

Training Makes You Better,
Not Safer

Debunking the Billheimer Myth

MotorcycleDanger.org/Data

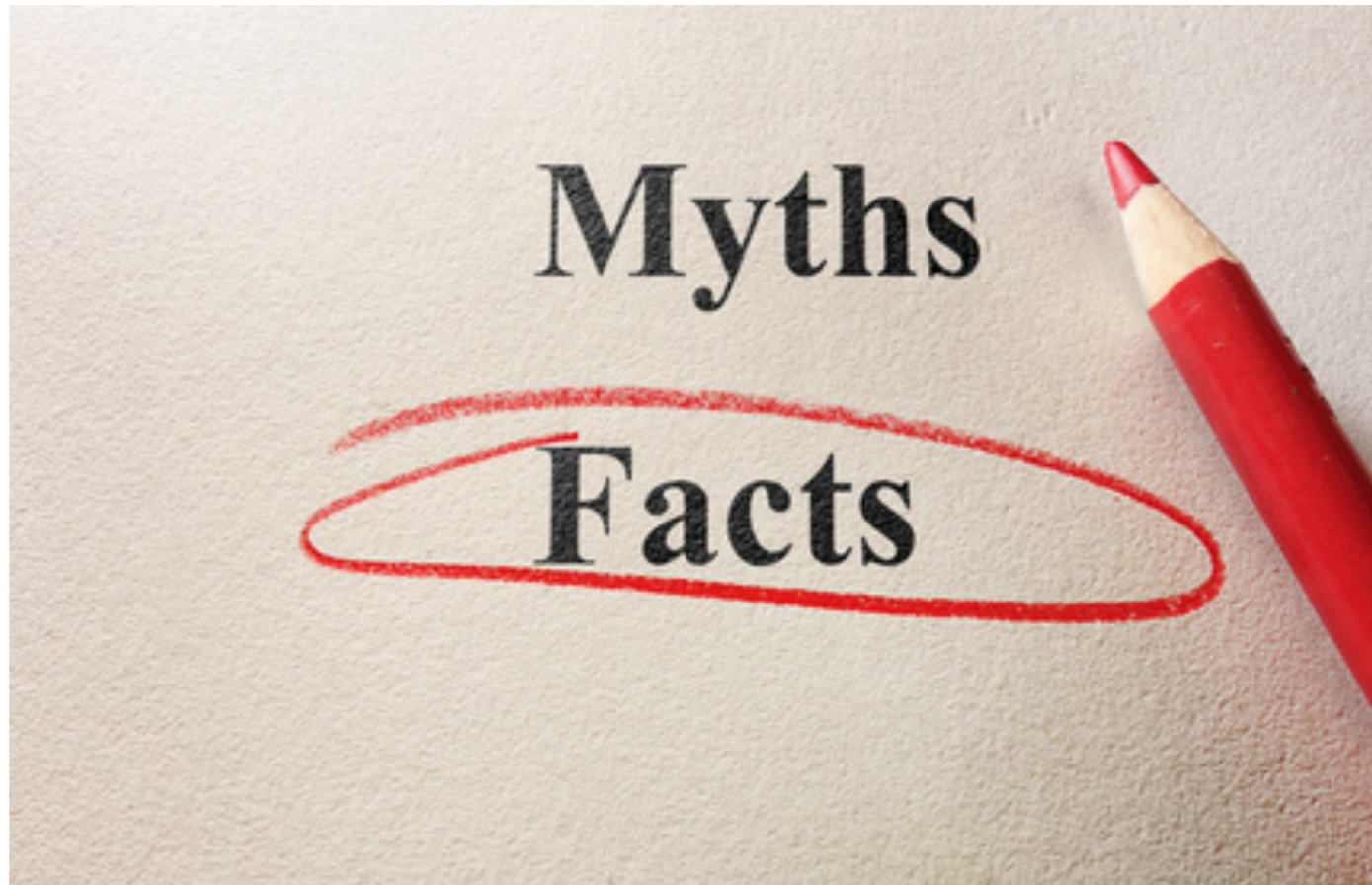


“The great enemy of truth is very often not the lie--deliberate, contrived and dishonest--but the myth--persistent, persuasive and unrealistic.

