

## CHAPTER 9— ANSWERS TO EXERCISES

1.

- a. The independent variable is sex; the dependent variable is fear of walking alone at night.

Fear of Walking Alone at Night	Sex	
	Male F (%)	Female F (%)
Yes	2 (22%)	8 (73%)
No	7 (78%)	3 (27%)

- b. Approximately 73% of women are afraid to walk alone in their neighborhoods at night, whereas approximately 22% of men said the same. This amounts to about a 51% difference between women and men who are not afraid to walk alone at night, indicating a strong relationship. It is important to keep in mind that our small sample size limits the generalizability of these results.
- c. There is a relationship between homeownership and fear of walking alone at night. The majority of homeowners (56%) are not afraid of walking alone at night in their neighborhood. Among those who were not home owners, the majority (55%) reported being afraid of walking alone at night.

Fear of Walking Alone at Night	Home Ownership	
	Yes F (%)	No F (%)
Yes	4 (44%)	6 (55%)
No	5 (56%)	5 (45%)

2.

- a. The independent variable is *age* (measured in categories).
- b. The majority of respondents, regardless of their age, have not contacted a politician or civil servant. The groups most likely to have made contact in the past year or in the distant past are those aged 40–49 years (38%) or 50–59 (43.6%) years. The youngest age group, 18–29 years, was least likely to have made contact within the past year or in the distant past (16.3%).
- c. Respondent's income or education could be considered. Leisure time (time spent not working) might also be a good predictor of political engagement.

3.
  - a. Based on the student's argument the independent variable is *attitude toward homosexual relations* and the dependent variable is *political views*.
  - b.  $285/645 = 44\%$
  - c. Those who believe that homosexuality is always wrong are more likely to be conservative (51%) than moderate (34%) or liberal (15%). On the other hand, those who believe homosexuality is not wrong at all are more like to report liberal (41%) or moderate (40%) views than conservative (18%) ones.

4.
  - a. Dependent variable: attitudes about homosexual relations  
Independent variable: church attendance
  - b. 24% of respondents who never attended church also thought that homosexual relations were always wrong compared with 74% of respondents who attend church weekly and think that homosexual relations are always wrong. This amounts to a 50% difference, indicating a moderate relationship between church attendance and attitudes toward homosexual relations.

		Church Attendance			Total
		Never	Several Times a Year	Every Week	
Homosexual Relations	Always Wrong	24%	42%	74%	44%
	Not Wrong at All	76%	58%	26%	56%
Total		100.0%	100.0%	100.0%	100.0%

- c. The assignment of variables in this case would be problematic because both variables are attitudes or opinions. As such, it would be difficult to say that one attitude or opinion changes on the basis of another attitude or opinion. Either variable could qualify as the independent variable; and either variable could qualify as the dependent variable.
5. The relationship is weak between race and the frequency of being drunk in the past 12 months. The majority of students are likely to report not being drunk in the past 12 months, at least 86% of each racial group. The percentage of students being drunk at least 3 or more times is highest for whites (7%), followed by Hispanic (6%), and black (2%) students.

Drunk in the Last 12 Months	Race			Total
	Black	White	Hispanic	
None	75	282	119	476
	90%	86%	90%	

Drunk in the Last 12 Months	Race			Total
	Black	White	Hispanic	
1–2 times	6	23	5	34
	7%	7%	4%	
3–5 times	0	13	3	16
		4%	2%	
6 or more times	2	11	5	18
	2%	3%	4%	
Total	83	329	132	544

6. The death penalty is more likely in cases where the victim was female or white. The percentage difference is greater for female versus male victims ( $57.5 - 45.4 = 12.1\%$ ) than white versus black victims ( $52.7 - 46.5 = 6.2\%$ ). When considering the interactive effects of gender and race, death sentences are more likely in cases of white and black female victims (55% or higher). Death sentences are least likely in cases of a black male victim.
7. Female seniors have higher educational expectations than male seniors. For example, 73.9% ( $32.6 + 41.3$ ) of female students expected to complete a bachelor's degree or higher. This is higher than the combined percentage for male students: 63.3% ( $34.4 + 28.9$ ).
8.
  - a. Table is shown below.

