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Seat Belt Use, Race, and Hispanic Origin

The U.S. Census Bureau collects race and ethnicity data according to U.S. Office of Management and Budget (OMB) guidelines. These data are based on self-identification. Race categories include American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White. People may choose to report more than one race group. OMB requires a minimum of two ethnicities in collecting and reporting data: Hispanic or Latino and Not Hispanic or Latino. People who report themselves as Hispanic can be of any race and are referred to as people of Hispanic origin. According to the 2019 American Community Survey, 60% of the U.S. population identifies as White alone and not of Hispanic origin. The remaining 40% identify as either a race other than White, of Hispanic origin, or both.

This population diversity also is reflected among the fatally injured passenger vehicle occupants in the Fatality Analysis Reporting System (FARS). For 2018 FARS identified the 22,845 fatally injured passenger vehicle occupants' race or Hispanic origin (or both) 97% of the time. As stated in the 2018 FARS CRSS Coding and Validation Manual, race and Hispanic origin were obtained from death certificates (National Center for Statistics and Analysis, 2019). Among the 22,172 passenger vehicle fatalities with known race or Hispanic origin, restraint use was known for 92% (20,310). And, as seen in Table 1, the percentage of unrestrained fatalities varied considerably by race and Hispanic origin.

The National Occupant Protection Use Survey (NOPUS) is the only nationwide probability-based survey of seat belt use by occupants 8 years old and older in both front and rear seats. The racial categories Black, White, and Members of Other Races in NOPUS reflect subjective characterizations regarding the race of vehicle occupants selected by roadside observers from a predetermined list. NOPUS does not attempt to identify Hispanic origin. The 2019 NOPUS showed front seat belt use continued to be lower among Black occupants (86.4%) than White occupants (90.7%) and occupants of other races (94.1%). The differences were more substantial for observed belt use in rear seats, with rates of 65.0% for Black occupants, 81.2% for White occupants, and 73.5% for occupants of other races (Enriquez, 2020).

The Motor Vehicle Occupant Safety Survey (MVOSS) is a nationally representative survey of self-reported behaviors, attitudes, knowledge, and demographics. Researchers administered the survey from June 2016 through February 2017.

Table 1: 2018 Unrestrained Passenger Vehicle Fatalities by Race and Hispanic Origin

Race, Hispanic Origin	Passenger Vehicle Fatalities	Percentage Fatalities Unrestrained ¹
American Indian, Non-Hispanic/Unknown	342	67%
Asian, Non-Hispanic/Unknown	313	28%
Black, Non-Hispanic	3,384	56%
Hispanic (any race)	3,410	47%
Multiple Races, Non-Hispanic/Unknown	48	59%
Native Hawaiian or Other Pacific Islander, Non-Hispanic/Unknown	49	68%
White, Non-Hispanic	13,685	45%
All Other Race or Non-Hispanic	941	45%
Unknown Race and Unknown Hispanic Origin	673	39%
Total	22,845	47%

Source: FARS 2018 Final File

¹ Fatalities with known restraint use.

Version A of the 2016 MVOSS focused on seat belts and had 6,009 complete responses, with a response rate of 31%. MVOSS followed the OMB race and ethnicity guidelines for this collection. The sample included 369 respondents who considered themselves Hispanic or Latino (regardless of race). The remaining (non-Hispanic) respondents included 38 American Indian or Alaska Native respondents, 278 Asian respondents, 416 Black or African American respondents, 227 respondents who indicated more than one race (multiracial), 21 Native Hawaiian or Other Pacific Islander respondents, and 4,660 White respondents.

MVOSS asked respondents how often they wear seat belts while driving, while riding as front passengers, and while riding in back seats. For analysis, these variables were recoded as "always" versus "not always." MVOSS also asked respondents the last time they did not wear a seat belt while driving. Responses were recoded as "more than" versus "less than" a year ago. Table 2 lists self-reported belt use by race and Hispanic origin. The American Indian and Native Hawaiian or Other Pacific Islander estimates are not reported due to small sample sizes.

Table 2: Self-Reported Seat Belt Use by Race and Hispanic Origin of Drivers and Passengers

	Asian	Black	Hispanic	Multiracial	White	p-value
Always use seat belt while driving	96% (258)	93% (368)	93% (338)	92% (204)	93% (4,477)	0.54
Always use seat belt as front passenger	98% (262)	92% (374)	93% (337)	94% (209)	93% (4,489)	0.03
Always use seat belt in back seat	58% (258)	60% (344)	70% (319)	66% (194)	64% (4,128)	0.09
Last time did not wear a seat belt while driving was more than one year ago	94% (259)	87% (369)	88% (337)	87% (208)	86% (4,497)	0.06

Source: MVOSS 2016 Version A, weighted percentages, sample sizes in parentheses, p-value based upon Rao-Scott chi-square test

MVOSS also asked about attitudes related to seat belt laws and enforcement. Responses from drivers who primarily drove passenger vehicles are listed below in Table 3. Additional

questions listed in Table 4 probed beliefs about seat belts that may affect drivers' use of seat belts.

