hope that our work will have a positive influence how European Union Member States implement and develop the Second European Driving Licence Directive and how the opportunities inherent in the review procedure, due to commence in 1998, will be approached.

In the introduction we mentioned that the Second European Driving Licence Directive specified uniform criteria that has be satisfied to obtain a licence in all member States. These are set out in Annexe II to the Directive.

We have compared the conclusions that we have reached, in the form of the guiding principles, with the criteria set out in Annexe II and have found them to be broadly compatible, indeed generally to be mutually supportive. There are some areas where we believe that the criteria should be reviewed. For example the need to know road traffic regulations does not refer to the reasons for the rules and regulations being understood by the aspiring rider or driver and understanding the effect of wind on a vehicle is mentioned as being important for the drivers of heavy goods vehicles but not for motorcyclists!

Most importantly we believe that whilst considerations such as hazard awareness and avoidance, understanding the needs of other vehicles and road users, and rider and driver attitudes and behaviour are referred to generally, we would contend that they should be contained and appropriately explained in the specific requirements for motorcycles. The motorcycle is a very different vehicle from its four or more wheeled counterparts and the training and testing of riders would benefit from the skills and knowledge criteria being specifically rather than generally described.

As we said in the beginning of this report riding a motorcycle is an exhilarating experience. We believe that with the right approach in preparing riders for the road and with those riders having the right attitude and behaviour, the exhilaration will be enjoyed by many more and will at least be understood by those who don't ride a motorcycle and by those who are responsible for proposing and enacting legislation affecting motorcycles and their riders.