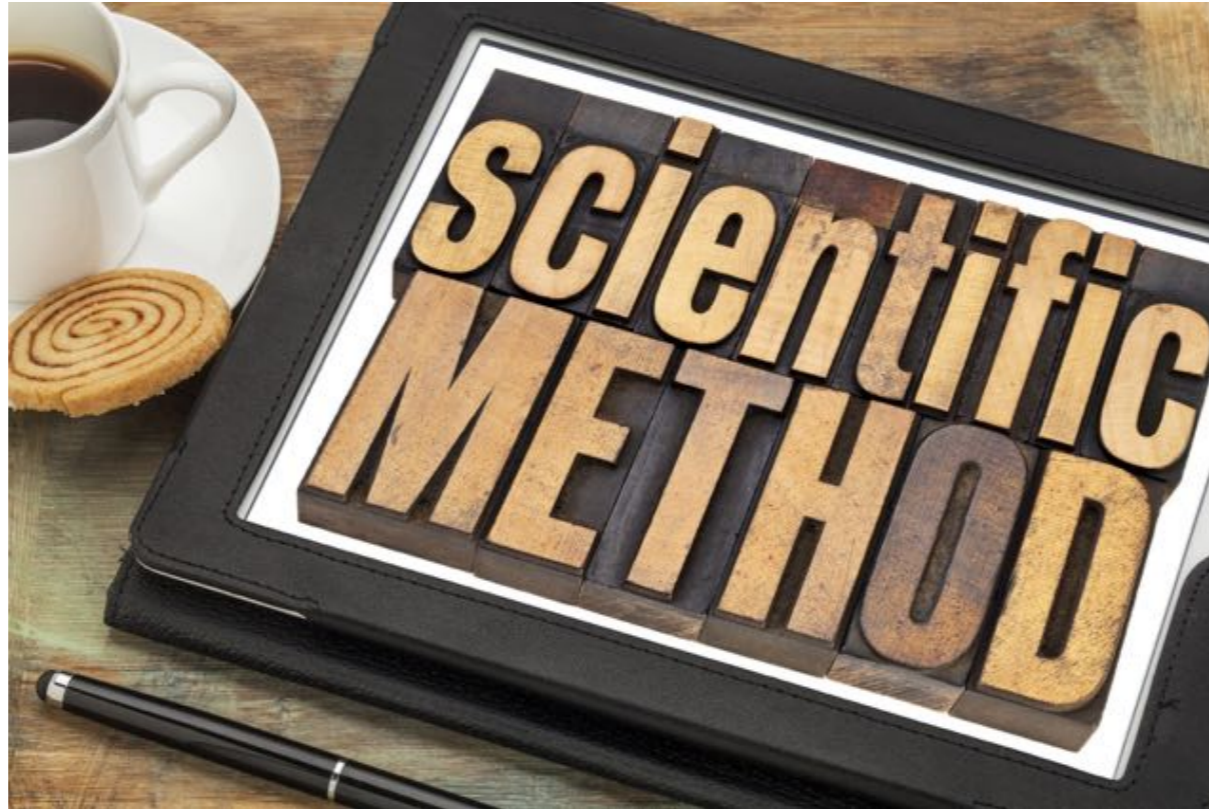
Too often we hold fast to the cliches of our forebears. We subject all facts to a prefabricated set of interpretations. We enjoy the comfort of opinion without the discomfort of thought.”

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

conducted in the 1990s in California:

"EVALUATION OF THE
CALIFORNIA MOTORCYCLIST SAFETY PROGRAM"

by

John W. Billheimer

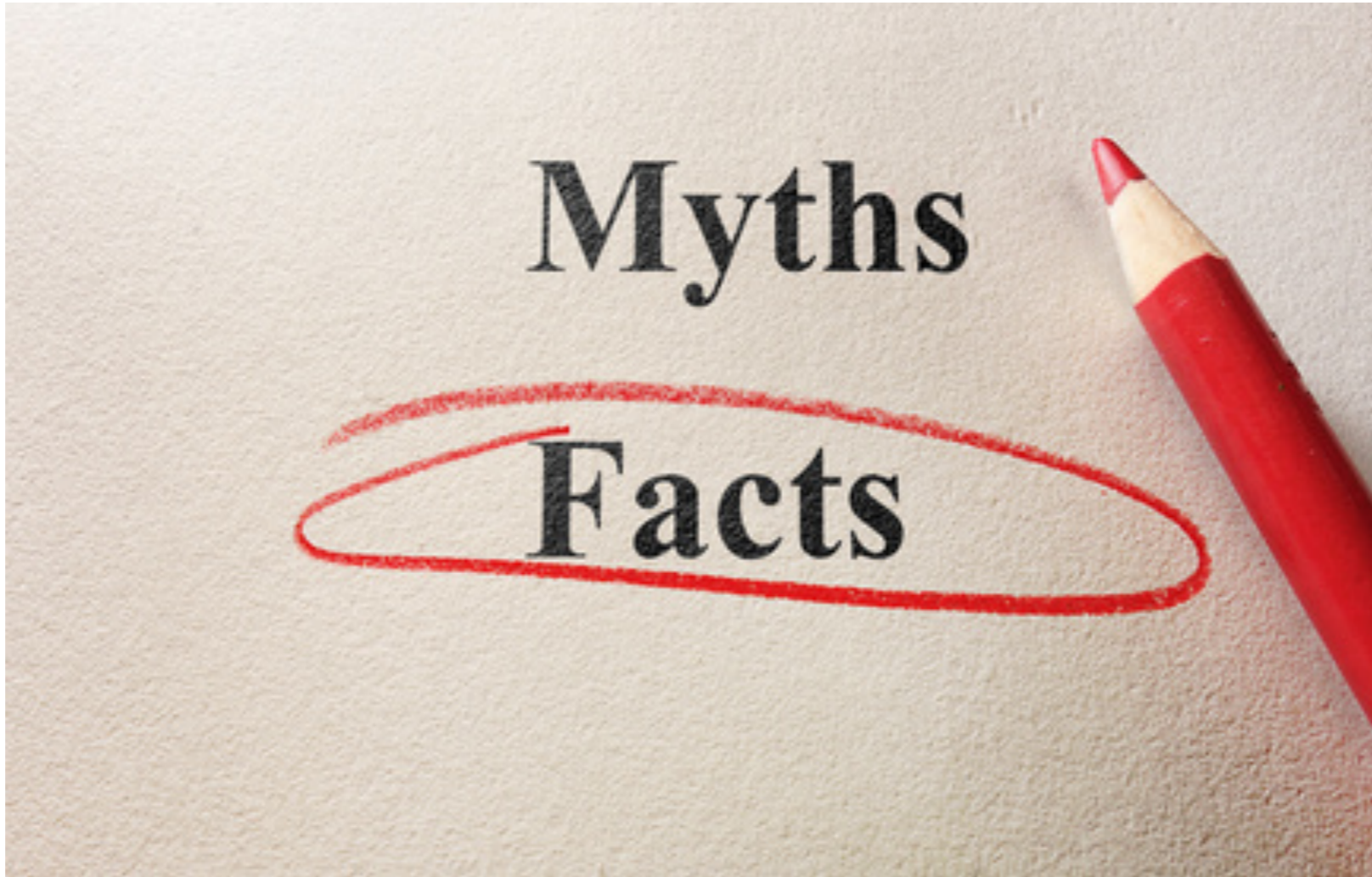
In the early and mid 1990s there were **many** experienced and untrained riders in California.



