

- Boertien, D.; Vignoli, D. (2018) "Changes in the Well-being of Same-Sex Couples Following the Legalization of Same-Sex Marriage in England and Wales". Presented in: Poster Session 2: Marriage, Families, Households, and Unions 1. Population Association of America (PAA). 2018 Annual Meeting. Denver (United States), April 26-28.
<https://paa.confex.com/paa/2018/meetingapp.cgi/Paper/19050>

Changes in the well-being of same-sex couples following the legalization of same-sex marriage in England and Wales

Diederik Boertien, *Centre d'Estudis Demogràfics, Spain*, dboertien@ced.uab.es

Daniele Vignoli, *University of Florence, Italy*, vignoli@disia.unifi.it

In this paper, we address the question to what extent the subjective well-being of same-sex couples changed following the legalization of same-sex marriage in England and Wales in March 2014. We employ data from the Annual Population Survey to examine changes in several aspects of well-being during the period before and after legalization. The total period covered by the analysis spans from April 2011 to September 2016 and provides information on ~530,000 individuals including ~4600 individuals living in a same-sex couple. The analysis reveals substantial increases in well-being among same-sex couples following legalization. In particular, reported levels of happiness increased and levels of anxiety decreased in the 12 months following legalization, compared to the 12 months before legalization. Additional analysis hints at a 'marital well-being premium' among same-sex couples, suggesting that the legalization could have influenced the well-being of same-sex couples who married in particular.

Over the last decades, families have undergone remarkable changes produced by increasing rates of divorce, cohabitation, unwed motherhood, the (re) emergence of step families and working mothers, a sharp rise in the number of single person households or in living-apart-together arrangements at older ages. Within these global trends, the new visibility of same sex relationships has attracted increasing attention among family scholars (e.g., Cortina and Festy 2014; Flores et al. 2016; Gamson and Moon 2004; Gates 2011, 2012; Ghaziani et al. 2016; Moore and Stambolis-Ruhstorfer 2013).

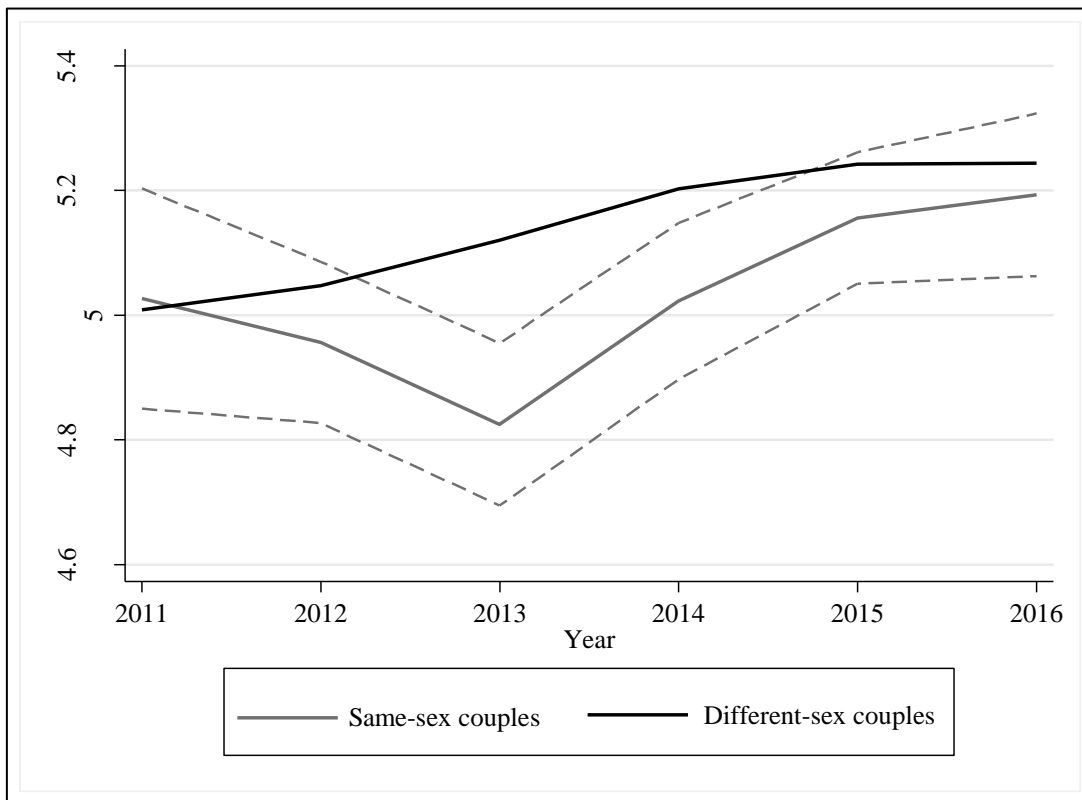
In July 2013, the parliament of the United Kingdom decided to legalize marriage for same-sex couples in England and Wales. The law came into force the 13th of March 2014 and the first same-sex marriages were registered on March 29th 2014. England and Wales therewith followed a trend that has been spreading across countries since its introduction in 2001 in the Netherlands. Access to marriage can be important for individuals' well-being as marriage is positively associated with a wide variety of outcomes including health, income, and wealth (e.g., Kamp Dush and Amato 2005; Musick and Bumpass 2012; Nock 1995; Ross and Van Willigen 1997). The availability of marriage as an option might therefore have increased the well-being of same-sex couples. However, no study so far (to our knowledge) has documented whether this is indeed the case. We aim to fill this gap in the literature by answering the question: *Has the well-being of same-sex couples increased in England and Wales after the introduction of same-sex marriage in 2014?*

