The LGBTQ+ Gap:
Recent Estimates for Young Adults in the United States

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LGBTQ+ in the United States

LGBTQ+ rights/attitudes have rapidly improved in the last decades:

▸ **2015:** Same-sex Marriage Law.

▸ **2020:** Labor Market Anti-Discrimination Law.

▸ **2021:** 70% of adults favor same-sex marriage (Gallup Survey).

▸ **2022:** One in five Gen Z adults identify as LGBTQ+ (Gallup Survey).

This Paper:

What is the current socioeconomic/health situation of the LGBTQ+ youth?

Literature Review

Earnings:

- ‣ Gay penalty and lesbian premium. *Klawitter (2015), Valfort (2017), Aksoy et al. (2018), Burn (2019), Badgett et al. (2021), Drydakis (2022), and, Jepsen and Jepsen (2022)*

- ‣ Gay and lesbian premium. *Carpenter and Eppink (2017)*

- ‣ Penalty for young cohabitating lesbians. *Martell (2019)*

- ‣ Bisexual penalty. *Drydakis (2022)*

- ‣ Transgender penalty. *Geijtenbeek and Plug (2018), Carpenter et al. (2020), Campbell et al. (2021), and, Shannon (2021)*

Health:

- ‣ LGBTQ+ negative gap. *Meyer (2003), Valfort (2017), Hatzenbuehler et al. (2012), Wight et al. (2013), Raifman et al. (2017), Carpenter et al. (2021), and, Chen and van Ours (2022).*

Contributions

New survey data: Baccalaureate and Beyond Longitudinal Study

- ▸ +10k college graduates + rich set of additional characteristics.
- ▸ Full spectrum of self-identified LGBTQ+ individuals.
- ▸ Panel component: 1, 4, 10 years after graduation.
- ▸ Info. about concealment in work, family and social environments.

Findings:

- ▸ Penalty in earnings and mental health for LGBTQ+ males and females.
- ▸ Earnings penalty increases over graduates career.
- ▸ Half of the earnings penalty can be attributed to career sorting.
- ▸ Closeted graduates experience more pronounced penalties.

B&B Data: Description

Baccalaureate and Beyond Longitudinal Study (B&B):

- ▸ Survey of students who completed a BA degree in a given academic year.

- ▸ Conducted by the U.S. Department of Education.

- ▸ Representative sample of graduating seniors in all majors and colleges.

- ▸ Respondents followed 1, 4 and 10 years after graduation.

- ▸ Survey includes: demographic characteristics, family background and labor market experiences, among many other variables.

- ▸ B&B:08/18: sexual orientation and gender identity/expression.

- ▸ B&B:16/17: sexual orientation, gender identity/expression, sexual orientation concealment, and, mental health.

B&B Data: LGBTQ+ graduates

Someone's emotional or physical attraction to the same and opposite sex:

"*lesbian or gay, that is, homosexual*", "*straight, that is, heterosexual*", "*bisexual*", "*another sexual orientation*", and, "*questioning or unsure*".

Gender identity and expression:

"*male*", "*female*", "*transgender, male-to-female*", "*transgender, female-to-male*", "*genderqueer or gender nonconforming*", "*a different gender identity*", "*questioning or unsure*", and, "*more than one gender*".

Reporting Bias?

Survey mostly conducted via Web.

No missing observations.

High fraction of closeted graduates.

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B&B Data: Earnigs and Mental Health

Earnings:

B&B:16/17: salary for their most recently started job (within 12 months after BA completion).

B&B:08/18: salary for their current primary job (10 years after graduation).

Mental Health: "*What is the main type of condition/impairment you have?*"

B&B:16: **"depression", "anxiety"**, "*hearing impairment*", "*blindness or visual impairment*", "*speech or language impairment*", "*orthopedic or mobility impairment*", "*specific learning disability or dyslexia*", "*attention deficit disorder (ADD or ADHD)*", "*autism, Asperger's syndrome, or other developmental disab.*", "*traumatic brain injury (TBI)*", and, "*other*".

B&B:16/17: **"learning, mental, emotional or psychiatric condition"**, "*blindness or visual impairment*", "*hearing impairment*", "*orthopedic or mobility impairment*", "*speech or language impairment*", and, "*other health impairment or problem*".

