

# K-12, College/University, and Mass Shootings: Similarities and Differences

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## Psychology

### Introduction

Mass shootings are classified as shootings that have resulted in the deaths of 4 or more individuals, excluding the shooter. Recent years have witnessed a number of shootings across a range of different venues including elementary, middle, and high schools, colleges and universities, workplaces, movie theaters, concerts, and houses of worship to name a few. To date, no research has compared K-12, college/university, and mass shootings. How are they similar to and different from one another? Are predictors of K-12 shootings similar to antecedents of non-school mass shootings? Are predictors of K-12 shootings and college/university shootings the same? The current study examines these similarities and differences with the hopes of developing prevention/intervention programs.

### Method

All shootings examined in the current study occurred between March 7, 2001 and May 25, 2018 in the United States. For each type of shooting, multiple databases were examined along with researchers independently examining news accounts, police reports, and online databases for information that was not included in all of the existing databases. A list of 58 K-12 shootings that met predetermined criteria were identified: the shooting had to occur at school, during the school day, the shooter had to be a current or former student, and at least one individual (not necessarily a student) had to be killed or injured. Similar criteria were used to identify 35 college and university shootings that met the following criteria: the shooting occurred on campus or at a school-sponsored function, the shooter was a current or former student, and at least one person was killed or injured. A list of 79 mass shootings, both in and out of K-12 schools and college/universities, was identified. The criteria for inclusion were as follows: death of 4 or more people excluding the shooter, the shooting had to occur in a public area, and could not be gang related.