Home Ownership				
Fear	Men		Women	
	Rent	Own	Rent	Own
Yes	1	1	5	3
	(25%)	(20%)	(71%)	(75%)
No	3	4	2	1
	(75%)	(80%)	(29%)	(25%)
Total	4	5	7	4
	100%	100%	100%	100%

- b. Including the categories of home ownership does not modify the relationship between FEAR and SEX. The percentage differences are approximately the same for men who rent versus own ( $25 - 20\%$ ) and women who rent versus own ( $71 - 75\%$ ) and report being afraid to walk alone at night.
  - c. The original relationship between SEX and FEAR is confirmed. Controlling for home ownership did not change the relationship between SEX and FEAR. Home ownership is not a conditional or intervening variable. Women, regardless of home ownership status, are more likely to report being afraid of walking alone at night than men.

9. Yes, there is a relationship between political party affiliation and attitudes toward the Affordable Care Act. The majority of physicians who reported being Republican or Other party were strongly against or against Affordable Care Act. The largest reporting percentage was among Republicans ( $84.07\% = 31.08 + 52.99$ ). Only 47.2% ( $11.20 + 36$ ) of Democrats were strongly against or against the act.
- 10.

Immigrants Take Jobs Away	Czech Republic	France	Denmark	Finland	Germany
Strongly agree	648	251	108	93	125
	34.3%	13%	8.3%	7.8%	7.6%
Agree	658	310	211	245	254
	34.8%	16.1%	16.3%	20.6%	15.4%
Neither	355	490	309	309	459
	18.8%	25.4%	23.9%	26%	27.8%
Disagree	190	472	325	440	616
	10%	24.5%	25.1%	37.1%	37.3%
Disagree strongly	40	407	342	100	199
	2.1%	21.1%	26.4%	8.4%	12%
Total	1891	1930	1295	1187	1653

- a. Yes, there is a relationship between country of residence and agreement to the statement on immigrants. Czech Republic respondents were more likely to strongly agree/agree to the statement than respondents from other countries.
- b. The relationship cannot be stated in terms of positive or negative. Country of residence is nominal and cannot be described this way.
- c. Perhaps the Czech Republic has a higher unemployment rate or a limited labor market than the other countries.
11. The data indicate a positive relationship between students' educational expectations and parental education. The percentage of students indicating a bachelor's degree or higher increases as the parents' educational level increases: from 52% of students with parents with a high school degree or less to 86.1% of students with parents who completed a graduate/professional degree.
12. The relationship between students' educational expectations and family income is positive. As family income increases, so does the percentage of students indicating a bachelor's degree or higher. The highest percentage (82.8%) is in the category of more than \$75,000.
13. In contrast with male students, female students are more likely to report not being drunk at all (at least 82% of each racial group). According to the data, Hispanic females (9%) are more likely to report being drunk three or more times in the last 12 months than white (7%) or black (6%) females.

Drunk in the Last 12 Months	Race			Total
	Black	White	Hispanic	
None	76	286	100	462
	87%	83%	82%	
1–2 times	6	33	11	50
	7%	10%	9%	
3–5 times	4	12	7	23
	5%	3%	6%	
6 or more times	1	14	4	19
	1%	4%	3%	
Total	87	345	122	554

## SPSS SOLUTIONS

1.

dwelown DOES R OWN OR RENT HOME? * class SUBJECTIVE CLASS IDENTIFICATION Crosstabulation							
			class SUBJECTIVE CLASS IDENTIFICATION				Total
			1 LOWER CLASS	2 WORKING CLASS	3 MIDDLE CLASS	4 UPPER CLASS	
dwelown DOES R OWN OR RENT HOME?	1 OWN OR IS BUYING	Count	42	308	366	26	742
		% within class SUBJECTIVE CLASS IDENTIFICATION	37.5%	58.4%	76.1%	83.9%	64.5%
	2 PAYS RENT	Count	61	214	113	4	392
		% within class SUBJECTIVE CLASS IDENTIFICATION	54.5%	40.6%	23.5%	12.9%	34.1%
	3 OTHER	Count	9	5	2	1	17
		% within class SUBJECTIVE CLASS IDENTIFICATION	8.0%	0.9%	0.4%	3.2%	1.5%
Total		Count	112	527	481	31	1151
		% within class SUBJECTIVE CLASS IDENTIFICATION	100.0%	100.0%	100.0%	100.0%	100.0%