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:



4-Box Condition-Outcome Test

	No Mishap	Mishap
Trained	a	b
Un-Trained	c	d

**Test if
b less than d**

Matched pairs, comparing Rider Course Participants
and Untrained Counterparts

4-Box Condition-Outcome Test

Experienced Rider Course Participants, 1 Year Later

	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

	No Mishap	Mishap	
ERC Trained	1,156	26	$a+b = 1,182$
Un-Trained	1,161	21	$c+d = 1,182$

"26 Is Less Than 21"
Statement is **FALSE**

4-Box Condition-Outcome Test

Basic Rider Course Graduates, 1 Year Later

	No Mishap	Mishap	
BRC Grad ¹	1,101	38	$a+b = 1,139$
Un-Trained	1,114	25	$c+d = 1,139$

1. BRC grads had a 16 hour advantage over the "Un-trained" since mishaps were not counted from the course.

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

MYTHS

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

"By any measure the CMSP is a cost-effective Program that pays for itself many times over in saved lives and reduced accident rates."

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.

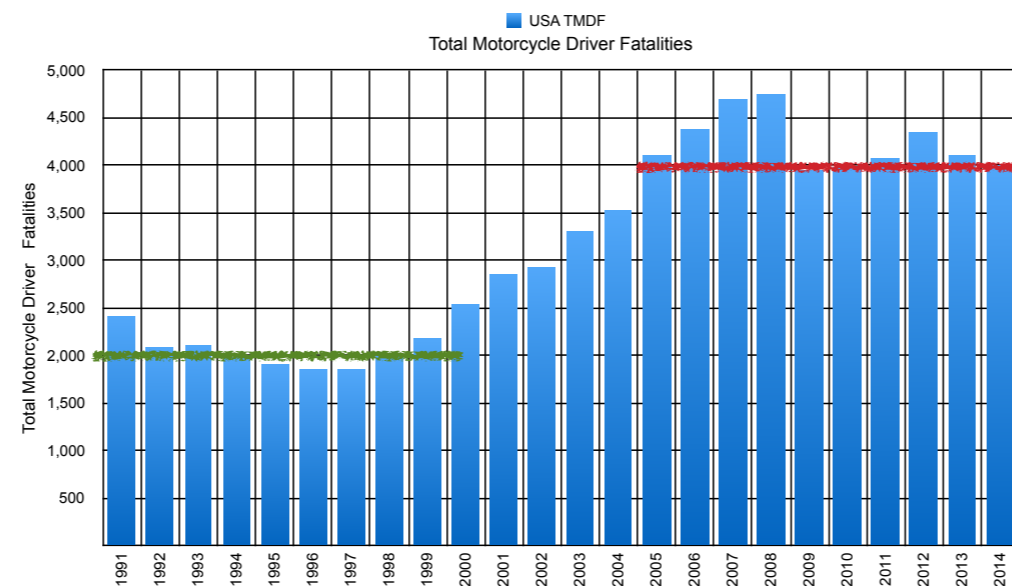
It Has Been **Disproved**

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.

“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.”

imagestate



Artemus Ward