

**Mental health and union dissolution:  
are socio-economic determinants the same for men and women ?**

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**Extended abstract**

Union dissolution has dramatically increased over the last decades. These evolutions have implications on health. The literature highlights that divorced or separated people, even when repartnered, report poorer health, on average, than do their married counterparts (Hughes et al. 2009; Monden et al. 2013). Although there has been evidence that selection effects are playing a role - poor health increasing the probability of not having a partner or separating – a number of studies show more causal association between the process of marital disruption and poor health (Amato 2010; Metsä-Simola et al. 2013). Some studies identified health deterioration going along with conflicts slightly before divorce and health problems persisting or even developing some time after separation, suggesting some long-term effects of union dissolution. These long-term effects could result from the separation itself or being mediated by the consequences of separation on other social or economic dimensions, that may in turn have consequences on health. Changes in social support or economic situation after separation could contribute to health deterioration, and that these effects could be gender differentiated. Women are more concerned than men by a decrease in living standards following divorce and their worsening economic conditions could have a negative effect on their health (LaPierre 2012). Union dissolution is also related to changes in social network. These changes could affect health negatively, while passing through a decrease in the social network and related support, or positively, while inducing more or new contacts (Hewitt et al. 2012).

The purpose of this study is to measure the links between separation and mental health in France for both men and women, trying (1) to disentangle the health impact of separation from the effect of being not in couple (2) to measure the contribution of changes in socioeconomic and social support situations to the health impact of separation for men and women.

**Data**

We use the two waves of the French Health and professional career survey (SIP – *Santé et Itinéraire professionnel*). The 2006 wave contains 13,648 respondents aged 20-74. Among them, 11,016 were interviewed again in 2010. The structure of the survey is particularly rich. In the first wave, we get retrospective information on career, marital and health histories. In 2010, the survey collects information on changes in professional, health or family situations.

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Combining these two dimensions - retrospective information in 2006 and changes over the 2006-2010 period - enables us to take past events into account but also the changes in health and socioeconomic dimensions over the four-year period considered.

Mental health is measured in 2006 and 2010 as the existence of symptoms of Major Depressive Episode (MDE) during the last fifteen days before the survey, using the MINI interview (Sheehan et al. 1998). We first analyze the variation in the MDE probability in 2006 and in the MDE probability in 2010, according to the marital status in 2006. Control variables are age, level of living standard, employment status, lack of material support or lack of social support, number of children, diploma, past health events, number of separations already experienced in 2006. Living standard is measured by dividing disposable income by the number of consumption units in the household in 2006. We measure the lack of social support in 2006 through a negative answer to the following question: « Is there someone you can rely on to discuss about personal things or to take some difficult decision?» and/or a positive answer to the question “Do you need more such help than received?”.

In a second step, we measure the union dissolution between 2006 and 2010 among individuals living in couple in 2006 and its association with MDE in 2010. We then measure the change in living standard and social support between the two waves and the mediating role of these changes in the association between union dissolution and MDE in 2010.

In this dataset, while the timing of the union dissolution is reported, it is not possible to date the changes in social support or variations in living standard and state whether the union dissolution occurred before or after. We therefore measure the extent to which changes in socioeconomic situation concomitant to the union disruption contribute to the observed health changes.