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Descriptive Statistics (B&B:2016/17)

	Males		**Females**	
	Straight Cis.	**LGBTQ+**	**Straight Cis.**	**LGBTQ+**
	(1)	(2)	(3)	(4)
LGBTQ+	91.6%	8.4%	88.2%	11.8%
Gay/Lesbian	-	50.5%	-	19.5%
Bisexual	-	24.2%	-	48.1%
Another Sexual Orientation	-	7.3%	-	16.4%
Questioning or unsure	-	9.6%	-	9%
Non-cisgender or non-conforming	-	14.8%	-	15.6%
Earnings and Mental Health				
Earnings from Primary Job (2017)	$ 38,205 [21,586]	$ 34,100 [19,841]	$ 32,995 [17,747]	$ 30,346 [18,274]
Anxiety (2016)	2%	4.3%	4.1%	8.8%
Depression (2016)	2.5%	5.8%	3.4%	9.4%
Learning or Mental Condition (2017)	8.3%	16.9%	10.6%	26.0%
Observations	5,000	500	7,500	900

Descriptive Statistics (B&B:2008/18)

	Males		Females	
	Straight Cis.	**LGBTQ+**	**Straight Cis.**	**LGBTQ+**
	(1)	(2)	(3)	(4)
LGBTQ+	93.9%	6.1%	93.1%	6.9%
Gay/Lesbian	-	61.4%	-	22.3%
Bisexual	-	19.0%	-	50.2%
Another Sexual Orientation	-	4.6%	-	15.1%
Don't know	-	8.3%	-	6.1%
Non-cisgender or non-conforming	-	18.6%	-	13.6%
Earnings and Mental Health				
Earnings from Primary Job (2018)	$ 87,154 [61,616]	$ 68,342 [43,743]	$ 64,506 [42,860]	$ 55,037 [35,181]
Depression (2008)	1.1%	1.7%	1.4%	4.3%
Observations	4,600	300	6,300	500

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Descriptive Statistics (B&B:2008/18)

	Males		**Females**	
	Straight Cis.	**LGBTQ+**	**Straight Cis.**	**LGBTQ+**
	(1)	(2)	(3)	(4)
Students Characteristics (2018)				
Moved from state of legal residence	35%	47.6%	31.3%	45.6%
Single, never married	33.3%	65.3%	29.6%	46.8%
Living with partner	68.1%	49.1%	71.6%	61.8%
With dependent children	45.5%	10.7%	53.8%	30.6%
Region of residence:				
Northeast	23.7%	27.0%	23.8%	23.3%
Midwest	26.5%	29.0%	27.4%	22.1%
South	32.8%	25.5%	33.5%	31.7%
West	17%	18.4%	15.3%	23.0%
Observations	4,600	300	6,300	500

Estimation

Estimate separately for both cohorts of college graduates:

$$Y_i = \alpha + \beta LGBTQ_i + \gamma F_i + \Gamma X_i + \epsilon_i$$

- Y_i : student outcome (log. earnings, mental health).

- $LGBTQ_i = 1$ if student self-identified as LGBTQ+.

- $F_i = 1$ if student sex assignment at birth was female.

- α: straight cisgender male student.

- X_i:

  At graduation: age, race/ethnicity, parents' income (for dependent students) or student's income (for independent students), GPA and college selectivity.

  At interview: marital status, cohabitating status, the presence of dependent children, mobility and region of residence.

Earnings Gap

	All		**Males**		**Females**	
	(1)	(2)	(3)	(4)	(5)	(6)
B&B:16/17						
LGBTQ+	-0.121***	-0.118***	-0.122***	-0.098**	-0.121***	-0.120***
	[0.030]	[0.031]	[0.046]	[0.046]	[0.040]	[0.041]
Female	-0.146***	-0.144***				
	[0.018]	[0.018]				
Observations	11,200	11,200	4,400	4,400	6,800	6,800
B&B:08/18						
LGBTQ+	-0.229***	-0.217***	-0.287***	-0.194**	-0.188***	-0.218***
	[0.052]	[0.051]	[0.093]	[0.091]	[0.065]	[0.065]
Female	-0.302***	-0.314***				
	[0.021]	[0.022]				
Observations	10,300	10,300	4,500	4,500	5,800	5,800
Controls		✓		✓		✓

*p<0.1;**p<0.05;***p<0.01

Balanced repeated replication standard errors in brackets.

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Adjusted Earnings Gap

	B&B:16/17			B&B:08/18		
	(1)	(2)	(3)	(4)	(5)	(6)
LGBTQ+	-0.074***	-0.032	-0.024	-0.179***	-0.107**	-0.103***
	[0.025]	[0.028]	[0.025]	[0.039]	[0.050]	[0.039]
Female	-0.104***	-0.050***	-0.039***	-0.194***	-0.178***	-0.097***
	[0.015]	[0.016]	[0.014]	[0.018]	[0.022]	[0.018]
Controls	✓	✓	✓	✓	✓	✓
Full-time Empl.	✓		✓	✓		✓
Major and Occ.		✓	✓		✓	✓
Career						✓
Observations	11,200	11,200	11,200	10,300	10,300	10,300

*p<0.1;**p<0.05;***p<0.01

Balanced repeated replication standard errors in brackets.

