Training Makes You Better, Not Safer

Debunking the Billheimer Myth

MotorcycleDanger.org/Data
“The great enemy of truth is very often not the lie--deliberate, contrived and dishonest--but the myth--persistent, persuasive and unrealistic.

Too often we hold fast to the cliches of our forebears. We subject all facts to a prefabricated set of interpretations. We enjoy the comfort of opinion without the discomfort of thought."

*John F. Kennedy*
*Commencement Address at Yale University, June 11 1962*
Science Separates Facts from Myths
Statement because Explanation:

- Where the Statement is measurable and disprovable,
- The Explanation difficult to manipulate,
- And the results are reported in a truthful manner.
"Statement" because "Explanation"

Where the "Statement" must be Measurable and Disprovable

And the "Explanation" must be Difficult to Manipulate
And results must be

Reported in a Truthful Manner
Statement to Test:
"Trained riders have less mishaps than untrained riders."

A well constructed, long term and well funded,

**Matched Pair Test** of this statement
consducted in the 1990s in California:

"EVALUATION OF THE CALIFORNIA MOTORCYCLIST SAFETY PROGRAM"

by
John W. Billheimer
In the early and mid 1990s there were many experienced and untrained riders in California.

With this reservoir of untrained riders, Dr. Billheimer could match graduates of the California Motorcyclists Safety Program with untrained riders and track the mishaps of each group.

He matched thousands of riders.

The results follow:
Myths

Facts
Matched pairs, comparing Rider Course Participants and Untrained Counterparts

Test if $b$ less than $d$
No Mishap | Mishap
---|---
ERC Trained | 1,156 |  
Un-Trained | 1,161 |  

1,182 matched pairs were created, 1,182 Experienced Rider Course Participants paired with 1,182 like Riders.
4-Box Condition-Outcome Test
Experienced Rider Course Participants, 1 Year Later

<table>
<thead>
<tr>
<th></th>
<th>No Mishap</th>
<th>Mishap</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERC Trained</td>
<td>1,156</td>
<td>26</td>
</tr>
<tr>
<td>Un-Trained</td>
<td>1,161</td>
<td>21</td>
</tr>
</tbody>
</table>

\[
a + b = 1,182
\]

\[
c + d = 1,182
\]

"26 Is Less Than 21"

Statement is **FALSE**
4-Box Condition-Outcome Test
Basic Rider Course Graduates, 1 Year Later

<table>
<thead>
<tr>
<th></th>
<th>No Mishap</th>
<th>Mishap</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRC Grad¹</td>
<td>1,101</td>
<td>38</td>
</tr>
<tr>
<td>Un-Trained</td>
<td>1,114</td>
<td>25</td>
</tr>
</tbody>
</table>

\[ a+b = 1,139 \]
\[ c+d = 1,139 \]

"38 Is Less Than 25"
Statement is **FALSE**

1. BRC grads had a 16 hour advantage over the "Un-trained" since mishaps were not counted from the course.
By any measure the CMSP is a cost-effective Program that pays for itself many times over in saved lives and reduced accident rates.

Dr. Billheimer, confusingly, returns to myths and closed the published paper with:

MYTHS
Using the scientific method, "Statement because Explanation" we find:

"Rider Course Training will decrease mishap rates because by any measure, the CMSP is a cost-effective Program that pays for itself many times over in saved lives and reduced accident rates."

Is False.

It Has Been Disproved

It is a MYTH!
Epilogue:

Every US State that has promoted Motorcycle Training in the last 25 years has experienced quickly rising Motorcycle Driver Fatalities. There are No Exceptions.

USA Total Two-Wheeled-Street Motorcycle Driver Fatalities changed from 2000 per year to 4000 per year.

This simple chart indicates there is a problem with managing the danger of driving motorcycles in the USA.

MotorcycleInstitute.org
“It ain't so much the things we don't know that get us in trouble.

It's the things we know that just ain't so.”

Artemus Ward