

**The Transition to Grandparenthood and its Impact on the Big Five Personality  
Traits and Life Satisfaction**

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**Abstract**

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## **The Transition to Grandparenthood and its Impact on the Big Five Personality Traits and Life Satisfaction**

In view of an aging demographic and an increased share of childcare functions being fulfilled by grandparents, intergenerational relations have received heightened attention from psychological and sociological research in recent years (Bengtson, 2001). With regard to personality development, the transition to grandparenthood has been posited as an important developmental task in old age (Hutteman et al., 2014). However, empirical research into the psychological consequences of this transition is sparse. Testing hypotheses derived from social investment theory (Roberts & Wood, 2006) in a matched control-group design (see Luhmann et al., 2014), we aim to investigate whether the transition to grandparenthood affects the Big Five personality traits and life satisfaction.

### **Personality Development in Old Age**

#### **Social Investment Theory**

According to social investment theory, normative life events or transitions such as entering the work force or becoming a parent lead to personality maturation through the adoption of new social roles (Roberts et al., 2005). These new roles encourage or compel people to act in a more agreeable, conscientious, and emotionally stable way, and are hypothesized to drive personality development. However, regarding the transition to parenthood, recent evidence failed to empirically support the social investment principle (Asselmann & Specht, 2020; van Scheppingen et al., 2016).

#### **Grandparenthood**

While we could not find prior studies investigating development of the Big Five over the transition to grandparenthood, there is some (conflicting) evidence on life satisfaction: Past research on associations of grandparenthood with well-being often relied on cross-sectional designs (e.g., Mahne & Huxhold, 2014; Triadó et al., 2014). Previous

longitudinal studies utilizing panel data from the Survey of Health, Ageing and Retirement in Europe (SHARE) showed that the birth of a grandchild was followed by improvements to quality of life and life satisfaction only among women (Tanskanen et al., 2019), and only in first-time grandmothers via their daughters (Di Gessa et al., 2019). Several studies emphasized that grandparents actively involved in childcare experienced larger positive effects to life satisfaction (Arpino et al., 2018; Danielsbacka et al., 2019; Danielsbacka & Tanskanen, 2016). However, fixed effects regression models<sup>1</sup> using SHARE data did not find any effects of first-time grandparenthood on life satisfaction regardless of grandparental investment and only minor decreases of grandmothers' depressive symptoms (Sheppard & Monden, 2019). In a similar vein, some prospective studies reported beneficial effects of the transition to grandparenthood and of grandparental childcare investment on various health measures, especially in women (Chung & Park, 2018; Condon et al., 2018; Di Gessa et al., 2016a, 2016b). Again, effects on self-rated health did not persevere in fixed effects analyses as reported in Ates (2017) who used longitudinal data from the German Aging Survey (DEAS).

## Current Study

Our study is the first to analyze personality development during the transition to grandparenthood with regards to the Big Five. To address the missing and conflicting empirical evidence, we will compare development over the transition to grandparenthood with that of matched control groups that do not experience this transition during the study period. We adopt a prospective design that tests effects of first-time grandparents against two propensity-score-matched control groups: first, a matched control group of parents (but not grandparents) with at least their oldest child in reproductive age, and, second, a matched control group of nonparents. This allows us to disentangle potential effects attributable to becoming a grandparent from effects attributable to being a parent, thus,

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<sup>1</sup> Fixed effects regression models exclusively rely on within-person variance (see Brüderl & Ludwig, 2015; McNeish & Kelley, 2019).

addressing selection effects into grandparenthood and confounding more comprehensively than previous research. Our design also controls for average age-related trends in the Big Five traits and life satisfaction and enables us to report effects of the transition to grandparenthood unconfounded by instrumentation effects, which describe the tendency of reporting lower well-being scores with each repeated measurement (Baird et al., 2010). We go beyond previous studies utilizing matched control groups (Anusic et al., 2014a, 2014b; Yap et al., 2012) in that we performed the matching at a specific time point preceding the transition to grandparenthood and not based on individual survey years. This design choice ensures that the covariates involved in the matching procedure are not influenced by the event (Greenland, 2003; Rosenbaum, 1984; VanderWeele et al., 2020). Similar approaches in the study of life events have recently been adopted by Balbo and Arpino (2016), van Scheppingen and Leopold (2020), and Krämer and Rodgers (2020).

We preregistered the following hypotheses ():

- H1

## Methods

We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study. The preregistration (and deviations from it), data, documentation of assessed variables, and R-scripts to reproduce this manuscript are available at

## Participants

## *Attrition Analysis*

## Procedure

## Measures

## **Analytical Strategy**

This design is referred to by Shadish, Cook, and Campbell (2002, p. 182) as an interrupted time-series with a “nonequivalent no-treatment control group”.

A list of all software we used is provided in the Supplemental Material.

## **Results**

## **Discussion**

Based on

## **Limitations**

Despite

## **Conclusions**

Our

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