Table 3: Attitudes Toward Seat Belt Enforcement by Race and Hispanic Origin of Driver

	Asian	Black	Hispanic	Multiracial	White	p-value
Favor laws that require drivers and front seat passengers to wear seat belts	99% (244)	98% (337)	94% (309)	89% (187)	93% (4,313)	<0.01
Agree that police should be allowed to stop a vehicle if they observe a seat belt violation when no other traffic laws are being broken	89% (241)	77% (336)	82% (309)	69% (189)	76% (4,277)	<0.01
Agree that police in my community generally do not bother to write tickets for seat belt violations	39% (242)	32% (332)	30% (305)	35% (173)	43% (4,178)	<0.01
Agree it is just as important for police to enforce seat belt laws as it is for police to enforce other traffic safety laws	84% (243)	78% (339)	79% (310)	71% (182)	72% (4,307)	<0.01

Source: MVOSS 2016 Version A, weighted percentages, sample sizes in parentheses, p-value based upon Rao-Scott chi-square test

Table 4: Beliefs About Seat Belt Use by Race and Hispanic Origin of Driver

	Asian	Black	Hispanic	Multiracial	White	p-value
Agree seat belts are just as likely to harm you as help you	19% (243)	40% (336)	32% (310)	33% (186)	19% (4,311)	<0.01
Agree would feel self-conscious around friends if wore a seat belt and they did not	35% (238)	20% (333)	28% (307)	16% (182)	11% (4,304)	<0.01
Agree with having a habit of wearing a seat belt because parents insisted when a child	72% (237)	45% (338)	64% (306)	39% (178)	41% (4,194)	<0.01
Agree that if it is your time to die, you'll die, so it doesn't matter whether you wear your seat belt	10% (242)	26% (338)	22% (309)	18% (175)	14% (4,262)	<0.01

Source: MVOSS 2016 Version A, weighted percentage, sample sizes in parentheses, p-value based upon Rao-Scott chi-square test

Self-reported seat belt use for the same seating position was similar across groups and did not demonstrate statistically significant differences ($\alpha = 0.05$), with one exception: as a front passenger, reported seat belt use indicated a statistically significant difference across groups. Also note that MVOSS and NOPUS seat belt use estimates are different because of differences in collection methods (self-report versus observation) and because MVOSS attempts to capture belt use over a longer period than NOPUS.

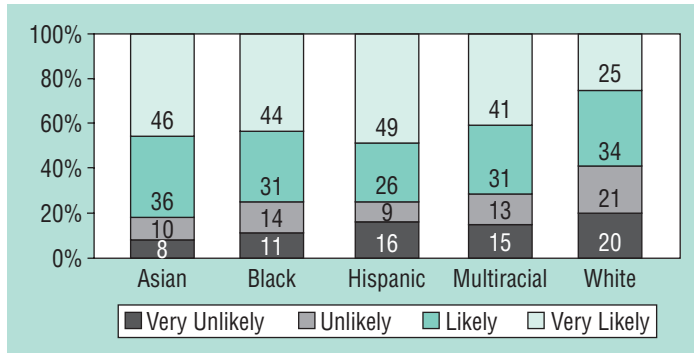
Support for seat belt laws, as indicated by favoring such laws, was high among all groups, ranging from 89% among multiracial drivers to 98% and above for Black and Asian drivers. However, when asked about "primary" seat belt enforcement where police can stop a vehicle based just on an observed seat belt violation, support declined by about 20 percentage points for Black, multiracial, and White drivers (21, 20, and 17 percentage points) but by smaller amounts for Asian and Hispanic drivers (10 and 12 percentage points). The attitude that

police generally do not bother to write seat belt citations in drivers' communities ranged from 30% for Hispanic drivers to 43% for White drivers. Attitudes about the relative importance of seat belt enforcement ranged from a 71% among multiracial drivers to 84% for Asian drivers.

The percentages of Black, Hispanic, and multiracial drivers who believed that seat belts will harm as much as help (40%, 32%, and 33%) and agreed with the fatalistic view that wearing a seat belt does not matter (26%, 22%, and 18%) were greater than the percentages for Asian or White drivers. The percentages of Asian and Hispanic drivers who agreed that their parents positively influenced seat belt use (72% and 64%) and that peers will judge seat belt use (35% and 28%) were greater than the percentages for other groups.

Another question asked about the likelihood the driver would receive a ticket for not wearing a seat belt. Figure 1 shows the responses across the four response categories.

Figure 1: Belief of Likelihood of Receiving a Ticket for Not Wearing a Seat Belt ($n = 5,330$, $p < 0.01$)



Source: MVOSS 2016 Version A

The percentage of White drivers who reported feeling very likely to receive tickets was 25%, while the percentages for all other groups ranged from 41% to 49%. Similarly, 41% of White drivers felt they were unlikely or very unlikely to receive tickets, while the percentages for all other groups ranged from 18% to 28%.

The results from FARS indicated that Native American, Native Hawaiian or Other Pacific Islander, Black, and multi-racial passenger vehicle occupant fatalities were more likely to be unrestrained than Hispanic, White, or Asian occupant fatalities. NOPUS suggests that differences in seat belt use may be part of the explanation for differences in unrestrained fatalities. The MVOSS findings suggest that the appropriate countermeasures to increase seat belt use may vary by the drivers' race and Hispanic origin. For example, high-visibility enforcement, which relies on increasing drivers' perceived risk of citations for violations, is unlikely to be an effective countermeasure for many non-White drivers because almost half already believe they are very likely to receive tickets for non-use. By comparison, only one-quarter of White drivers believe they are very likely to receive tickets for not wearing seat belts. These findings suggest that non-enforcement countermeasures that address unfavorable beliefs towards seat belt use could be effective for increasing seat belt use among non-White drivers.

References

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