

## **Abstract for “Information Technologies and Subjective Well-being: Does the Internet Raise Material Aspirations?”**

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In this paper, we examine whether access to modern information and telecommunication technologies (ICTs), in particular access to the internet, has an effect on individual positionality -- meaning the degree to which subjective well-being is affected by income relative to others rather than absolute income. Our research builds on a growing economic literature documenting that subjective well-being and economic decision-making are affected by how individuals see themselves within their social environment. Of particular interest in existing theoretical and empirical work is the concept of relative income. In recent theoretical work, Van Praag (2011) synthesises that 'the phenomenon of social transparency or lack of transparency plays a role in the evaluation of social subjective well-being'. We accordingly hypothesise that information sets are crucial for how people evaluate their own living conditions relative to others and therefore subjective well-being might be negatively affected by ICT-triggered rising material aspirations.

The empirical analysis in this paper delivers a systematic test of the relation between internet access and material aspirations and the findings emphasise a vital role for the internet in shaping material aspirations. First, using panel data from the European Union Statistics on Income and Living Conditions, we directly relate ICT possession to a measure of reference income. Our findings show that households in possession of a computer report needing significantly higher levels of income to make 'ends meet', after controlling for their actual level of income and a range of socio-economic characteristics. Furthermore, we find direct empirical support for the hypothesis of internet-based material aspirations, as the positive effect of computer possession prevails in regions which become more advanced in their internet infrastructure. Against the background of this positive relation between material aspirations and ICT access, we subsequently explore the implications of rising material aspirations for subjective well-being. Based on recent data on life satisfaction, ICT usage, and income from the World Values Survey, we find that individuals who regularly use the internet as a source of information are predicted to derive less satisfaction from their income, pointing to an increase in material aspirations driven by the use of the internet.

Given the limited range of papers on ICT-driven material aspirations, our paper is innovative to the existing literature in four ways. First, our paper is the first to provide systematic evidence on the role of the internet. Second, we take a closer look at how material aspiration effects differ among income groups within countries. In doing so, we relax the rigid assumption made in previous studies that the interaction between income and ICT access needs to be the same across all income groups and can assess the relevance of material aspirations effects in different parts of the income distribution. Third, we use the response to the minimum-income question, namely how much income it needs for the household to 'make ends meet', as a direct measure of aspirations to analyse the impact of ICT possession. In this way, we do not need to rely on direct survey questions but get a comparable and continuous measure of material aspirations from multiple European countries. This approach resolves some of the problems arising in other studies due to the actual reference point of individuals being unobservable to the econometrician. Finally, we resolve some of the endogeneity concerns present in previous cross-sectional studies and take

a step towards establishing a causal link between internet access and material aspirations through controlling for time-invariant unobserved heterogeneity in ICT possession in a panel analysis of European households.

Together, the empirical results from our paper corroborate the hypothesis that modern ICTs raise material aspirations via fostering relative concerns in the society and have an indirect negative impact on subjective well-being. Our paper adds to multiple strands of current economic literature. First, we provide new insights on the relation between globalisation and subjective well-being. While the literature has so far mostly focused on the aftermath of economic globalisation, we contribute to the burgeoning literature on the microeconomic implications of social globalisation on well-being. Second, the evidence on existing material aspirations directly adds to the discussion in the happiness literature on how income translates into well-being. If material aspirations are sufficiently strong, even a constant growth in income does not necessarily imply a rise in subjective well-being.

In line with the literature around the Easterlin paradox, our findings underscore the notion of external and internal norms to evaluate well-being and suggest a vital role for information technologies. Finally, our results augment the literature on the determinants of reference groups for interpersonal (income) comparisons. One might conjecture, for instance, that in the future ICT-driven material aspiration effects might be particularly relevant for less developed countries who are currently experiencing drastic advancements in information technology infrastructure and cross-national standard of living comparisons might gain in importance.