Changes in Subjective Wellbeing during the Transition to Widowhood for Men and Women: Does the Social Network Buffer the Effect?

Introduction

The transition to widowhood is one of the most significant and stressful life events that and individual can experience (Lucas, Clark, Georgellis, & Diener, 2003; Parkes, 1987; Stroebe & Stroebe, 1987; Anusic & Lucas, 2014) with far-reaching consequences on physical, emotional, and psychological well-being (Burns, Browning, & Kendig, 2015; Jadhav & Weir, 2017; Siflinger, 2017). It is associated with feelings of isolation, depression, anxiety (Siflinger, 2017; M. S. Stroebe et al., 2005a; Tseng et al., 2017; Kristiansen et al., 2019a, b; Ennis & Majid, 2019), as well as significant declines in life satisfaction (Infurna et al., 2017; Bonanno et al. 2002; Ong, Fuller-Rowell & Bonanno 2010). Moreover, the consequences of losing a spouse can persist over many years (Lucas et al., 2003; Yap, Anusic, & Lucas, 2012; Anusic & Lucas, 2014).

Despite the substantial impact of widowhood on subjective well-being, there are considerable variations in how individuals react to and adapt to this experience (Bonanno et al., 2002; Lucas et al., 2003; Parkes, 1987). Some individuals are profoundly affected, while others exhibit remarkable resilience in the face of this challenging life transition. However, the specific mechanisms contributing to these differences remain largely unexplored.

One potential explanatory factor for these individual differences can lie in the strength and supportiveness of an individual's social relationships. Extensive research has established the link between physical and psychological well-being and social support and relationships (Argyle, 2001; Watson, Clark, McIntyre, & Hamaker, 1992; Lucas & Dyrenforth, 2006; Pinquart & Soerensen, 2000). Greater social network size and increased contact with friends and family have consistently correlated with higher levels of happiness (Pavot et al., 1990; Watson et al., 1992; Lucas & Dyrenforth, 2006; Pinquart & Soerensen, 2000) and greater resilience to stress (Cohen & Wills, 1985; Myers, 1992, 2000). Social networks may act as buffers against psychological distress during adverse life events (Belinda, Turrell & Giskes, 2012) and may help individuals in recovering from traumatic experiences (e.g., Charuvastra & Cloitre, 2008; Kawachi & Berkman, 2001; Mancini & Bonanno, 2009). However, to date, there is a lack of studies investigating the role of social networks in buffering the effect of widowhood for individuals´ subjective wellbeing (Belinda, Turrell & Giskes, 2012), and existing findings are inconclusive (Stroebe et al., 1996; Kung, 2020).

This study aims to investigate the transition to widowhood and its effects on subjective well-being while examining the role of social networks in buffering these effects. We use the term buffer for a process by which a resource mitigates the impacts of adverse life events. We focus on the positive aspects of social networks, including the size, the perceived satisfaction, the frequency of contact with social network members, the geographical proximity, the number of close social network members, and the number of friends and children within the social networks. In addressing these aspects, we consider whether the associations between transition widowhood, subjective wellbeing and social networks vary for men and women.

Aim of the Study:

The aim of this study is to investigate the effect of widowhood on subjective wellbeing and the buffering effect of the social network. Specifically, we will explore the following research questions:

1. How does widowhood impact subjective wellbeing?
2. To what extent does the social network buffer the effects of widowhood on subjective wellbeing?

3. What specific aspects of the social network (e.g., size, quality, frequency, etc.) are most important in buffering the effect of widowhood?
4. Are there gender differences?

Methods

The data used for this study was obtained from the Survey of Health, Ageing, and Retirement in Europe (SHARE). SHARE is a longitudinal survey that examines the living conditions and health of European individuals aged 50 and over. The study started in 2004 and includes participants from 27 European countries. We used data from waves 1-8, collected from 2004 to 2019/2020. The sample was restricted to individuals who were married at the time of their first SHARE interview, became widowed during the data collection, and did not remarry afterwards. We excluded individuals who were widowed or divorced at the first wave of the survey, and who did not provide information on their marital status, wellbeing indicators and social network measures. The final sample is composed of 812 individuals.

