

# Retiring from Riding – or Not?

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## Biography

Christine Mulvihill is a Research Assistant who has worked in several areas of road safety research during 18 months at Monash University Accident Research Centre. In addition to motorcycle safety, she has conducted work in the areas of road worker safety, young driver research, emergency vehicle safety, and rail safety. Christine has a Bachelor of Behavioural Science with Honours.

## Abstract

The total number of motorcycle rider fatalities in Australia has increased since 1997 (ATSB Monograph 12, 2002), despite a reduction in the number of riders killed aged 25 and under. This trend of increased crash involvement by older riders is mirrored in fatality and injury data in a large number of Australian and overseas jurisdictions.

A survey of motorcycle licence holders aged over 30 years (Haworth, Mulvihill and Symmons, 2002) asked whether they had ridden in the previous 12 months. Overall, 53% of respondents had ridden in the last year. Those licence holders who had ridden (“riders”) were asked to complete questions relating to riding history, current riding patterns, crash involvement and demographics. Those licence holders who had not ridden in the last year (“non-riders”) were asked to complete a small number of questions relating to riding history, when they stopped riding and why and demographics.

This paper describes the characteristics of non-riders and the reasons why they gave up riding. Comparisons are then made with riders who continued to ride, those who had given up riding but have recently returned to riding and new riders. The road safety implications of these results and potential countermeasures to the increasing motorcycle crash problem are then discussed.

## 1. INTRODUCTION

After a period of sustained reductions, motorcyclist fatalities and injuries appear to be increasing. While the number of motorcyclist fatalities in Australia halved from 1987 to 1997, the number increased by 27% from 176 in 1999 to 223 in 2002. In Victoria, the number of motorcyclists killed increased from 38 in 1999 to 64 in 2001 before stabilising at 56 in 2002 (ATSB, 2003). This trend appears to reflect an increase in crashes involving older motorcyclists. The Australia-wide fatality data since 1989 has shown a decrease in the number of riders aged under 25 and an increase in the number of riders aged over 25 (ATSB, 2002). This trend is mirrored in injury data from New South Wales (Christie and Harrison, 2001) and Victoria (Haworth, Mulvihill and Symmons, 2002) and in data from other countries. In the United States, the number of motorcyclists killed aged 40 years and over increased while the number aged under 30 declined considerably from 1990 to 1999 (National Center for Statistics and Analysis Research and Development, 2001). UK data show substantial reductions in the number of motorcyclist casualties for those aged under 20 since the late 1980s/early 1990s (Lynam et al., 2001). In contrast, the number of casualties aged 30-39 has been growing since 1993.

The changing trend in crashes appears to reflect changing trends in riding. In NSW, the number of motorcycles registered to people aged 40 and over increased by 57% between 1995 and 2000, while the number of motorcycles registered to people under 25 years decreased by 33% (de Rome, Stanford and Wood, 2002). In the United States, the median age of owners of registered motorcycles increased from 24 years in 1980 to 38 years in 1998 (Shankar, 2001, cited in Christie and Harrison, 2001).

A survey of motorcycle licence holders aged 30 and over by Haworth et al. (2002) categorised older riders into three groups:

1. Riders who have held licences and ridden for many years (continuing riders)
2. Riders who have held licences for many years but have only returned to riding recently (returned riders)
3. Riders who have only obtained a licence recently (new riders)

Haworth et al. (2002) found that only 53% of licence holders had ridden in the past 12 months. Of those who had ridden, 43% were continuing riders, 27% were returned riders and 31% were new riders. Returned riders were less likely than new riders to have undertaken a training course and were more likely to ride for recreation than continuing riders. Returned riders reported a similar level of involvement in crashes to continuing riders, but rode less frequently and shorter distances, suggesting that their crash risk per kilometre ridden would be higher.

In Victoria, NSW and Queensland (and possibly other jurisdictions), the licensing system allows motorcycle licences to remain current at no additional cost to people who hold car licences. This makes it relatively easy for retired riders to take up riding again. Given the increase in crashes involving older motorcyclists, it is important to know what leads licence holders to give up riding and whether those licence holders who do not currently ride will return to riding. The current paper presents further results of our earlier survey, with a focus on the characteristics of non-riders and the reasons why they gave up riding. Comparisons are then made with riders who continued to ride, those who had given up riding but have recently returned to riding and new riders to provide some insight into the likelihood that non-riders will return to riding. The road safety implications of these results and potential countermeasures to the increasing motorcycle crash problem are then discussed.