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LGBTQ+ Discrimination and Acceptance

Workplace Discrimination
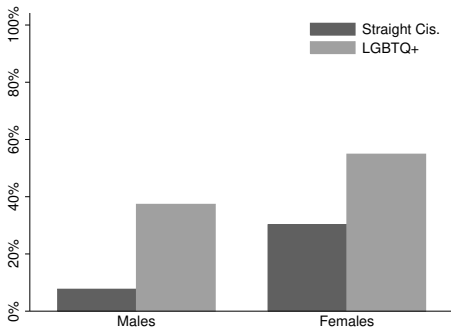
Employer LGBT Acceptance
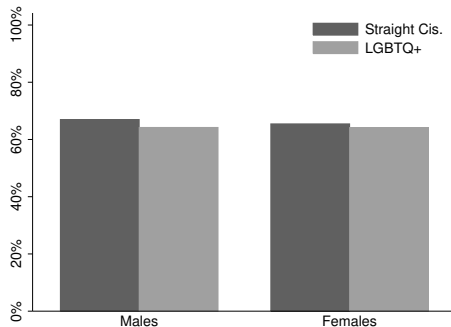
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Mental Health Gap
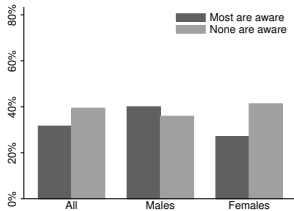
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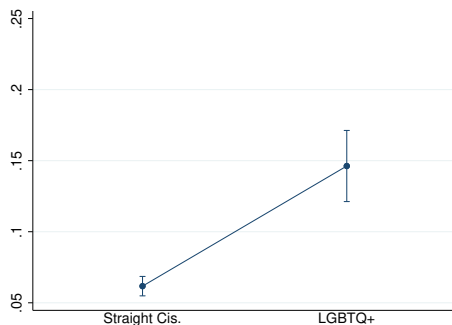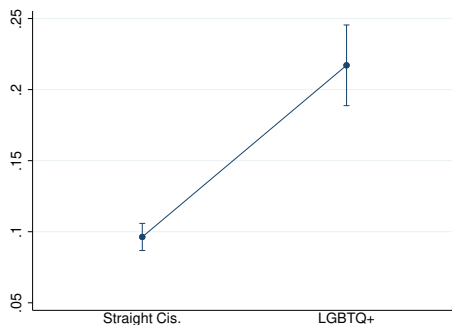
Sexual Orientation Concealment

(a) Overall

(b) Workplace

(c) Family

(d) Social

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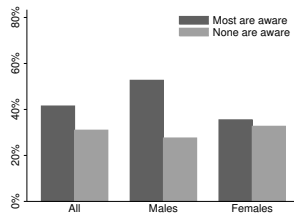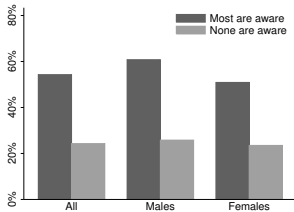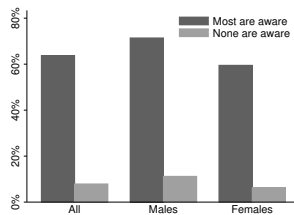
Concealment, Earnings and Mental Health

Disclosure at:	Log. Earnings				Learning or Mental Condition (average marginal effect)			
	Work	Family	Social	Overall	Work	Family	Social	Overall
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Most aware	-0.086* [0.049]	-0.052 [0.043]	-0.066* [0.035]	-0.051 [0.048]	0.073*** [0.021]	0.107*** [0.021]	0.105*** [0.018]	0.084*** [0.024]
Some aware	-0.082* [0.045]	-0.139*** [0.054]	-0.182*** [0.062]	-0.108* [0.062]	0.146*** [0.029]	0.136*** [0.032]	0.162*** [0.030]	0.118*** [0.029]
None aware	-0.197*** [0.054]	-0.249*** [0.054]	-0.295*** [0.116]	-0.182*** [0.046]	0.158*** [0.028]	0.133*** [0.030]	0.082 [0.065]	0.149*** [0.026]
P-value:								
Most vs. some	0.957	0.203	0.101	0.465	0.040	0.452	0.099	0.357
Some vs. none	0.099	0.137	0.354	0.328	0.764	0.951	0.300	0.440
Most vs. none	0.118	0.002	0.065	0.048	0.021	0.483	0.747	0.096
Controls	✓	✓	✓	✓	✓	✓	✓	✓
Observations	11,200	11,200	11,200	11,200	13,900	13,900	13,900	13,900

*$p<0.1$;**$p<0.05$;***$p<0.01$

Balanced repeated replication standard errors in brackets.

Conclusions

- ▸ Penalty in earnings and mental health for LGBTQ+ males and females.

- ▸ Earnings penalty increases over graduates career.

- ▸ Half of the earnings penalty can be attributed to career sorting.

- ▸ Evidence of significant LGBTQ+ workplace discrimination.

- ▸ Many still in the closet (specially at work).

- ▸ Closeted graduates experience more pronounced penalties.