To answer this question, we employ data from the Annual Population Surveys covering the period April 2011 to September 2016. During this period, around 530,000 individuals were interviewed of which around 4,600 lived in a same-sex couple. Four variables have been introduced into the APS to monitor the well-being of the population. Respondents were asked to rate on a scale from 1 to 10: 1) How anxious they were yesterday; 2) How happy they felt yesterday; 3) How worthwhile things done in life are felt to be; 4) How satisfied they are with their life. Each of these components of well-being will be looked at separately, but they are also combined in an index to create a single indicator of well-being ($\alpha = 0.72$). During the survey period considered, the Annual Population Survey recorded information on household composition where living in a same-sex couple was one possible category.

Preliminary Results

Figure 1 displays the development of overall well-being across the whole period for which data was available. 95% confidence intervals are added for individuals living as a same-sex couple. It can be observed that well-being has been steadily increasing for individuals living in different-sex couples. Individuals in same-sex couples, in contrast, reported decreasing well-being in the period 2011-2013. Their well-being, however, experienced considerable increases from 2014 onward; the year same-sex marriage was legalized.

Figure 1. Average well-being by sex-composition of couple (with 95% CI's and including sample weights)



Source. Annual Population Survey 2011-2016; N = 530,000

We zoom in on the period just before and after the legalization of marriage for same-sex couples. Table 1 reports OLS regressions explaining overall well-being, as well as results for the sub-components used for the overall measure of well-being, depending on the sex-composition of the couple and time period. Well-being of different groups is

compared between the 12 months before legalization (April 2013-March 2014) and the 12 months after legalization (April 2014-March 2015).

It can be observed that the overall well-being of same-sex couples increased significantly in the period following legalization. This is also observed once looking at the sub-components happiness, anxiety, and whether things are worthwhile doing in life. Further analysis of the paper will investigate the robustness of these results to different cut-offs regarding the time periods considered and the inclusion of more covariates.

Table 1. OLS Regressions Explaining Well-being According to Sex-Composition of Couples in the 12 months Before and After Legalization

	Happiness		Anxiety		Satisfaction		Worthwhile		Overall	
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
Post-legalization (<i>ref. pre-legalization</i>)	0.08**	0.01	-0.07**	0.02	0.11**	0.01	0.08**	0.01	0.08**	0.01
In same-sex couple (<i>ref. opposite-sex</i>)	-0.30**	0.09	0.62**	0.11	-0.09	0.07	-0.19*	0.09	-0.31**	0.07
Same-sex couple, post-legalization (interaction)	0.33**	0.12	-0.41*	0.16	0.13	0.09	0.24*	0.10	0.28**	0.09
Age	0.01**	0.00	-0.00**	0.00	0.00**	0.00	0.01**	0.00	0.00**	0.00
Female	0.09**	0.01	0.26**	0.02	0.10	0.01	0.23**	0.01	0.04**	0.01
Constant	7.05**	0.03	2.51**	0.04	7.44**	0.02	7.38**	0.02	4.85**	0.02

Sample weights included, robust standard errors, N = 201,003; 1,772 same-sex. Pre-Legalization period is April 2013-March 2014; Post-Legalization period is April 2014-March 2015. ** p<0.01 * p<0.05 † p<0.10. 'Overall' indicates results for combined measure of well-being (alpha = 0.72)

The question arises which factors produced increases in well-being following the legalization of same-sex marriage. Possibilities include the benefits marriage brings to individuals, positive effects of the legalization on the general attitudes toward same-sex couples, or other unobserved processes. A necessary (but not sufficient) condition for the first possibility to hold would be to observe higher well-being among married same-sex couples compared to cohabiting same-sex couples (as negative selection on unobserved factors into marriage appears unlikely). Table 2 displays the well-being of married individuals as compared to cohabiting individuals for both same-sex and different-sex couples. Even though the well-being of married individuals is higher than that of cohabiting individuals for both groups, results are imprecise for same-sex couples. Larger sample sizes, which might be available soon, will therefore be needed to come to conclusive evidence on this matter.