## **2. METHOD**

In mid 2002, a questionnaire was mailed to 4,000 holders of Victorian motorcycle licences who were aged over 30 years. The sample was drawn from a data file provided by Vic Roads Registration and Licensing Department which contained records of approximately 50,000 motorcycle licences where the date of birth of the licence holder was prior to 1 January 1972. The sample was stratified in an attempt to ensure sufficient responses from licence holders aged 50 and over and for licences issued in particular years. However, the number of motorcycle licence holders aged 60 and over that could be sampled was limited by the small number of licence holders in this age range, particularly among recently issued licences. The random selection of cases function in SPSS was used to select particular licence holders from the data file. Reminder letters were sent two weeks after the original mailing to the entire sample with the exception of those 116 licence holders whose questionnaires has already been received marked "return to sender".

Licence holders were classified as metropolitan or rural residents according to their postcode. A small number of licence holders were excluded from the sample because their date of birth was

missing, their address was missing or incomplete or their postcode was missing or not in Victoria.

Those who responded that they had not ridden in the last 12 months were classified as 'non-riders'. The licence holders who responded that they had ridden during the previous 12 months were classified as 'riders'. The riders were classified into three groups:

**Continuing riders** Riders who said they obtained their licence prior to 1995 and who agreed with the statement that "I have ridden regularly ever since I got my licence".

**Returned riders** Riders who said they obtained their licence prior to 1995 and who agreed with the statement that "I rode regularly when I first got my licence and then didn't ride much for a while and now have taken up riding again".

**New riders** Riders who said they obtained their licence in 1995 or more recently.

The frequency of riding that corresponded to riding "regularly" was not defined in this question but the frequency of current riding was discussed elsewhere in the questionnaire.

Riders were asked to complete questions relating to riding history, current riding patterns, crash involvement and demographics. Non-riders were asked when their learner permit and licence were issued, when they last rode, the main reason they stopped riding, the year they were born and where they live.

### **3. RESULTS**

#### **3.1 Response characteristics**

Overall, 1,948 completed questionnaires were returned, corresponding to a response rate of 48.7%. This comprised 1,025 questionnaires from riders and 923 questionnaires from non-riders. Thus 53% of respondents were riders. Among the riders there were 384 "continuing riders" (42.7% of riders), 240 "returned riders" (26.7%) and 275 "new riders" (30.6%). A further 126 riders were unable to be classified because they did not provide their year of licence issue or they did not answer the item regarding riding pattern in the period between when they first obtained their licence and now.

#### **3.2 Characteristics of non-riders**

The percentage of respondents who were non-riders increased with age, from 42% of licence holders aged 30 to 39 to 64% of licence holders aged 60 and over. Thus, non-riders were older, on average, than continuing, returned or new riders.

In general, the percentage of respondents who were non-riders increased with the number of years since their licence was issued. Of those licence holders whose licence was issued in 2000 or later, only 10.3% were non-riders. This increased to about 65% of licence holders whose licence was issued before 1960. Unfortunately, the number of years since the licence was issued is strongly correlated with age of the licence holder and it is hard to disentangle these two potential factors.

As a general rule, the younger a respondent was when he/she obtained a motorcycle licence, the more likely he/she was to be a non-rider. Just over 50% of the respondents who had

obtained a licence between the ages of 16 and 19 were non-riders, which fell to 20% of those who had been issued a licence when they were 60 or more.

Overall, licence holders who lived in the Melbourne metropolitan area were more likely to have stopped riding than licence holders who lived in rural Victoria (48.9% versus 46.4%). However, the opposite was true for licence holders aged 30 to 39, where 37.1% of metropolitan residents had stopped riding compared with 44.6% of rural residents.

### **3.3 When do licence holders stop riding?**

Non-riders were asked what year they last rode. Combining this information with the year their licence was issued and their age enabled calculation of the age when they stopped riding and how long they had held a licence when they stopped riding.

In general, the older non-riders were older when they stopped riding. More than 40 percent of licence holders aged 60 and over did not stop riding until they were at least 50 years of age.

### **3.4 Why do licence holders stop riding?**

The questionnaire asked non-riders "What was the main reason you stopped riding?" The options provided were "Needed to transport family", "Too dangerous", "Didn't have time and "Other". Many respondents ticked more than one reason and a large number of "Other" responses were recorded.

"Too dangerous" was the most frequent reason why the licence holder stopped riding, being cited by 24.5% of respondents. This was closely followed by "Didn't have time" (20.0%) and "Needed to transport family" (18.5%). The most common "Other" reason was "Sold bike" (17.8%).

The main reasons why the licence holder stopped riding differed according to their age when they stopped riding. "Too dangerous" was the most common reason offered by those who stopped riding under the age of 30 and approached being the most common reason of those who stopped riding between the ages of 30 and 39. "Need to transport family" was most commonly cited by those who stopped riding between the ages of 30 to 39. Licence holders who stopped riding between the ages of 40 and 49 or between 50 and 59 frequently cited "Didn't have time" or "Sold bike". "Age" was cited as a reason by 8% of those who stopped riding when they were 60 or older.