- $214/527 = 40.6\%$
- $42/112 = 37.5\%$
- This requires calculating from the percentages by row.  $(366 + 26)/742 = 0.528 = 52.8\%$
- Yes, there is a relationship between social class and home ownership. Those with a higher social class (middle or upper) are more likely to own or buy their home compared with those in the lower class. About 60% of working-class respondents also reported owning or buying their home.
- Yes, there is a difference in the relationship between class and home ownership for whites and blacks. The relationship for whites is strong, with the majority of working-, middle-, and upper-class respondents reporting owning or buying their home. On the other hand, social class is not a strong predictor of home ownership for blacks. The majority of lower-, working-, or middle-class blacks are renters, though for upper-class blacks, the modes are split between owning and renting one's home.

dwelown DOES R OWN OR RENT HOME? * class SUBJECTIVE CLASS IDENTIFICATION * race RACE OF RESPONDENT Crosstabulation								
race RACE OF RESPONDENT				class SUBJECTIVE CLASS IDENTIFICATION				Total
				1 LOWER CLASS	2 WORKING CLASS	3 MIDDLE CLASS	4 UPPER CLASS	
1 WHITE	dwelown DOES R OWN OR RENT HOME?	1 OWN OR IS BUYING	Count % within class SUBJECTIVE CLASS IDENTIFICATION	34 42.5%	247 64.5%	316 80.2%	20 100.0%	617 70.4%
		2 PAYS RENT	Count % within class SUBJECTIVE CLASS IDENTIFICATION	40 50.0%	133 34.7%	76 19.3%	0 0.0%	249 28.4%
		3 OTHER	Count % within class SUBJECTIVE CLASS IDENTIFICATION	6 7.5%	3 0.8%	2 0.5%	0 0.0%	11 1.3%
		Total	Count % within class SUBJECTIVE CLASS IDENTIFICATION	80 100.0%	383 100.0%	394 100.0%	20 100.0%	877 100.0%
2 BLACK	dwelown DOES R OWN OR RENT HOME?	1 OWN OR IS BUYING	Count % within class SUBJECTIVE CLASS IDENTIFICATION	4 19.0%	36 39.1%	24 49.0%	4 44.4%	68 39.8%
		2 PAYS RENT	Count % within class SUBJECTIVE CLASS IDENTIFICATION	17 81.0%	54 58.7%	25 51.0%	4 44.4%	100 58.5%
		3 OTHER	Count % within class SUBJECTIVE CLASS IDENTIFICATION	0 0.0%	2 2.2%	0 0.0%	1 11.1%	3 1.8%
		Total	Count % within class SUBJECTIVE CLASS IDENTIFICATION	21 100.0%	92 100.0%	49 100.0%	9 100.0%	171 100.0%

2. The relationship between BIBLE and HOMOSEX is confirmed in the table. Individuals who believe the Bible is the word of God are more likely to indicate that homosexuality is always wrong (76.1%) versus the other BIBLE response categories (32.7%, 10.6%, and 20%). Individuals who believe the Bible is the inspired word of God, a book of fables, or other are more likely to indicate that homosexuality is not wrong at all.

homosex HOMOSEXUAL SEX RELATIONS * bible FEELINGS ABOUT THE BIBLE Crosstabulation							
			bible FEELINGS ABOUT THE BIBLE				Total
			1 WORD OF GOD	2 INSPIRED WORD	3 BOOK OF FABLES	4 OTHER	
homosex HOMOSEXUAL SEX RELATIONS	1 ALWAYS WRONG	Count	210	144	22	2	378
		% within bible FEELINGS ABOUT THE BIBLE	76.1%	32.7%	10.6%	20.0%	40.4%
	2 ALMST ALWAYS WRG	Count	8	20	11	0	39
		% within bible FEELINGS ABOUT THE BIBLE	2.9%	4.5%	5.3%	0.0%	4.2%
	3 SOMETIMES WRONG	Count	10	39	10	0	59
		% within bible FEELINGS ABOUT THE BIBLE	3.6%	8.8%	4.8%	0.0%	6.3%
	4 NOT WRONG AT ALL	Count	48	238	165	8	459
		% within bible FEELINGS ABOUT THE BIBLE	17.4%	54.0%	79.3%	80.0%	49.1%
Total	Count	276	441	208	10	935	
	% within bible FEELINGS ABOUT THE BIBLE	100.0%	100.0%	100.0%	100.0%	100.0%	

