

Rider Training Effectiveness **Research Reference List**

(compiled May 2020)

SMARTER at www.smarter-usa.org

NOTE: Research reports regarding the effectiveness of motorcycle rider training is posted on the SMARTER website at <http://smarter-usa.org/research/training/>

Two reviews of the literature noted below are posted. 2009 – “Effectiveness of Motorcycle Training and Licensing” <http://smarter-usa.org/wp-content/uploads/2017/06/3.-effectiveness-of-motorcycle-training-and-licensing-2009.pdf>. This literature review looked at the effectiveness of motorcycle education courses by examining the effect that training had on accident rates, violation rates, and personal protective equipment use found through past research. The methods, findings, and conclusions of seven independent studies were compared to evaluate the effectiveness of motorcycle training. One common assumption is that trained motorcyclists have fewer accidents. A review of the literature shows that there is no consensus for the validity of this assumption. This study also reviewed different motorcycle licensure systems and their effectiveness.

An abstract of the 2010 – “Motorcycle Rider Training for Preventing Road Traffic Crashes” is posted here. http://smarter-usa.org/wp-content/uploads/2017/06/4_2010_Motorcycle_Rider_T.-abstract.pdf. A link to the full report is contained in the posted abstract. This is a literature review by the Cochran collaboration of 23 research studies that report an evaluation of the effectiveness of motorcycle rider courses in reducing the number of traffic offences, motorcycle rider crashes, injuries and deaths. Due to the poor quality of studies identified, the researchers were unable to draw any conclusions about the effectiveness of rider training on crash, injury, or offence rates.

We have noted in the referenced reports listed below those studies included in the Cochran review with the designation (ICR)

Adams A, Collingwood V, Job RFS. Evaluation of the 1982 Australia post motorcycle rider training scheme. NSW, Australia: Traffic Accident Research Unit, Traffic Authority NSW, 1985. (ICR)

Anderson J, Ford JL, Peck RC. Improved motorcyclist licensing and testing project. Washington, DC: National Highway Traffic Safety Administration (NHTSA), USA, 1980:1-217. [DOT-HS-805-598] (ICR)

Anderson, LC. Better biking: a motorcycle rider improvement program. International Motorcycle Safety Conference. Washington DC, USA: Motorcycle Safety Foundation, 1980:231-53.

Rider Training Effectiveness, Research Reference List
(compiled May 2020), SMARTER at www.smarter-usa.org

Aupetit S, Riff J, Buttelli O, Espie S. Ergonomics research program on motorcycle learning: Contributions to the development of a motorcycle simulator for training. Transport Research Arena. Ljubljana, 2008:9.

Awane T. Integrating simulators in motorcycle safety education. Journal of International Association of Traffic and Safety Sciences 1999;23(1):26-35.

Baer, J., A. Cook, and S. Baldi. Motorcycle Rider Education and Licensing: A Review of Programs and Practices. Publication DOT HS 809 852.NHTSA, U.S. Department of Transportation, March 2005.

Baldi S, Baer JD, Cook AL. Identifying best practices states in motorcycle rider education and licensing. Journal of Safety Research 2005;36(1):19-32.

Batchler MW. Evaluation of the pre-license motorcycle training course at the New South Wales traffic education centre. Federal Office of Road Safety (FORS), 1988:1-122. [Report No: CR 77]

Billheimer JW. Evaluation of the California Motorcyclist Safety Program. Transportation Research Record 1998;1640:100-9. [TRB Report Number: 980652] (ICR)

Blanchard HT, Tabloski PA. Motorcycle safety: educating riders at the teachable moment. Mosby (CV) Company 2006;32:330-2.

Bonnett J. Mature age skills training for experienced motorcycle riders. Motorcycle riders' association of the Australian Capital Territory 2005.

Burgess C, Broughton P, Fylan F, Stradling. Interim evaluation of the UK's National Ride program. In: L. Dorn editor(s). Driver behaviour and Training. Vol. IV, Aldershot: Ashgate Publishing Limited, 2010.

Clayton AB, Sudlow DE. An evaluation of the effectiveness of a one-day training programme for learner motorcyclists. Berkshire, UK: Transport and Road Research Laboratory, 1980:1-23. [ISSN 0266-7045]

Clayton A, Sudlow DE. An evaluation of the effectiveness of a one-day training program for learner motorcyclists. The Human Element: International Motorcycle Safety Conference. Orlando, Florida, USA, 1990:13-105 to 13-111.