Figure 1

Mass, College and K-12

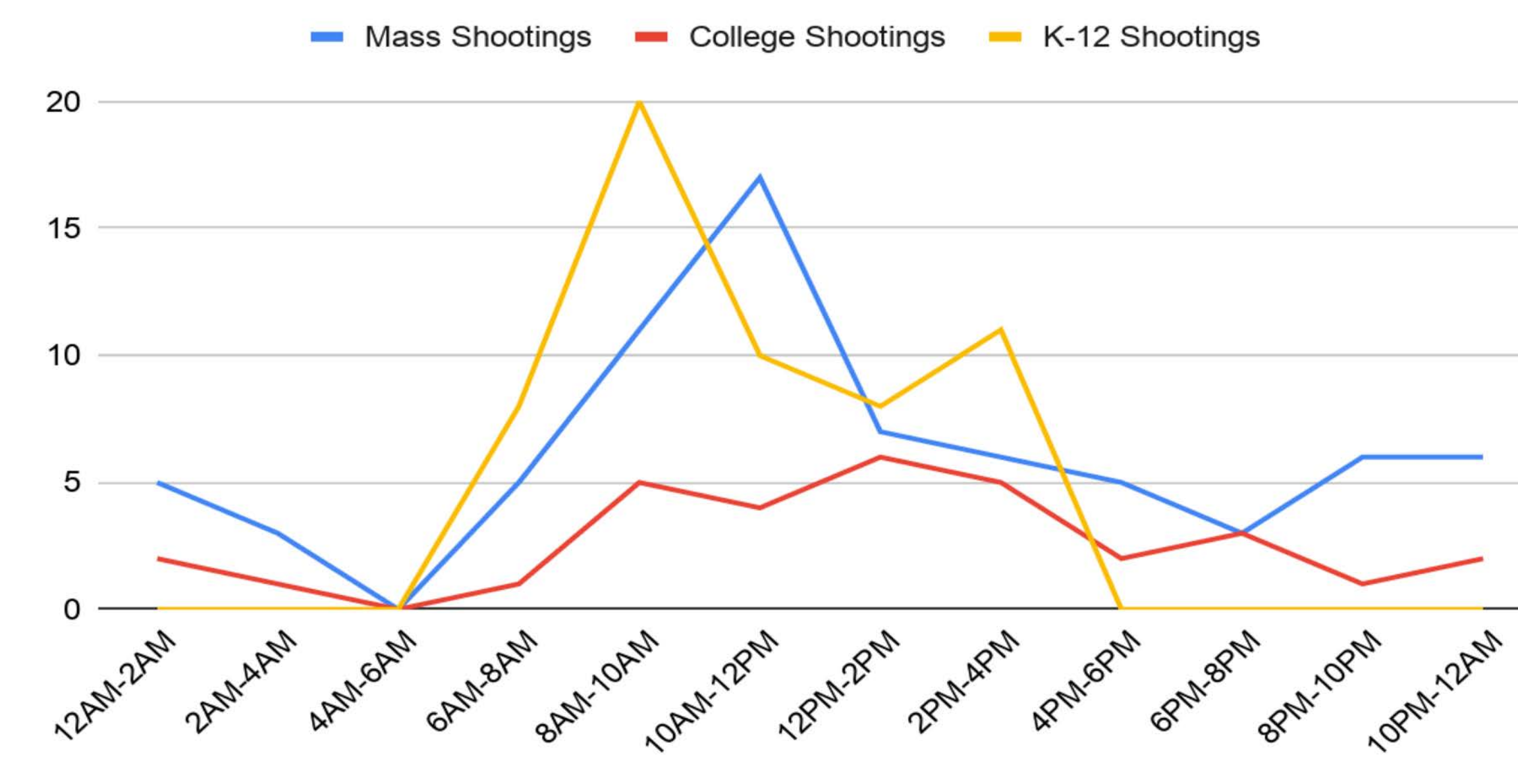


Figure 2

U.S. Shootings by Type

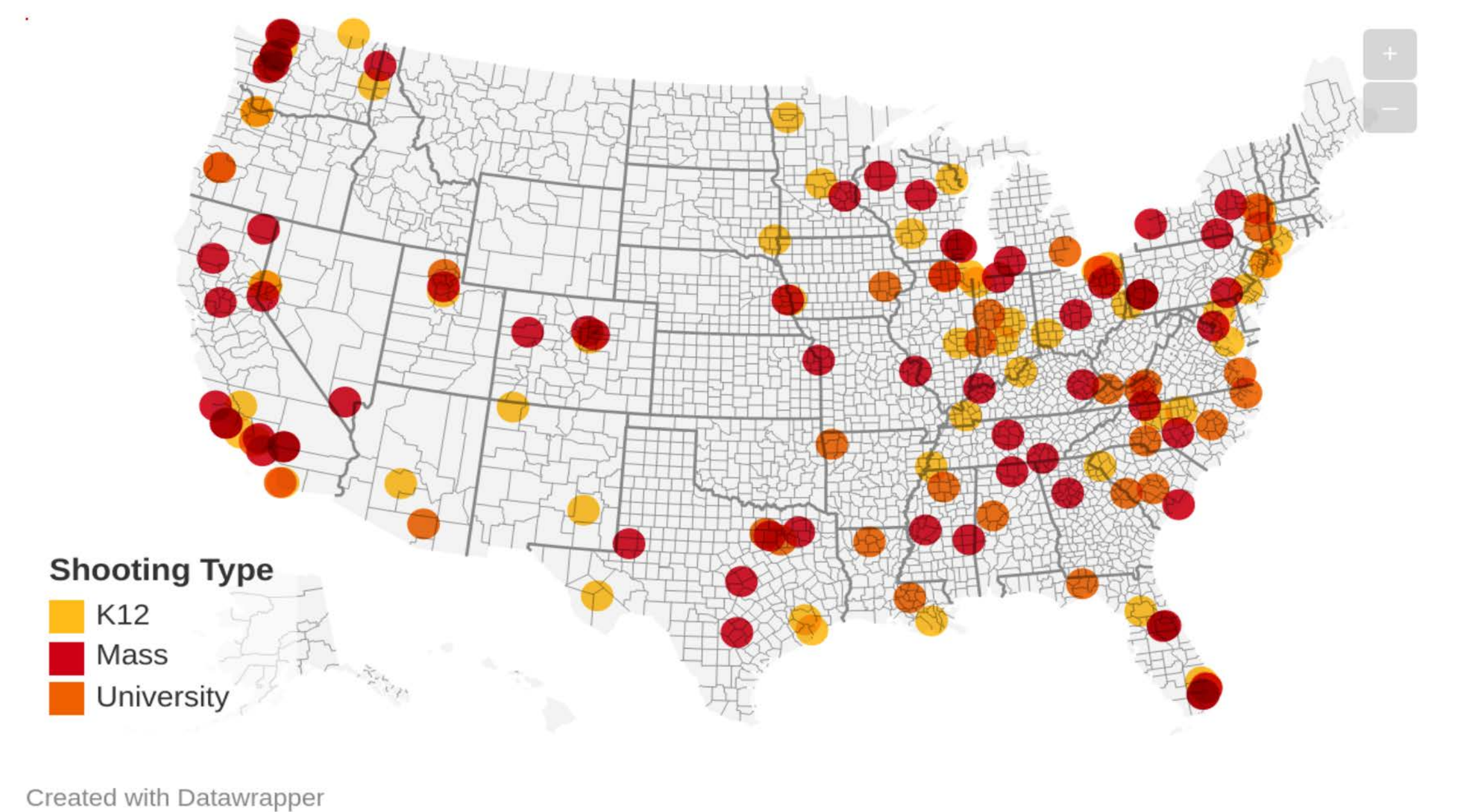


Table 1

Demographics	Mass Shootings	K-12 Shootings	College Shootings
Gender of shooter	97% Male	95% Male	97% Male
Race of shooter	46% White	61% White	37% White
Age Range	15-64 (median = 34)	12-21 (median = 15)	18-62 (median = 23)
Immigration Status	22% Immigrants	0% Immigrants	23% Immigrants
Outcome of Shooting			
Mean Number of People Killed	8	2	3
Mean Number of People Injured	18	2	3
Fate of shooter	43% suicide	21% suicide	26% suicide
5 Predictors			
Long Term History of Rejection	20%	44%	26%
Psychological Problems	67%	54%	57%
Fascination with Violence	61%	35%	34%
Fascination w/ Guns	37%	18%	23%
Acute Rejection Experience	31%	33%	23%

### Results and Discussion

Demographic characteristics of the shooters were similar across the three types of shootings (see Table 1). The majority of the shooters across all types of shootings were white males. Most of the mass shooters were heterosexual. This suggests that the shooters were members of majority groups within the population, yet felt marginalized in some way, either through acute or long-term rejection experiences, stigmatization of mental illness, a “sense of aggrieved entitlement” (Schultz et al., 2014), or threatened masculinity. As shown in Figure 1, most K-12 shootings occurred at the start of the school day whereas most mass shootings took place mid-morning. College shootings were more variable regarding when they occurred. Across all types of shootings, an eastern trend seemed to occur (see Figure 2). K-12 and college shootings showed more evidence of planning than mass shootings (see Figure 3). However, K-12 and mass shootings mirrored one another more than either mirrored college shootings in terms of leakage. Across all three types of shootings, handguns were used more frequently than other types of weapons. Over half of all shooters displayed a history of psychological problems, with at least a fifth of all shooters having acute and long-term rejection experiences.

Figure 3