3. The majority of women, regardless of social class, voted for President Obama. For men, there is a different voting pattern. Lower-, working-, and upper-class men were more likely to vote for President Obama, while middle-class men were more likely to vote for Governor Romney (though the difference between Obama and Romney voters is small: 47.7% vs. 49.2%).

PRES12 VOTE OBAMA OR ROMNEY \* class SUBJECTIVE CLASS IDENTIFICATION \* sex RESPONDENTS SEX Crosstabulation

sex RESPONDENTS SEX				class SUBJECTIVE CLASS IDENTIFICATION				Total
				1 LOWER CLASS	2 WORKING CLASS	3 MIDDLE CLASS	4 UPPER CLASS	
1 MALE	PRES12 VOTE OBAMA OR ROMNEY	1 Obama	Count	9	62	63	7	141
			% within class SUBJECTIVE CLASS IDENTIFICATION	47.4%	57.9%	47.7%	58.3%	52.2%
		2 Romney	Count	8	41	65	4	118
			% within class SUBJECTIVE CLASS IDENTIFICATION	42.1%	38.3%	49.2%	33.3%	43.7%
		3 Other candidate (SPECIFY)	Count	2	4	2	1	9
			% within class SUBJECTIVE CLASS IDENTIFICATION	10.5%	3.7%	1.5%	8.3%	3.3%
		4 Didn't vote for president	Count	0	0	2	0	2
			% within class SUBJECTIVE CLASS IDENTIFICATION	0.0%	0.0%	1.5%	0.0%	0.7%
		Total	Count	19	107	132	12	270
			% within class SUBJECTIVE CLASS IDENTIFICATION	100.0%	100.0%	100.0%	100.0%	100.0%
2 FEMALE	PRES12 VOTE OBAMA OR ROMNEY	1 Obama	Count	22	96	86	7	211
			% within class SUBJECTIVE CLASS IDENTIFICATION	84.6%	67.6%	57.0%	77.8%	64.3%
		2 Romney	Count	4	43	63	2	112
			% within class SUBJECTIVE CLASS IDENTIFICATION	15.4%	30.3%	41.7%	22.2%	34.1%
		3 Other candidate (SPECIFY)	Count	0	3	0	0	3
			% within class SUBJECTIVE CLASS IDENTIFICATION	0.0%	2.1%	0.0%	0.0%	0.9%
		4 Didn't vote for president	Count	0	0	2	0	2
			% within class SUBJECTIVE CLASS IDENTIFICATION	0.0%	0.0%	1.3%	0.0%	0.6%
		Total	Count	26	142	151	9	328
			% within class SUBJECTIVE CLASS IDENTIFICATION	100.0%	100.0%	100.0%	100.0%	100.0%

4.

PRES08 VOTE OBAMA OR MCCAIN \* bible FEELINGS ABOUT THE BIBLE Crosstabulation

			bible FEELINGS ABOUT THE BIBLE				Total
			1 WORD OF GOD	2 INSPIRED WORD	3 BOOK OF FABLES	4 OTHER	
PRES08 VOTE OBAMA OR MCCAIN	1 Obama	Count	138	262	157	5	562
		% within bible FEELINGS ABOUT THE BIBLE	50.4%	56.1%	75.1%	71.4%	58.7%
	2 McCain	Count	134	195	43	2	374
		% within bible FEELINGS ABOUT THE BIBLE	48.9%	41.8%	20.6%	28.6%	39.1%
	3 OTHER CANDIDATE (SPECIFY)	Count	2	7	7	0	16
		% within bible FEELINGS ABOUT THE BIBLE	0.7%	1.5%	3.3%	0.0%	1.7%
	4 DIDN'T VOTE	Count	0	3	2	0	5
		% within bible FEELINGS ABOUT THE BIBLE	0.0%	0.6%	1.0%	0.0%	0.5%
	Total	Count	274	467	209	7	957
		% within bible FEELINGS ABOUT THE BIBLE	100.0%	100.0%	100.0%	100.0%	100.0%