Measures

Dependent variable

The dependent variable in this study was subjective wellbeing, measured by life satisfaction. It was assessed by the question, "All things considered, how satisfied are you with your life as a whole these days?" Responses ranged from 0 (completely dissatisfied) to 10 (completely satisfied).

Independent variables

The main independent variables of interest were social networks characteristics, operationalized as SN size, satisfaction with SN, number of close SN members, number of SN members within 5 km, number of SN members with weekly contact, number of SN members with daily contact, number of friends in SN, number of children in SN. These variables were measured before the occurrence of the event (in the Social Networks Modules, in wave 4 or 6). We measured each SN characteristics as a dichotomous (two groups) variable (high/low level) based on median value of the continuous variable (see tab. 2).

Analytic Strategy

First, we used fixed-effect regression models to examine the relationship between widowhood and subjective well-being, divided by gender. Fixed-effect models are particularly suitable for longitudinal data, as they allow us to control for all time-invariant variables that might be confounding the relationship between social network and subjective wellbeing.

Subsequently, we carry out separate analysis for each buffer and gender, which means that we have 16 different regression models. In these models, the dependent variable was life satisfaction, and the independent variables included the level of social network and time to event. Time was measured by five dummy variables: two or more waves before the event (t<=-2), one wave before the event (t=-1), the time of the event (t=0), the wave after the event (t=1), and two or more waves after the event (t>=2).

We are interested in the protective potential of social network aspects, rather than in the variability of the social network over time. We therefore construct the social network aspects as time-invariant variables per event. They are measured before the occurrence of the event (in wave 4 or 6). We measure each aspect as a dichotomous (two groups) variable. To measure buffering effects, we compare life satisfaction after the event (t=0, t=1 and t>=2) to the level 2 or more years before the

event (reference category). The interaction coefficient between a given SN measure and the year after widowhood shows the buffering effect of the measure.

Preliminary results

Tab. 1 and 2 show some descriptive results.

Tab.1. Number of observation during the transtition to retirement.

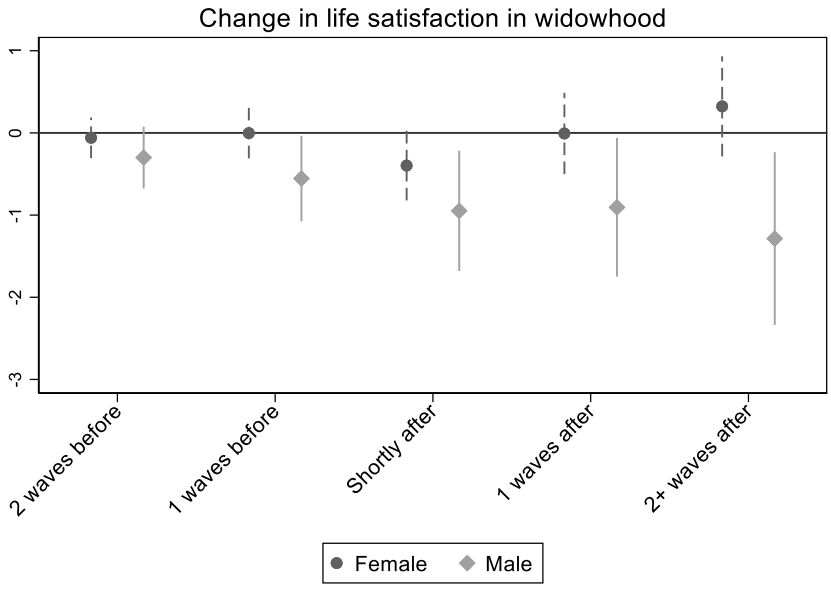
Waves before and after widowhood	Freq.	%
<-3	351	11.20
-2	577	18.41
-1	812	25.91
0	812	25.91
1	371	11.84
2	211	6.73
Total	3,134	100.00

Tab. 2. Pre-existing social networks resources (mesured before widowhood, in wave 4 or 6).