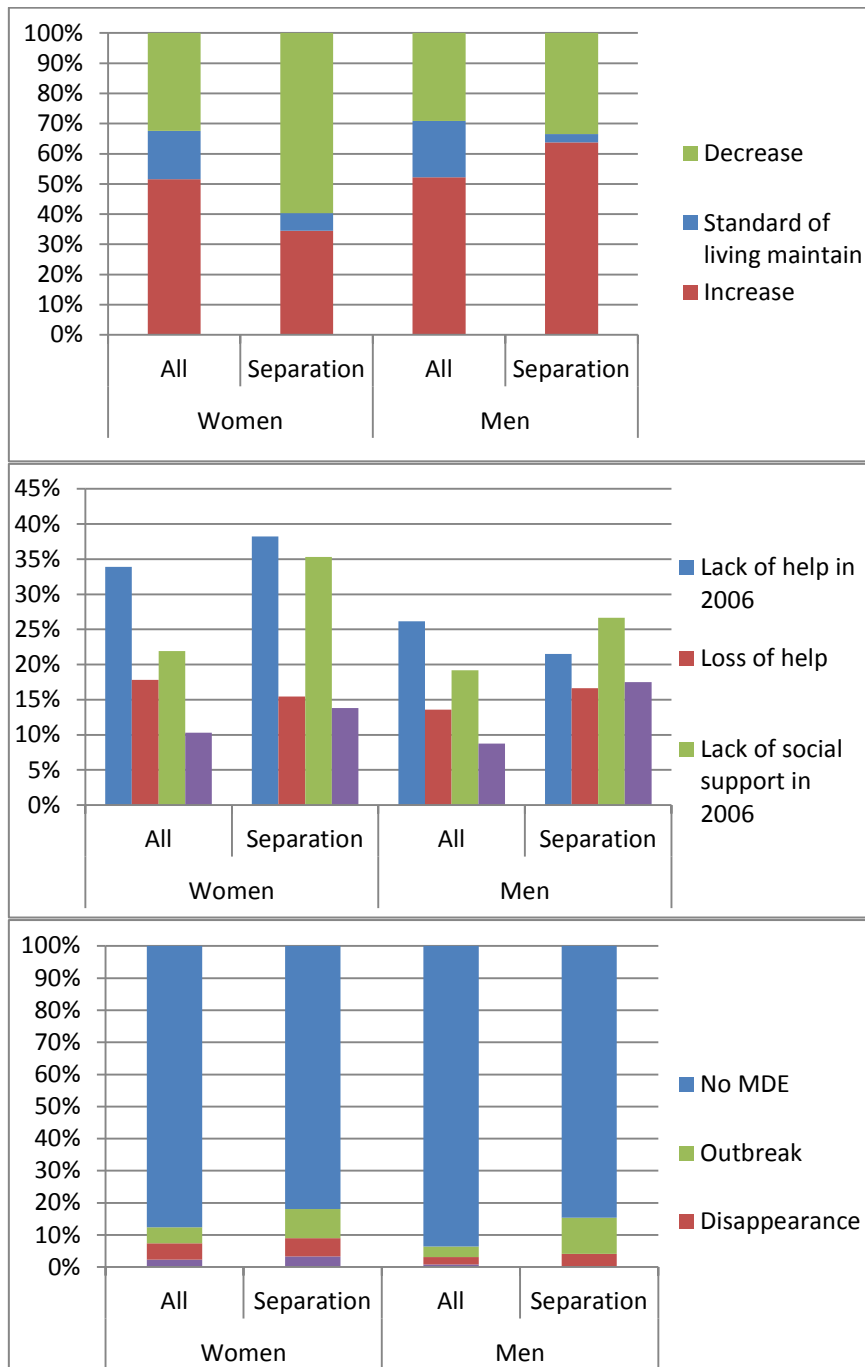
## **Method**

We use logistic regressions to investigate the links between reporting a MDE in 2010 and experiencing an union dissolution over the period, controlling for the individual economic and demographic characteristics in 2006. The mediating role of the changes in socioeconomic situations is assessed by the method developed by Karlson, Holm and Breen (Karlson et al. 2012). The objective is to disentangle the direct effect of the separation and the indirect effects running through mediating variables (social support and living standards). The KHB-method allows the comparison of the full model with a reduced model that substitutes the mediators by the residuals of the mediators from a regression of the mediators on the key-variables of interest.

## **Results**

The probability of reporting a MDE in 2006 is significantly lower for men than for women (4,1 % vs 9,5 %). Among men and women, those who experience a separation over the 2006-2010 period report more often a MDE in 2006 and in 2010 (figure 1). The onset of a MDE is more frequent among people who got separated. Decrease in living standards is widespread among women, especially when they got separated, while men are more likely to experience an increase in their living standard, or a stagnation. Regarding social support, women more likely report a lack of social support in 2006 than men, especially for those who get separated over the period. But the loss of social support is more widespread among men who experience a union dissolution. These gender differences suggest running regressions separately for men and women.

