Social Science Research 48 (2014) 157–170

Contents lists available at ScienceDirect

Social Science Research

journal homepage: www.elsevier.com/locate/ssresearch

Intelligence and childlessness

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ARTICLE INFO

Article history:
Received 1 March 2013
Revised 30 May 2014
Accepted 15 June 2014
Available online 24 June 2014

Keywords:
Value for children
Parenthood
Childlessness
General intelligence
Savanna-IQ Interaction Hypothesis
The Lynn-Flynn Effect

ABSTRACT

Demographers debate why people have children in advanced industrial societies where children are net economic costs. From an evolutionary perspective, however, the important question is why some individuals choose not to have children. Recent theoretical developments in evolutionary psychology suggest that more intelligent individuals may be more likely to prefer to remain childless than less intelligent individuals. Analyses of the National Child Development Study show that more intelligent men and women express preference to remain childless early in their reproductive careers, but only more intelligent women (not more intelligent men) are more likely to remain childless by the end of their reproductive careers. Controlling for education and earnings does not at all attenuate the association between childhood general intelligence and lifetime childlessness among women. One-standard-deviation increase in childhood general intelligence (15 IQ points) decreases women's odds of parenthood by 21–25%. Because women have a greater impact on the average intelligence of future generations, the dysgenic fertility among women is predicted to lead to a decline in the average intelligence of the population in advanced industrial nations.

1. Introduction

Demographers have long debated why people have children, especially in advanced industrial societies where children are net economic costs (Friedman et al., 1994; Schoen et al., 1997). Among others, the question is key to understanding the causes of the fertility decline universally observed in such societies (Davis et al., 1987).

Explanations for parenthood and fertility decline range from normative (Blake, 1968; Lesthaeghe, 1983; Preston, 1986; Ryder, 1979; Westoff, 1986), to cultural or religious (Hayford and Morgan, 2008; Heaton, 1986; Mosher et al., 1992; Pearce, 2002; Westoff and Bumpass, 1973), and to rational choice (Becker, 1960, 1981; Butz and Ward, 1979; Easterlin et al., 1980; Friedman et al., 1994; Schoen et al., 1997). Empirically, we know that individuals' desire for and intentions about children strongly influence their actual fertility behavior (Barber, 2001; Williams et al., 1999); quite unsurprisingly, individuals who want to have children are more likely to have them than those who do not. But we do not know *why* some people want to have children more than others (Hayford, 2009, p. 767).

From an evolutionary perspective, however, *why people have children is the wrong question to ask.* Humans, like all other species in nature, are evolutionarily designed to reproduce. It is therefore not at all theoretically problematic that most individuals choose to have children in their lifetimes, even when they represent net economic costs. Humans have children because they are evolutionarily designed to do so. Reproduction is the ultimate (albeit largely unconscious) goal of all

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http://dx.doi.org/10.1016/j.ssresearch.2014.06.003
0049-089X/

biological existence, including humans, and everything else, like money and wealth, is a means to it. The theoretical puzzle from this perspective is *why some individuals choose not to have children despite their biological design.*

A leading evolutionary explanation for fertility decline in industrial societies is the trade-off theory (Beauchamp, 1994; Kaplan et al., 2002). The theory proposes that parents maximize their reproductive success by maximizing the joint product of the quantity and quality of offspring. For any given level of parental resources, the fewer children they have, the more they can invest in each. Since industrial societies require that the parents invest heavily in each child, they are forced to have fewer children, hence the fertility decline after industrialization.

A recent empirical test in the Netherlands (Kaptijn et al., 2010), however, does not support the trade-off theory. While the number of children in the family is negatively associated with their quality, measured by sex-specific mate value (the fewer children parents have, the higher the mate value of each child), there is also a negative association between the children's mate value and their fertility. In other words, taken altogether, parents who have fewer children end up with fewer grandchildren than those who have more children. Thus any tendency to limit the number of children in order to increase their quality cannot evolve. Perhaps this result could have been predicted from the earlier behavior genetic finding that fertility is partly heritable (Kohler et al., 1999; Rodgers et al., 2001). The fewer children you have, the fewer children your children are genetically predisposed to have.

