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Does relative material wealth matter for child and adolescent life satisfaction?

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ABSTRACT

There is a substantial literature examining the impact of relative wealth or income on adult subjective well-being. Yet the relationship between relative wealth and the subjective well-being of children and adolescents remains largely unknown. This study examines the role of relative (peer) wealth in determining youth life satisfaction. Examining this relationship in the young is advantageous as children and adolescents have limited influence on their socio-economic status. Using school fixed effects, peer groups defined at the school-grade level are likely to be partially exogenous as the student's grade is largely determined by year of birth. The results suggest that relative wealth is negatively associated with life satisfaction, though mainly for males.

1. Introduction

Numerous studies have investigated the role of wealth measures, in particular income and income relative to others, in determining subjective well-being or life satisfaction in adults.[1] These studies have largely been motivated by the finding that although real average incomes have increased over time, average subjective levels have not (Easterlin, 1974). To explain this "paradox" it was suggested that utility may be a function not only of income, but also of income relative to others (Clark et al., 2008). The evidence thus far suggests that social wealth comparisons do have an influence on the life satisfaction of individuals (Ball and Chernova, 2008; McBride, 2001; Ferrer-i-Carbonell, 2005; Caporale et al., 2009).

These social wealth comparisons studies have primarily focused on adults. Examining this issue in adults is difficult: it is arduous to define who is considered part of an adult's peer group; adults may be able to choose their own peers; and adults are in a better position to alter their own socio-economic status or wealth level.

In this study we examine relative wealth effects in children and adolescents. A greater understanding of this relationship in children and adolescents is particularly important as US research suggests that social wealth comparisons are related to more serious mental health outcomes such as depression and suicide (Daly et al., 2008). As Ireland ranks fifth highest in the EU for rates of youth suicide (among those aged 14-24), it is vital to understand how wealth affects the well-being of young Irish people (DHC, 2006).[2] There is also evidence that life satisfaction may act as a buffer against the negative effects of stress and the development of psychopathological behavior (Suldo and Huebner, 2004). In addition, subjective well-being in adolescence is associated with positive outcomes in adulthood such as significantly higher levels of income (De Neve and Oswald, 2012). The potential existence of wealth effects among young people may have important implications for parents and the community. For example, whether enrolling children into a school with children from wealthier backgrounds positively or negatively affects their well-being may of concern to parents. There are also implications for policy. If the subjective well-being of children and adolescents is affected by relative position then policies to reduce the impact of wealth inequality need to be prioritized.

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[1] The terms subjective well-being, happiness and life satisfaction are used interchangeably in this study. However, it should be noted that they may reflect different concepts. Happiness is thought to reflect the more affective aspect of well-being and life satisfaction is thought to reflect the more cognitive aspect. Happiness and life satisfaction are highly correlated and though the analysis in this study focuses on life satisfaction, similar results are found when the analysis is re-run using a happiness measure.

[2] There has been a sharp upward trend in male and female suicide rates in this age-group from 1988 to 2009 (Walsh and Walsh, 2011).

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Using a nationally representative sample, the association between relative wealth and the life satisfaction of children and adolescents is examined using a number of peer group definitions.[3]

Examining relative wealth in a child and adolescent sample is methodologically advantageous. As children and adolescents have a limited capacity to alter their socio-economic status, the potential for bias is reduced when estimating the relationship between socio-economic status and life satisfaction. School-going children and adolescents spend a high proportion of their day with their fellow schoolmates and thus the problem of defining peer groups is lessened. Using school fixed effects, peer groups defined at the school-grade level are likely to be partially exogenous as the student's grade is largely determined by year of birth. Due to the cross-sectional nature of the data used in this study we are primarily interested in examining the association between life satisfaction and peer wealth and do not make any causal claims.

A test of asymmetric wealth comparisons is also conducted. It was hypothesized by Duesenberry (1949) that people compare upwards. Therefore those who are worse off than their peers may experience a negative impact on their well-being but those who are better off may not experience a positive effect on their well-being as a result of being better off than their peers.