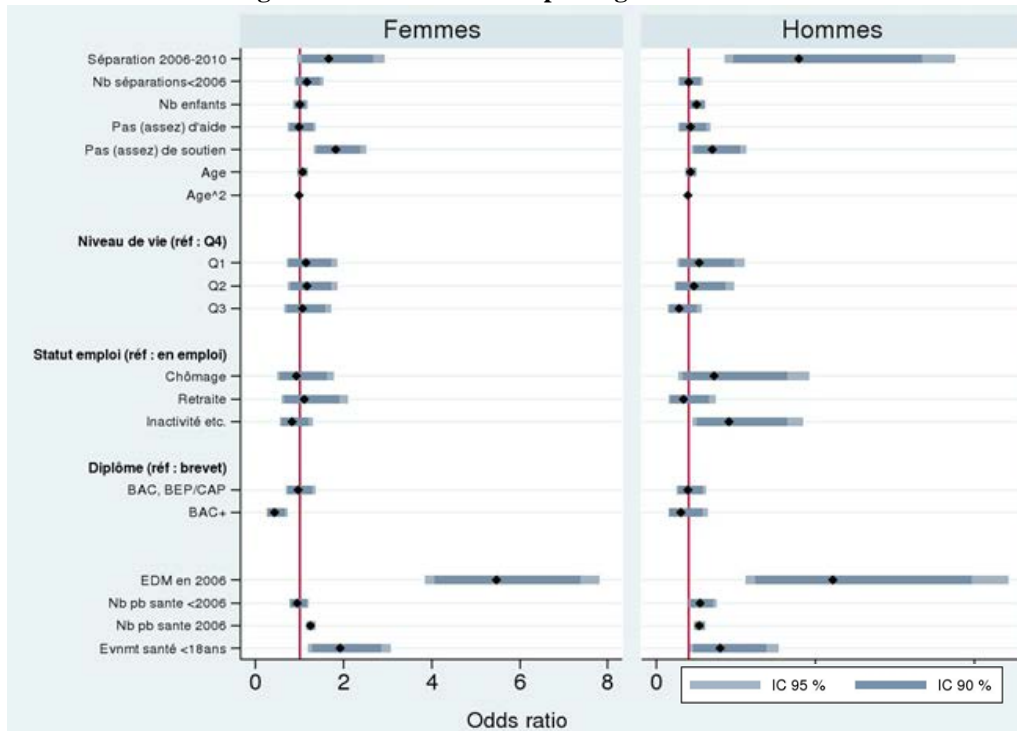
**Figure 1 : Descriptive statistics – MDE evolution, living standards, social support and help**



Source : men and women living in a couple in 2006, still in couple in 2010 or separated over the period.

The multivariate models show that a union dissolution over the 2006 – 2010 period increases the probability of reporting a MDE in 2010 for both men and women (fig 2). This association is only significant at 10 % for women. Health problems can be recurrent and reporting a MDE in 2010 is strongly linked to reporting a MDE in 2006. Reporting other health problems in 2006 is also positively associated with a MDE in 2010. Finally, the probability is higher when social support was missing in 2006 for both gender and it increases with the number of cohabiting children in 2006 for men.

**Figure 2 : Odds ratios of reporting a MDE in 2010**



Source : men and women living in a couple in 2006.

Using the KBH method, we find that changes in living standard and social support contribute positively to the probability of MDE in 2010 (table 1). However the association differs across gender. Socioeconomic changes for women contribute to 25 % to the association between union dissolution and MDE in 2010, with a 19% contribution of the decrease in living standard. For men, the indirect effects of separation are less important. The contribution of socioeconomic changes reaches 5,5 %, and essentially passes through the loss of social support. The direct effect of separation is slightly less important than the total effect, but still important.