Table 2. OLS Regressions Explaining Well-being among Married and Cohabiting Individuals following Legalization of Same-Sex Marriage (April 2014-September 2016)

	Happiness				Anxiety			
	Same-sex couple		Different-sex		Same-sex couple		Different-sex	
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
Married (<i>ref. Cohabiting</i>)	0.23	0.19	0.19**	0.02	-0.35	0.24	-0.03	0.01
<i>Year (ref. 2014)</i>								
2015	0.03	0.12	0.00	0.01	0.23	0.19	-0.03	0.02
2016	0.08	0.13	0.02	0.01	0.11	0.21	0.00	0.02
Age	0.00	0.00	0.01**	0.00	0.00**	0.00	-0.03**	0.02
Female	-0.13	0.10	0.08**	0.02	0.10	0.01	0.30**	0.02
Constant	7.69**	0.24	7.06**	0.03	2.84**	0.37	2.43**	0.04

	Satisfaction				Worthwhile			
	Same-sex couple		Different-sex		Same-sex couple		Different-sex	
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
Married (<i>ref. Cohabiting</i>)	0.36**	0.12	0.17**	0.01	-0.01	0.12	0.20**	0.01
<i>Year (ref. 2014)</i>								
2015	0.07	0.10	0.04**	0.01	0.02	0.10	0.03**	0.01
2016	0.10	0.11	0.05**	0.01	-0.02	0.11	0.03**	0.01
Age	0.00	0.00	0.00**	0.00	0.00	0.00	0.01**	0.00
Female	-0.05	0.08	0.09**	0.01	0.07	0.08	0.23**	0.01
Constant	7.80**	0.19	7.48**	0.02	7.73**	0.19	7.38**	0.02

	Overall			
	Same-sex couple		Different-sex	
	Coef.	SE	Coef.	SE
Married (<i>ref. Cohabiting</i>)	0.23†	0.13	0.14**	0.01
<i>Year (ref. 2014)</i>				
2015	-0.02	0.10	0.02*	0.01
2016	0.01	0.10	0.03*	0.01
Age	0.00	0.00	-0.00**	0.00
Female	-0.03	0.07	0.03**	0.02
Constant	5.10**	0.19	4.87**	0.02

Note. Sample weights included, robust standard errors; N = 214,753 of which 2,030 in same-sex couples.

** p<0.01 * p<0.05 † p<0.10.

Key References

- Cortina, C. and P. Festy (2014). Identification of same-sex couples and families in censuses, registers and surveys. FamiliesAndSocieties Working paper 8(2014). <http://www.familiesandsocieties.eu/wp-content/uploads/2014/12/WP8CortinaFesty2014.pdf>
- Flores, A.R. et al. (2016) How many adults identify as transgender in the United States? <http://williamsinstitute.law.ucla.edu/research/how-many-adults-identify-as-transgender-in-the-united-states/>
- Gamson, J. and D. Moon (2004) The Sociology of Sexualities: Queer and Beyond. Annual Review of Sociology, 30: 47-64.
- Gates, G.J. (2011) How many people are lesbian, gay, bisexual, and transgender? <http://williamsinstitute.law.ucla.edu/wp-content/uploads/Gates-How-Many-People-LGBT-Apr-2011.pdf>
- Gates, G.J. (2012) LGBT Identity: A Demographer's Perspective. Available at: <http://digitalcommons.lmu.edu/llr/vol45/iss3/2>
- Ghaziani, A., V. Taylor, and A. Stone (2016) Cycles of Sameness and Difference in LGBT Social Movements. Annual Review of Sociology, 42: 165-183
- Kamp Dush, C. M. and P. R. Amato (2005). Consequences of relationship status and quality for subjective well-being. Journal of Social and Personal Relationships, 22, 607–627.
- Moore, M. R., and M. Stambolis-Ruhstorfer (2013) LGBT Sexuality and Families at the Start of the Twenty-First Century. Annual Review of Sociology, 39: 491-507
- Musick, K., and L. Bumpass (2012). Reexamining the case for marriage: union formation and changes in well-being. Journal of Marriage and Family, 74, 1–18.
- Nock, S. L. (1995). A comparison of marriages and cohabiting relationships. Journal of Family Issues, 16, 53–76.
- Ross, C. E., and M. Van Willigen (1997). Education and the subjective quality of life. Journal of health and social behavior, 38, 275–297.