In this paper, I propose a new evolutionary psychological explanation for why some individuals desire to have children more than others. The theory predicts that more intelligent individuals are less likely to value parenthood and more likely to choose to remain childless. Analyses of a prospectively longitudinal, large, nationally representative sample from the United Kingdom show that more intelligent men and women are more likely, early in their reproductive careers, to express a desire to remain childless for life. However, only more intelligent women (not more intelligent men) are actually more likely to remain childless for life.

2. Evolutionary origins of individual preferences and values

Where do individuals' preferences and values, such as values for or against children, come from? Why do people like or want what they do? The origin of individual preferences and values is one of the remaining theoretical puzzles in social and behavioral sciences (Kanazawa, 2001).

Recent theoretical developments in evolutionary psychology may suggest one possible explanation (Kanazawa, 2010b). On the one hand, evolutionary psychology (Crawford, 1993; Symons, 1990; Tooby and Cosmides, 1990) posits that the human brain, just like any other organ of any other species, is designed for and adapted to the conditions of the ancestral environment (roughly the African savanna during the Pleistocene Epoch), not necessarily to those of the current environment. It may therefore have difficulty comprehending and dealing with entities and situations that did not exist in the ancestral environment (Kanazawa, 2002, 2004a). On the other hand, an evolutionary psychological theory of the evolution of general intelligence proposes that general intelligence may have evolved as a domain-specific adaptation to solve evolutionarily novel problems, for which there are no predesigned psychological adaptations (Kanazawa, 2004b, 2008).

The logical conjunction of these two theories, *the Savanna-IQ Interaction Hypothesis* (Kanazawa, 2010a), implies that the human brain's difficulty with evolutionarily novel stimuli may interact with general intelligence, such that more intelligent individuals have less difficulty with such stimuli than less intelligent individuals. In contrast, general intelligence may not affect individuals' ability to comprehend and deal with evolutionarily familiar entities and situations.

Evolutionarily novel entities that more intelligent individuals are better able to comprehend and deal with may include ideas and lifestyles, which form the basis of their preferences and values; it would be difficult for individuals to prefer or value something that they cannot truly comprehend. Hence, applied to the domain of preferences and values, the Hypothesis suggests that more intelligent individuals are more likely to acquire and espouse evolutionarily novel preferences and values that did not exist in the ancestral environment than less intelligent individuals, but general intelligence has no effect on the acquisition and espousal of evolutionarily familiar preferences and values that existed in the ancestral environment (Kanazawa, 2010b).

There has been emerging evidence for the Hypothesis as an explanation for individual preferences and values. First, more intelligent children are more likely to grow up to espouse left-wing liberalism (Deary et al., 2008; Kanazawa, 2010a), possibly because genuine concerns with genetically unrelated others and willingness to contribute private resources for the welfare of such others – liberalism – may be evolutionarily novel. Even though past studies show that women are more liberal than men (Lake and Breglio, 1992; Shapiro and Mahajan, 1986; Wirls, 1986), and blacks are more liberal than whites (Kluegel and Smith, 1986; Sundquist, 1983), the effect of childhood intelligence on adult liberalism is twice as large as the effect of sex or race (Kanazawa, 2010a).

Second, more intelligent children are more likely to grow up to be atheists (Kanazawa, 2010a), possibly because belief in higher powers, as a consequence of overinference of agency behind otherwise natural phenomena, may be part of evolved human nature (Atran, 2002; Boyer, 2001; Guthrie, 1993; Haselton and Nettle, 2006; Kirkpatrick, 2005), and atheism may therefore be evolutionarily novel. Even though past studies show that women are much more religious than men (Miller and Hoffmann, 1995; Miller and Stark, 2002), the effect of childhood intelligence on adult religiosity is twice as large as that of sex (Kanazawa, 2010a).