

LETTER TO THE EDITORS

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Testing Durkheim's theory of suicide: a comment

Abstract In ten nations from 1900 to 1988, birth rates were more consistently and more strongly associated with suicide rates than were marriage rates, confirming the results of a study in Bavaria by Wiedenmann and Weyerer.

Key words Suicide · Birth rate · Marriage rate

Durkheim (1897) proposed that social forces which increase social integration should decrease suicide, and research over the past century has shown that marriage and birth rates tend to be negatively associated with suicide rates, both over time and over regions (Lester 1992).

Recently, Wiedenmann and Weyerer (1994) showed that in Bavaria from 1865 to 1980 suicide rates were associated with birth rates in the way that Durkheim's theory predicts, but that marriage rates were not significantly

associated with suicide rates. The present comment explores this result using other nations.

Suicide rates were available from the World Health Organization from 1901 to 1988 for ten European nations (see Table 1). Marriage and birth rates were available for this same period from Mitchell (1992).

The results of a simple correlational analysis, a linear multiple regression and a regression correcting for the serial autocorrelation in the data sets using the Cochrane-Orcutt technique (Doan 1990) are presented in Table 1.

It can be seen that eight of the ten nations had negative correlation coefficients between suicide rates and birth rates, seven of which were statistically significant. In contrast, six nations had negative associations between suicide rates and marriage rates, only four of which were statistically significant. Both of these results are in the direction predicted by Durkheim's theory, but the associations for birth rates are stronger. In addition, the eight negative associations of suicide rates with birth rates were all larger than those with marriage rates.

The linear multiple regressions confirmed these results. However, it must be noted that correcting for the serial autocorrelation in the data sets eliminated the majority of the significant associations and produced little difference between the associations of suicide with birth and marriage rates.

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Table 1 Correlational and regression results for time series analyses from 1900 to 1988 for ten nations

	Correlation coefficients		Regression coefficients (linear)		Regression coefficients (corrected)	
	Marriage	Birth	Marriage	Birth	Marriage	Birth
England/Wales	0.21 ^b	0.05	0.21	0.02	0.02	0.06
Finland	0.04	-0.90 ^b	0.31 ^b	-0.91 ^b	-0.31	0.39
Ireland	0.01	-0.49 ^b	0.21	-0.50 ^b	0.05	-0.16
Italy	0.05	0.42 ^b	-0.08	0.10 ^b	-0.03	0.08
Netherlands	-0.50 ^b	-0.74 ^b	-0.20 ^b	-0.19 ^b	0.09	-0.21 ^b
Norway	-0.47 ^b	-0.66 ^b	-0.55 ^b	-0.37 ^b	-0.30 ^b	-0.01
Scotland	-0.16	-0.65 ^b	-0.31 ^b	-0.28 ^b	-0.03	-0.03
Spain ^a	-0.26 ^b	-0.38 ^b	-0.09	-0.06 ^b	-0.03	-0.07
Sweden	-0.35 ^b	-0.58 ^b	-0.25 ^b	-0.31 ^b	-0.25	-0.03
Switzerland	-0.02	-0.08	0.04	-0.06	-0.18	0.34

^aSpanish data were available only up to 1987

^bStatistically significant at the 5% level or better

The present results confirm the results found for Bavaria by Wiedenmann and Weyerer (1994). In simple correlational analyses, birth rates are more commonly and more strongly associated with suicide rates than are marriage rates. It would be of interest to compare the social meaning of the marriage rate as a social indicator in these different nations in order to explore why marriage protects against suicide in some nations and not in others.

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