To our knowledge this is one of the first studies to examine the effect of both absolute and relative wealth on child and adolescent life satisfaction. This study will help give an indication of whether the findings observed in adults have their origins in adolescence. To date, much of the literature has used income as a measure of wealth and status. The need for better measures has been highlighted by a number of authors (Diener and Biswas-Diener, 2002; Christoph, 2009). So far attempts to meet this need have been made in only a few studies. For example, Mullis (1992), Christoph (2009) and Dittmann and Goebel (2009). This study builds upon this research by using an alternative measure of wealth based on consumption and material possessions. The remainder of the paper is structured as follows. Section 2 provides an overview of key studies. Section 3 describe the data and the methodology employed. Section 4 presents the main empirical findings on the relationship between material wealth and well-being and discusses the validity and robustness of the results. Section 5 concludes, with suggestions for future research.

2. Background

In this section, we present a brief review of the key studies that have examined the wealth or socio-economic determinants of child and adolescent subjective well-being. We then turn to studies related to wealth comparisons.

There is now a growing literature examining the subjective well-being of children and adolescents and here we briefly summarise the key findings in relation to wealth and socio-economic status. In their study of adolescent life satisfaction, Ash and Huebner (2001) found that low income was significantly associated with low life satisfaction. Levin et al. (2011) examined the relationship between family affluence and adolescent life satisfaction in 35 countries and found a relationship between family affluence and life satisfaction across several countries. This child and adolescent subjective well-being literature suggests that there is a relationship between life satisfaction and socio-economic indicators. Becchetti and Pisani (2013) examined the relationship between household wealth and life satisfaction of secondary school students living in Rome, Milan and Genoa. They found that family home ownership, mortgages and (class) relative wealth significantly affect the life satisfaction of students.

We now turn to studies relating to wealth comparisons. Much of the research on relative wealth and income has been motivated by the work of Easterlin (1974), who found that although real average incomes have increased over time, average happiness levels have not.[4] In addition, other studies have found that individual income is positively related to individual subjective well-being. Clark et al. (2008) suggested that utility may be a function not only of income, but also of income relative to others. This would explain why a positive relationship between income and subjective well-being is observed in studies of individuals and why studies examining average happiness levels find a weak relationship.

Below we provide a brief overview of studies which directly measure the wealth or income of a reference or peer group. We start with studies which define their reference groups based on geographical characteristics and then discuss studies which use respondent characteristics as a basis for defining a reference group.

Using US panel data, Luttmer (2005) found that higher earnings of neighbors were associated with lower levels of self-reported happiness. Along similar lines, Dittmann and Goebel (2009) used data from the German Socio-Economic Panel (GSOEP) study and micro-geographic data on neighborhoods for the years 2000 to 2006 to examine the effect of relative status on well-being. It was found that individuals were less satisfied when living in a neighborhood that was better off than they were themselves. Knight et al. (2009) used data from rural China, which asked respondents about the people with whom they made comparisons. Most respondents compared themselves with fellow villagers. It was found that although income was positively related to happiness, there was also a role for relative income. Using fellow villagers as the comparison group, Knight et al. (2009) found that having an above-average income was associated with an increase in happiness and having a below-average income was associated with a decrease in happiness. Using the 1994 US General Social Survey (GSS), McBride (2001) defined reference groups by assuming that an individual compares his income to anyone five years older or five years younger than him. This is based on the idea that an individual associates most with people of his own age and as a result compares his income to theirs. He found that increases in income affect subjective well-being positively, while increases in relative-income norms affect subjective well-being negatively. It was also found that at low income levels, relative income effects are smaller and absolute income becomes more important. McBride (2001) also tested for asymmetric comparisons by running separate regressions on different sub-samples based on income. In contradiction to Duesenberry's (1949) hypothesis that comparisons are only upward, McBride's results show that the magnitude of the reference group's income coefficient is larger for the richer sub-sample than for the poorer sub-sample. Caporale et al. (2009) used the same reference group definition as McBride (2001) to analyse data from the first two rounds of the European Social Survey (ESS). They found a positive and statistically significant relationship between income and happiness. They also found that such a relationship is weakened by relative income which has a negative effect on happiness in the case of Western European countries and a positive effect in Eastern European countries. This finding is consistent with the "tunnel effect" hypothesis, which suggests that in uncertain and adverse situations people often interpret any positive signals they observe to predict an improvement in their own situation (Hirschman, 1973). Eastern Europeans' reference income may then be a source

[3] One of the advantages of examining relative material wealth in Ireland is the comparatively homogeneous composition of the Irish population. According to the Census taken in the same year as the study 88.6 percent of the population were born in Ireland.

[4] Though this finding has been recently disputed (Stevenson and Wolfers, 2008).