	Mean	s.e.	p50	Min	Max
Sn size	2.42	.03	2	0	7
Satisfaction with SN	9.07	.02	10	0	10
Number of close SN members	2.20	.03	2	0	7
Number of SN members within 5 km	1.70	.02	1	0	6
Number of SN members with weekly contact	2.21	.02	2	0	7
Number of SN members with daily contact	1.33	.01	1	0	6
Number of friends in SN	.30	.01	0	0	4
Number of children in SN	1.00	.02	1	0	5

Fig.1 displays fixed-effects regressions on life satisfaction by year sice widowhood. Given potential evidence on the gender differential in wellbeing in widowhood, the regressions are conducted by gender. There is evidence for a marked difference in life satisfaction between men and women. In particular, men seem to have a continuous decrease in life satisfaction, started one weave before the transition to widowhood, and continues in subsequent waves, with a worsening 2+ waves after the event. For women, the trend, although not statistically significant, seems to have a U-shape, with a decrease in life satisfaction in the wave of the transition, and with a consequent increase in life satisfaction with a return to pre-widowhood levels one wave after the event.

Fig. 1. Yearly changes of life satisfaction in widowhood by gender.



Note: coefficient estimates from fixed effects regressions on life satisfaction indicator for year since widowhood, the reference group is 3 or more waves before spousal death. Regressions include age, and year dummies. Plots represent point estimates with 95% confidence intervals.

We compare life satisfaction levels after the occurrence (t=0, t=1 and t>=2) to the level 2 or more years prior to the transition to widowhood (reference group) in order to determine buffering effects. The buffering impact of the SN characteristic is shown by the interaction coefficient between a specific SN characteristic and the years following widowhood. We can interpret the coefficients in terms of changes in life satisfaction. Positive coefficients show that the SN measure has a buffering effect and that people with higher SN resource experienced a smaller drop in life satisfaction than people with lower SN resource. A negative coefficient indicates that the SN aspect under consideration exacerbates the decline in life satisfaction caused by widowhood rather than mitigating its effects.

Tab.4. Bufering role of social network carateristics for life satisfactionin during widowhood. The reference group two or more waves before spousal death.

	F	M	F	M	F	M	F	M
One wave after # large sn size	0.250	-0.0337						
2+ waves after # large sn size	-0.173	0.699						
One wave after # high sn satisfaction			-0.190	-0.335				
2+ waves after # high sn satisfaction			-0.0604	-0.460				
One wave after # many close sn members					0.141	0.0510		
2+ waves after # many close sn members					-0.191	-0.657		
One wave after # 1+ nearby sn member							0.0614	-0.0295
2+ waves after # 1+ nearby sn member							0.133	0.594

Tab.4. Continues.

VARIABLES	F	M	F	M	F	M	F	M
One wave after # 2+ weekly contact	0.192	0.126						
2+ waves after # 2+ weekly contact	0.198	-0.320						
One wave after # 1+ daily contact			-0.0897	0.126				
2+ waves after # 1+ daily contact			-0.00122	0.727				
One wave after # at least one friend					0.226	0.547		
2+ waves after # at least one friend					**0.666***	**1.250***		
One wave after # 1+children in sn							0.0842	-0.197
2+ waves after # 1+children in sn							-0.0300	-0.119

Note: *p < 0.10, **p < 0.05, ***p < 0.01.

The only statisticaly significant buffering efects is observed in the case of presence of friends in the social network, where women and men with at least one friend gain respectively 0.7 points and 1.2 points more in life satisfaction than those without any friends. For the other social network measures, we did not find any significant buffer effect.

Conclusion

This study estimates the effect of widowhood for subjective wellbeing of men and women and the possible buffering effects of various social network characteristics for the transition to widowhood. Instead of focusing on well-being levels, we adopted a longitudinal approach to investigate how subjective wellbeing changes following this life event. Evidence indicates a significant difference in life satisfaction between men and women after widowhood. Men experience a continuous decrease in life satisfaction starting before widowhood, while women show a U-shaped pattern with a decrease in life satisfaction in the widowhood year and a return to pre-widowhood levels one wave later (though statistically not significant). Moreover, our preliminary results suggest that having friends in the social network serves as a buffer against the negative effects of widowhood. This effect appeares to be more pronounced for men. As for the other measures of social network characteristics, we did not identify any statistically significant correlations.