The reasons why non-riders stopped riding were examined separately according to their ages now and when they first stopped riding. For those who gave up riding when they were aged under 30, 'too dangerous' was cited by all age cohorts as the most common reason for stopping riding. About one third of all cohorts cited this reason, indicating that the pattern of response is fairly consistent over time. For respondents in the youngest cohort, cost was relatively more important than in older age cohorts.

The reasons why respondents gave up riding when they were aged 30-39 appear to have changed over time. For the latest cohort (respondents currently aged 30-39), family, danger and time were equally common reasons. For both 40-49 year olds and those aged 60+, family was cited more commonly. Among 50-59 year olds, the most commonly cited reason was 'too dangerous'.

The pattern of responses among 40-49 year olds was similar to that for the youngest cohort. Time was the most common reason cited for those aged 40-49. For 50-59 year olds, the pattern of responses was varied, with 'too dangerous', sold bike and family being cited, in addition to time. Time and 'too dangerous' were the most commonly cited reasons in the 60+ cohort. Among respondents aged 50-59, time was also cited as the most common reason for ceasing riding. A variety of reasons was cited by the previous cohort (aged 60+), with 'too dangerous', sold bike, and time being fairly common.

#### **4. DISCUSSION AND CONCLUSIONS**

Overall, the survey found that more than half of the licence holders aged over 30 had not ridden in the previous 12 months (i.e. were non-riders). Non-riders and riders differed on a number of dimensions. Non-riders were older on average, than continuing, returned or new riders. Respondents who obtained a motorcycle licence at a younger age than other respondents were more likely to be non-riders. In general, the older non-riders were older when they stopped riding.

The examination of the reasons why licence holders stopped riding may provide some insight into the likelihood that they will return to riding. The survey showed that the most common reason for giving up riding was because it was "Too dangerous". This was followed closely by "Didn't have time", "Needed to transport family" and "Sold bike".

When the reasons why licence holders ceased riding were analysed separately according to their age group now and when they first stopped riding, several patterns emerged. About one third of all cohorts cited "too dangerous" as a reason for giving up riding when they were aged under 30 suggesting that this is not a transient, age related pattern but one that persists over time. This finding may reflect the fact that younger riders aged under 30 have a much higher risk of crash involvement than older riders. It might also be expected that these licence holders will be less likely to take up riding again. Unlike some of the other reasons, the decision to stop riding because it is too dangerous is perhaps more indicative of a lifestyle choice rather than as barrier to something they would otherwise be content to pursue.

Cost was more commonly cited in the youngest cohort (30-39 year olds) than in other cohorts. One possible explanation is that purchasing and maintaining a motorcycle was once a more cost efficient mode of transport compared to a car. In recent times however, motorcycles have become more expensive to purchase and maintain whereas cars have become relatively less costly. While this might deter some retired riders from taking up riding again, it is potentially only a transient deterrent that could change as the retired riders become older and have more disposable income.

Among those who gave up riding when they were aged 40-49, time was the most commonly cited reason for the current cohort, and the most commonly cited reason after "too dangerous" for earlier cohorts. For those who ceased riding when they were 50-59, time was also the most common reason for the current cohort. This suggests that, among the current cohort in particular, licence holders may be more willing to return to riding if (and when) time demands decrease with age. Indeed, an increase in 'free-time' might explain the recent increase in the number of older licensed riders both in Australia and internationally. Unlike 'too dangerous', the decision to stop riding due to a lack of time is more a transient factor that would possibly be less likely to deter riders whose time demands will decrease as they get older.

Overall, the research suggests that motorcycle licence holders who retire from riding because they feel it is too dangerous, many of whom stop riding at a relatively young age, are less likely to return to riding than those who retire from riding because they lack time or it interferes with family responsibilities. It would be informative to know why returned riders gave up riding and why they took it up again. Knowing the pattern of reasons for ceasing riding among returned riders would also provide better insight into those reasons that might lead current non-riders to return to riding and those that might not.

The survey demonstrated that returned riders are a significant proportion of older riders and are less likely than new riders to have undertaken a training course. While returned riders ride less frequently and shorter distances than continuing riders, their crash risk per kilometre ridden appears to be higher. Potential measures to reduce the crash involvement of returned riders range from measures to discourage retired riders from returning to riding (such as some mechanism such that a motorcycle licence needs to be actively maintained) to encouraging or mandating training for returning riders. If the latter is to have benefits other than discouraging potential riders from returning to riding, then the training has to be demonstrated to have clear safety benefits.

### **References**

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### **Keywords**

Motorcycle safety, older road users