Cooper PJ, Rothe JP. Motorcyclists: who they are and why they do what they do. Transportation Research Record 1988;1168:78-85. (ICR)

Council FM, Desper LP, Dutt AK. Driver education for motorcycle operation. University of North Carolina Highway Safety Research Center, 1978:1-40.

Rider Training Effectiveness, Research Reference List
(compiled May 2020), SMARTER at www.smarter-usa.org

Crowther G. Engaging with motorcyclists: UK police and the BikeSafe Road Safety Programme. Published proceedings of the Australasian Road Safety Research Policing Education Conference, Wellington, New Zealand 2005, issue ISBN 0-473-10636-1:1-11.

Daniello A, Gabler HC, Mehta YA. Effectiveness of motorcycle training and licensing. Transportation Research Board 88th Annual Meeting, 2009:13.

David CF. Evaluation of community traffic safety programs and motorcycle operator training programs. Connecticut Department of Transportation 1997:63. (ICR)

Dewanti M. Challenging efforts in promoting young motorcyclist safety in Indonesia. Road Safety on Four Continents: 14th International Conference. Swedish National Road and Transport Research Institute, 2007.

Du Plooy DW. Motorcycle training in South Africa. The Human Element: International Motorcycle Safety Conference. Orlando, Florida, USA: Motorcycle Safety Foundation, 1990:4-1 to 4-9.

Goldenbeld C, Twisk D, Craen S. Short and long term effects of moped training: a field experiment. Transportation Research Part F 2004;7(1):1-16.

Hall CJ, Buchanan L, Engle R. Motorcycle rider education evaluation project. Washington, DC, USA: National Highway Traffic Safety Administration (NHTSA), US Department of Transportation, 1988. [DTNH 22-80-C-05123] (ICR)

Haworth N, Smith R, Brumen I, Pronk N. In: Monash University Accident Research Centre, editor(s). Case-control study of motorcycle crashes. Victoria, Australia: Department of Transport and Regional Development, The Federal Office of Road Safety, 1997:1-149. [ISBN 0 642 25501 6] (ICR)

Haworth, N., R. Smith, and N. Kowadlo. Motorcycle Training in Victoria: Evaluation of Rider Training Curriculum in Victoria. Monash University Report No. 165. Monash University, Melbourne, Australia, 1999

Haworth N, Smith R, Kowadlo N. Motorcycle training in Victoria: evaluation of rider training curriculum in Victoria. Monash University Accident Research Centre Reports 2000; Vol. 165, issue 31:31.

Haworth N, Mulvihill C. Review of motorcycle licensing and training. Monash University Accident Research Centre 2005. [Report no. 240]

Haworth NL, Mulvihill C, Rowden PJ. Teaching old dogs new tricks? Training and older motorcyclists. Australasian Road Safety Research, Policing and Education Conference. Gold Coast, Queensland, 2006.

Rider Training Effectiveness, Research Reference List
(compiled May 2020), SMARTER at www.smarter-usa.org

Hill D. Motorcycle rider training, testing and licensing. Motor Cycle Council of New South Wales, Sydney 1983.

Hurt H, Ouellet J, Thom D. Motorcycle accident cause factors and identification of countermeasures. USA: Department of Transportation, 1981. [Technical Report DOT HS 806-862] (ICR)

Imatake Y. On the activities in Japan of motorcycle safe riding promotion committee (MSRPC) - especially the education of unskilled riders of class 1 motorbikes. International Motorcycle Safety Conference. Washington DC, USA: Motorcycle Safety Foundation, 1980:255-68.

Jonah BA, Dawson N, Bragg B. Are formally trained motorcyclists safer? Accident Analysis & Prevention 1982;14(4):247-55. (ICR)

Jonah BA, Dawson NE, Bragg BW. Evaluation of the Canada Safety Council's Motorcycle Training Program. Proceedings of the International Motorcycle Safety Conference. Washington, DC. USA, 1980:59-93. (ICR)

Koch H, Brendicke R. How to influence risk taking behaviour within motorcycle rider training programs. The Human Element: International Motorcycle Safety Conference. Orlando, Florida, USA: Motorcycle Safety Foundation, 1990: Motorcycle Safety Foundation; 1990. p. 9-1 to 9-25A.