PRES12 VOTE OBAMA OR ROMNEY \* bible FEELINGS ABOUT THE BIBLE Crosstabulation

			bible FEELINGS ABOUT THE BIBLE				Total
			1 WORD OF GOD	2 INSPIRED WORD	3 BOOK OF FABLES	4 OTHER	
PRES12 VOTE OBAMA OR ROMNEY	1 Obama	Count	97	152	92	4	345
		% within bible FEELINGS ABOUT THE BIBLE	52.7%	56.1%	71.3%	66.7%	58.5%
	2 Romney	Count	83	114	30	2	229
		% within bible FEELINGS ABOUT THE BIBLE	45.1%	42.1%	23.3%	33.3%	38.8%
	3 Other candidate (SPECIFY)	Count	2	4	6	0	12
		% within bible FEELINGS ABOUT THE BIBLE	1.1%	1.5%	4.7%	0.0%	2.0%
	4 Didn't vote for president	Count	2	1	1	0	4
		% within bible FEELINGS ABOUT THE BIBLE	1.1%	0.4%	0.8%	0.0%	0.7%
	Total	Count	184	271	129	6	590
		% within bible FEELINGS ABOUT THE BIBLE	100.0%	100.0%	100.0%	100.0%	100.0%

- a. The argument could be made that PRES08/12 are dependent on beliefs about the Bible. BIBLE would be defined as the independent variable. We can hypothesize that individuals will cast their vote for candidates whom they believe share their definition of the Bible.
- b. For 2008 and 2012, the majority of respondents, regardless of BIBLE response, voted for President Obama. In 2008, a slightly higher percentage of those who believe the Bible is the word of God voted for the Republican candidate.
- c. Sex (SEX), political affiliation (PPARTY), or political views (POLVIEWS) could be used as control variables.

5.

Respondents who strongly agreed/agreed with the statement voted for Mitt Romney (63.1% and 41.5%). In contrast, those who disagreed/disagreed strongly to the statement voted for Barack Obama (85.4% and 87.5%).

PRES12 VOTE OBAMA OR ROMNEY * excludimm AMERICA SHOULD EXCLUDE ILLEGAL IMMIGRANTS Crosstabulation								
			excludimm AMERICA SHOULD EXCLUDE ILLEGAL IMMIGRANTS					Total
			1 AGREE STRONGLY	2 AGREE	3 NEITHER AGREE NOR DISAGREE	4 DISAGREE	5 DISAGREE STRONGLY	
PRES12 VOTE OBAMA OR ROMNEY	1 Obama	Count % within excludimm AMERICA SHOULD EXCLUDE ILLEGAL IMMIGRANTS	29  34.5%	65  55.1%	30  68.2%	41  85.4%	7  87.5%	172  57.0%
	2 Romney	Count % within excludimm AMERICA SHOULD EXCLUDE ILLEGAL IMMIGRANTS	53  63.1%	49  41.5%	12  27.3%	5  10.4%	1  12.5%	120  39.7%
	3 Other candidate (SPECIFY)	Count % within excludimm AMERICA SHOULD EXCLUDE ILLEGAL IMMIGRANTS	1  1.2%	4  3.4%	1  2.3%	2  4.2%	0  0.0%	8  2.6%
	4 Didn't vote for president	Count % within excludimm AMERICA SHOULD EXCLUDE ILLEGAL IMMIGRANTS	1  1.2%	0  0.0%	1  2.3%	0  0.0%	0  0.0%	2  0.7%
	Total	Count % within excludimm AMERICA SHOULD EXCLUDE ILLEGAL IMMIGRANTS	84  100.0%	118  100.0%	44  100.0%	48  100.0%	8  100.0%	302  100.0%