Supporting decision-making in retirement planning: do diagrams on pension benefit statements help?¹

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INTRODUCTION

This study used a controlled experiment to test whether explanatory diagrams can improve comprehension of pensions and increase willingness to contribute to a pension. The study was undertaken by the ESRI’s Behavioural Research Unit in collaboration with the Pensions Authority. Central Statistics Office (CSO) figures show that just 36% of 25-34 year-olds in employment have a pension plan. Even workers who do have a plan face replacement rates (income after retirement as a proportion of income before retirement) well below the recommended 70%.

International research suggests that failure to understand how pensions work contributes to this picture. Meanwhile, evidence from educational psychology shows that, across multiple areas of learning, comprehension can be improved by diagrams. We therefore tested whether the inclusion of explanatory diagrams on a pension benefit statement (PBS) could, first, improve understanding of how pensions work and, second, increase willingness to contribute to a pension.

METHOD

The laboratory experiment involved a representative sample of 176 individuals aged 22-55. We designed and tested two diagrams. The first illustrated how the total contribution to the pension was made up from take-home pay, tax relief and a matching contribution from the employer. The second showed how contributing more money now increased the projected pension pot and hence higher income in retirement. For each diagram, for half the sample the PBS contained the diagram


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while the other half saw the same information in more traditional table. Thus, we could test specifically for the effect of using diagrams to convey the information.

Participants were given a hypothetical scenario in which a friend was showing them their PBS and wanted advice. They read the PBS carefully before answering a series of multiple choice questions (MCQs), which tested recall of the information (e.g. “What is the total annual pension contribution?”) and comprehension of how the pension worked (e.g. “By how much would the total annual pension contribution increase if your friend were to contribute an extra €120 from their take-home pay?”). They could consult the PBS when answering the comprehension MCQs. Performance was incentivised; correct answers increased the chance of winning a €50 shopping voucher. Participants were then asked to give their friend advice on how much to contribute to the pension and to provide a rationale.

**RESULTS**

Both diagrams had marginal impacts on the ability to recall key information or to understand the basic relationships underpinning a pension. Effects were small and of marginal statistical significance. Participants particularly struggled to understand how much tax relief contributes to a pension – responses to the MCQs were at chance levels, despite over half the sample holding a primary degree.

Nevertheless, the diagrams had an impact on decision making. Participants who saw the diagram showing the impact of higher contributions on projected pension income were significantly more likely to propose an increase in contributions than those who saw the same information in a table. Moreover, participants who saw either diagram were more likely to give the associated logic behind the diagram as the reason for their advice (e.g. “you get extra money put in from your employer” or “if you invest money now it grows by the time you retire”).

**CONCLUSIONS AND POLICY IMPLICATIONS**

Diagrams did not clearly improve participants’ understanding but nevertheless altered decision making. They led them to place greater weight on contributions coming from the government and employer, and on the impact of higher contributions on pension income. One possibility is that the diagrams helped individuals to recognise the causal relationships, without conveying fully how these relationships operate. That is, diagrams help people to see that one things leads to another (e.g. putting more into your pension means the government and employer putting more in too), yet fall short of imparting full understanding of the relationships (e.g. if I put in €X more, government will add €Y and my employer €Z).

Given this, in addition to providing evidence about the value of including diagrams in communications about pensions, the present study raises a concern about the incentives that surround pensions. The composition of pension contributions, especially the role of tax relief, appears presently to be too complex for the general population to understand. This is likely to undermine the effectiveness of these incentives. The study therefore adds weight to arguments to simplify incentives designed to increase saving for retirement.