Kloeden CN, Moore VM, McLean AJ. Evaluation of the pre-license training program for motorcyclists in South Australia. Walkerville, South Australia, Australia: NHMRC Road Accident Research Unit, The University of Adelaide, 1994:1-37. [ISBN 0 7308 0607 3] (ICR)

Kraus JF, Riggins RS, Franti CE. Some epidemiological features of motorcycle collision injuries. American Journal of Epidemiology 1975;102(1):74-98. (ICR)

Labbett S, Langham M. Training can make the problem worse. Road Safety Congress. 2005:1-12.

Leung KS, Reding VA. Evaluation of the Wisconsin motorcycle rider course. Wisconsin: Bureau of Policy Planning and Analysis, Wisconsin Department of Transportation, 1987. (ICR)

Lowes BF. In-traffic rider training. The Human Element: International Motorcycle Safety Conference. Orlando, Florida, USA: Motorcycle Safety Foundation, 1990:7-46 to 7-57.

Mahon J. Teaching accident avoidance on the motorcycle. Journal of Traffic Safety Education 1976;23:1-29.

MAIDS. In-depth investigations of accidents involving powered two wheelers. ACEM (Acem@acem.eu)2004; Vol. Final report 2.0:179. (ICR)

Rider Training Effectiveness, Research Reference List
(compiled May 2020), SMARTER at www.smarter-usa.org

Mannering FL, Grodsky LL. Motorcycle rider training scheme. Traffic Education Research Centre. Armidale, Australia: Driver Training Australia Limited, 1995; Vol. April:1-56.

Mayhew DR, Simpson SH. Effectiveness and role of driver education and training in a graduated licensing system. Ottawa, Canada: The Traffic Injury Research Foundation, 1996:1-89. [ISBN 0-920071-12-0]

McDavid, J. C., B. A. Lohrmann, and G. Lohrmann. Does Motorcycle Training Reduce Accidents? Evidence from a Longitudinal Quasi-experimental Study. *Journal of Safety Research*, Vol. 20, No. 2, 1989, pp. 61–72. (IRC)

McGwin, G., Jr., J. Whatley, J. Metzger, F. Valent, F. Barbone, and L. W. Rue III. The Effect of State Motorcycling Laws on Motorcycle Driver Mortality Rates. *Journal of Trauma, Injury, Infection, and Critical Care*, Vol. 56, No. 2, Feb. 2004, pp. 415–419.

Mohan D. Evidence-based interventions for road traffic injuries in South Asia. *Journal of the College of Physicians and Surgeons, Pakistan* 2004;14(12):746-7.

Mortimer R. Evaluation of the motorcycle rider course. *Accident Analysis & Prevention* 1984;16(1):63-71. (ICR)

Mortimer RG. A further evaluation of the motorcycle rider course. *Journal of Safety Research* 1988;19(4):187-96. (ICR)

Motoki M, Yamazaki S. A study on effective motorcycle rider education. *The Human Element: International Motorcycle Safety Conference*. Orlando, Florida, USA: Motorcycle Safety Foundation, 1990:9-26 to 9-57A.

Mullin BT. Risk factors for motorcycle injury: the role of age, gender, experience, training and alcohol. PhD thesis. Auckland, New Zealand: University of Auckland, 1997.

Newland R. Motorcycle rider training and licensing requirements. *Driver training: steering a course for the future*. Melbourne, Victoria: Transport Regulation Board, 1982.

Newland R. Motorcycle training and licensing in Victoria 1980-1990. *The Human Element: International Motorcycle Safety Conference*. Orlando, Florida, USA: Motorcycle Safety Foundation, 1990.

Osga G, Ellingstad VS. An evaluation of the effectiveness of the 1978 South Dakota motorcycle rider course program. South Dakota, USA: University of South Dakota, 1979:1-89.

Osga G. An investigation of the riding experiences of MSF rider course participants. Dissertation. South Dakota, USA: The University of South Dakota, 1980:1-224. (ICR)

Rider Training Effectiveness, Research Reference List
(compiled May 2020), SMARTER at www.smarter-usa.org

Ormston R, Dudleston A, Pearson S, Stradling. Evaluation of Bikesafe Scotland. Scottish Executive Social Research, Edinburgh 2003.