**Tableau 1 : Odds ratios of reporting a MDE in 2010 and indirect effects of changes in socio economic determinants**

	Men and Women		Women		Men	
	Changes in situations		Changes in situations		Changes in situations	
	Without (Model 1)	With (Model 2)	Without (Model 1)	With (Model 2)	Without (Model 1)	With (Model 2)
OR associated with the separation	2,45***	2,28***	1,80*	1,55	3,90***	3,70***
Contribution of socio economic changes		8,1% **		25,2% **		3,9%
Linked to living standard decrease		2,6% *		19,2% **		-1,7%
Linked to social support loss		5,5% **		6,1%		5,5% *

Source: men and women living in a couple in 2006.

Control variables : employment status, age, age-squared, diploma, number of cohabiting children in 2006, couple length in 2006, number of unions before 2006, MDE in 2006, number of past health problems and in 2006, important health events during childhood, duration of the separation between 2006 and 2010, living standard in 2006

## Discussion and conclusion

In this article, we confirm the health advantage for individuals living as a couple compared to the single. More precisely, we found that having experienced a union dissolution in the past, especially when recent, increases the risk of reporting a MDE in 2006, for both gender. Once controlled for some selection effect on health, we observe interestingly that for men, living alone seems to play a bigger role in mental health status in 2010 than having experienced a union dissolution, while for women, the past experience of a union dissolution is more associated with a MDE in 2010 than living alone.

This statement is in line with our next findings. The experience of a union dissolution between 2006 and 2010 among individuals in couple in 2006 affects the probability of MDE in 2010 for both men and women. A part of the effect on women's health goes through the decrease in living standard, while for men, the indirect effect is limited and goes rather through the loss of social support.

We also acknowledge some limitations of this study. First, without the timing of changes in socio economic dimensions and separation, we don't know whether the variations in living standards or the loss in social support have preceded or followed the separation. Besides, as usual with panel data, some attrition exists and could be linked to some deterioration of mental health. The study is also based on self-reported measures, which might be themselves influenced by the socioeconomic situation of the individuals. We discuss these limitations in more details in the article, in particular to assess their quantitative effect.

Despite these limitations, the study indicates that marital status and history are associated with mental health outcomes however differently for men and women. While women are more frequently exposed to situations of low income and material deprivation, it seems that a part of the health consequences of the union disruption is mediated by a deterioration of the economic situation. For men, a loss in social support, which is more frequent for them with a union dissolution, seems to contribute although moderately, to its health impact. These findings are important when considering situations of vulnerability of men and women and their contribution to the gender health gap.

## References

- Amato, P. R. (2010). "Research on Divorce: Continuing Trends and New Developments." Journal of Marriage and Family **72**: 650-666.
- Hewitt, B., G. Turrell, et al. (2012). "Marital loss, mental health and the role of perceived social support: findings from six waves of an Australian population based panel study." Journal of Epidemiology and Community Health **66**: 308-314.
- Hughes, M. E. and L. J. Waite (2009). "Marital biography and health at mid-life." Journal of Health and Social Behavior **50**(3): 344-358.
- Karlson, K. B., A. Holm, et al. (2012). "Comparing regression coefficients between same-sample nested models using logit and probit: a new method " Sociological Methodology **42**: 286-313.
- LaPierre, T. A. (2012). "The enduring effects of marital status on subsequent depressive symptoms among women: investigating the roles of psychological, social and financial resources." Journal of Epidemiology and Community Health **66**: 1056-1062.

- Metsä-Simola, N. and P. Martikainen (2013). "Divorce and changes in the prevalence of psychotropic medication use: a register-based longitudinal study among middle-aged Finns." Social Science and Medicine **94**: 71-80
- Monden, C. W. S. and W. J. G. Uunk (2013). "For Better and for Worse: The Relationship Between Union Dissolution and Self-Assessed Health in European Panel Data." European Journal of Population **29**: 103-125.
- Sheehan, D. V., Y. Lecrubier, et al. (1998). "The Mini-International Neuropsychiatric Interview (M.I.N.I.): the development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10." Journal of Clinical Psychiatry **59**(Suppl 20): 22-33.