Perrino CS, Ahmed A, Callender A, Rozier E, Cantwell A, Stewart O. The role of Maryland's motorcycle rider course in promoting safer behaviors and attitudes. Baltimore, USA: National Transportation Center, Morgan State University, 2002:1-52. (ICR)

Radin Umar, RS. Motorcycle safety programmes in Malaysia: how effective are they? International Journal of Injury Control and Safety Promotion 2006;13(2):71-9.

Rowden P, Watson B, Haworth N. What can riders tell us about motorcycle training? A view from the other side of the fence. Australasian Road Safety Research, Policing and Education Conference, Melbourne, Australia. Melbourne, 2007.

Raymond S, Tatum S. An evaluation of the effectiveness of the RAC/ACU motorcycle training scheme - final report. Road Safety Research Unit, Dept. of Civil Engineering, University of Salford, London, 1979:1-131. (ICR)

Russam K. Motorcycle training and licensing in Japan. UK: Transport and Road Research Laboratory (TRRL), 1979. [Report 916]

Saffron DG. Driver and rider education, training and licensing: a brief review. Traffic Accident Research Unit, Traffic Authority of New South Wales. NSW, Australia: Traffic Accident Research Unit, Traffic Authority of New South Wales, 1981.

Satten RS. Analysis and evaluation of the motorcycle rider courses in thirteen Illinois counties. International Motorcycle Safety Conference. Washington DC, 1980:145-93. (ICR)

Savolainen, P. T., and F. L. Mannering. Effectiveness of Motorcycle Training and Motorcyclists' Risk-Taking Behavior. In Transportation Research Record: Journal of the Transportation Research Board, No. 2031, Transportation Research Board of the National Academies, Washington, D.C., 2007, pp. 52-58.

Savolainen Peter, Mannering Fred. Additional evidence on the effectiveness of motorcycle training and motorcyclists' risk-taking behavior. Transportation Research Board. 2007; Vol. March 20:19. (ICR)

Schulz U. Motorcycle accidents among learner riders. Motorcycle licensing. Evaluation of the effectiveness of a Graduated Licensing Scheme. Forshungshefte des Institut fur Zweiradsicherheit, 1990.

Rider Training Effectiveness, Research Reference List
(compiled May 2020), SMARTER at www.smarter-usa.org

Shepherd R. Do Motorcycle Safety Foundation programs work? *Driver* 1986;19(9):16-8.

Simpson HM, Mayhew DR. The promotion of motorcycle safety: training, education and awareness. *Health Education Research: Theory and Practice* 1990;5(2):257-64.

Steffens U, Gawatz R, Willmes G. Effectiveness of mofa courses [Wirksamkeit von Mofakursen]. *Unfall- und sicherheitsforschung strassenverkehr* 1988;67:168.

Sudlow D. Scoping study on motorcycle training. Road Safety Research Report. London, UK: The British Institute of Traffic Education Research. Department for Transport, 2003; Vol. June. [Report No. 36]

Swaddiwudhipong W, Boonmak C, Nguntra P, Mahasakpan P. Effect of motorcycle rider education on changes in risk behaviours and motorcycle-related injuries in rural Thailand. *Tropical Medicine and International Health* 1998;3(10):767-70. (ICR)

Tetard C. Motorcycle riders' training to detect indices in an intersection situation [L'entraînement a la prise d'information dans l'apprentissage de la conduite motocycliste]. *Le Travail Humain* 1985;48(2):147-59.

Thompson M. Evaluation of compulsory basic training for motorcyclists. Transport Research Laboratory. Crowthorne, Berkshire, UK, 1994. [Report 63]

Tobler U. Individual driving instruction for motorcycle driving learners: the Swiss experiment of motorcycle driving school. The Human Element: International Motorcycle Safety Conference. Orlando, Florida, USA: Motorcycle Safety Foundation, 1990.

Waller FL. An analysis of the impact of the Texas Department of Public Safety Motorcycle Operator Training Program upon motorcycle related traffic accidents. Texas State University Public Administration Program: Applied Research Projects 1992:77. (ICR)

Wisher G, Reid J. Motorcycle accidents in Norfolk: a three-year study of motorcycle training and the Part 1 test. Norfolk. UK: Road Safety Division, Highways Department, Norfolk County Council, 1988.

Yamazaki S, Nakanishi M. Survey on effect of Honda rider education. The Human Element: International Motorcycle Safety Conference. Orlando, Florida, USA, 1990:12-167 to 12-187.