Original Article

How behavioural science can improve financial advice services

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ABSTRACT Evidence from the behavioural sciences, notably economics and psychology, has profoundly changed the way policymakers and practitioners view expert advice to consumers. In this article, we take stock of the behavioural science evidence on financial advice and explore its implications for the profession. We organise the evidence in a comprehensive theoretical framework that also serves a practical purpose: the design of behaviour change interventions. We suggest various ways in which financial advisers can use the insights from behavioural science to improve the take-up and effectiveness of their advice. Finally, we discuss ethical and practical considerations for the financial advisor wishing to put behavioural science knowledge to use.

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INTRODUCTION

We all seek to influence the behaviour of others. A Financial Adviser (FA) is no exception, seeking to influence clients' financial



behaviour through expert advice. The relationship between FAs and clients has traditionally been seen as one of information provision, but evidence is rapidly accumulating on the importance of other aspects of the advisor-advisee interaction. Financial advice is still primarily a 'people-to-people' business and therefore subject to the same influences as any other human interaction. Furthermore, FAs will often try not only to inform their clients, but also help them translate their intentions into actions and/or persuade them. Our understanding is that such direct forms of influence are an indispensable part of the financial advice process, as long as they comply with legal requirements and industry best practice.

In this article, we review the evidence on the 'broader picture' of financial advice and explore its implications for the profession. We believe that FAs with a deep understanding of their influence on clients, as well as the skill to ethically and responsibly impact upon them, will have a competitive advantage in providing financial advice that corresponds to client needs, improves client satisfaction and, ultimately, generates new business opportunities.

There is nothing new in the idea of influencing people, but there is certainly something new in what we know about how to do it. Research from the behavioural sciences, notably psychology and economics, has revealed countless ways in which people's financial choices systematically diverge from models of rationality. Whether we are aware of it or not, we are influenced greatly by emotions, context and other details of the decision-making environment. Behaviour is not so much thought about, it simply comes about.

Experimental research has shown that we make many of our decisions by the use of *heuristics* – rules of thumb that allow the human brain to cope with complex choice environments (Gigerenzer and Todd, 1999). Although these heuristics save the brain from computational overload, they can also lead to erroneous and biased decisions, particularly in the financial domain (Kahneman and Riepe,

1998). To help people avoid such errors, the financial advice industry should offer services based on a realistic picture of human psychology – a picture that takes into account heuristics, emotions and other 'behavioural' influences. This approach has already proven effective for various financial decisions, such as choosing credit products and savings behaviour. For example, showing people a digitally aged picture of themselves increases their propensity to save (Hershfield *et al*, 2011).

The behavioural science perspective on financial decisions is thus growing in prominence, yet little is known about its implications for financial advice services. We aim to fill this gap in the literature through two key contributions. First, we present a summary of the empirical evidence on factors that influence the uptake and effectiveness of advice. Second, we organise the evidence in a comprehensive theoretical framework that can also be used to design behaviour change interventions. We also give some examples of how an FA might proceed to design such evidence-based interventions. Our comprehensive framework that is inspired by the literature on persuasion (Cialdini, 2007) and 'nudging' (Thaler and Sunstein, 2008), allows FAs to design interventions that work on several levels: building capability, creating opportunity and providing cognitive and automatic motivation.

LITERATURE REVIEW

How do financial advice services influence investors' decisions? This depends on many factors. Who are these investors, what are they told by whom and how do they respond to the advice? In this section, we discuss the empirical evidence on these questions from the *behavioural sciences* – disciplines that test hypotheses on human behaviour by systematically observing people in different settings. The behavioural science literature on giving and receiving advice has expanded considerably in recent years, most of it in the fields of behavioural finance, economics and social psychology. The contributions we discuss here are varied – they

range from controlled laboratory experiments with stylised institutions to field studies based on surveys or audit exercises. But they have one thing in common: they all focus on observed behaviour, on what people *do*.

Our focus in this review is on financial advice to retail clients. This does not mean, however, that the findings we discuss are not applicable to product advertising, boutique advisory services and interactions with professional investors. In the conclusion, we discuss how our findings might extend to other financial advice settings.

Content of financial advice

Following most textbooks in finance and economics (for example, Bodie et al, 2011; Hull, 2012), portfolio theory prescribes that prudent investors hold a well-diversified, lowcost portfolio that reflects their appetite for risk. Are FA's recommendations in line with this theory? Canner et al (1997) look at advisors' advertised portfolio recommendations for investors with different risk profiles and note that the recommended portfolio ratio of stocks to bonds goes up as investor risk appetite increases. They report that this pattern is inconsistent with the Capital Asset Pricing Model, according to which investors' relative cash holdings should decrease with risk appetite, with a constant ratio of stocks to bonds. These results suggest that FAs consider factors other than the historical return data necessary for recommending portfolios on the efficient frontier. These factors may be intangible and 'behavioural' in nature, such as clients' need to be convinced that the suggested portfolio matches their risk profile. Del Guercio and Reuters (2011) argue there are two types of retail investors: those who only care for fund returns, and those who derive intangible benefits of making advised investments. They present data that supports the notion that mutual fund companies target these two consumer segments separately. Providing evidence from market outcomes, Bergstresser et al (2009) report that broker-sold funds deliver significantly lower risk-adjusted returns than

direct-sold funds. The authors point out that this difference may be because of the intangible benefits that broker services provide to some.

Providing direct evidence on FA's face-to-face advice strategies is the audit study by Mullainathan et al (2012). They randomly assign professional auditors to unwitting FAs to get advice on a predesigned investment portfolio. Instead of endowing all the auditors with well-diversified, low-cost portfolios, the authors purposely design some of the fictional portfolios of their auditors to mimic common investment biases. They report that the recommendations of FAs are in line with some portfolio theory predictions, such as advising against holding employer stocks. Furthermore, they find that FAs are most supportive of clients with low-cost, well-diversified existing portfolios. But they also report that FAs often recommend actively managed funds with higher fees and that many FAs recommend making changes to lowcost, efficient portfolios. The latter result could reflect overzealous advice giving, but it does suggest that not all professional advice is financially beneficial.

The portfolios of advised investors

Related to the question of advice content, and perhaps more relevant, is whether advised investors hold different portfolios than nonadvised investors. Chalmers and Reuter (2012) and Hackethal et al (2012) find that brokeradvised retirement portfolios are riskier than self-directed portfolios, and that broker-advised portfolios underperform self-directed portfolios. By contrast, Kramer (2012) and Kramer and Lensink (2012) find that advised portfolios are better diversified and achieve better risk-adjusted returns. The latter two studies control econometrically for the endogenous choice of using an advisor, thus mitigating the potential for selection effects (better investors are more likely to receive advice) to explain the result. Taking these results at face value, they indicate that, holding the client's level of financial literacy and experience constant, advised portfolios perform better. It could be that the clients in the samples



of Kramer and Lensink are better placed to use advice because of their experience: they are bank customers with previous exposure to financial advice, whereas Chalmers and Reuter analyse the choices of university employees and Hackethal *et al* look at all customers of a retail bank. Another potential for the divergent results is that the FAs in the studies of Kramer and Lensink dataset received a fixed wage, whereas those analysed by Chalmers and Reuter and Hackethal *et al* received fees and commissions.

Interestingly, financial advice does not always lead investors to change their portfolios – in a study of a randomised advice offer to customers of a brokerage firm, Bhattacharya *et al* (2012) report a low take-up rate (5 per cent) and only a slight increase in portfolio efficiency for those who receive advice. It should be noted that the advice in this final study was provided by e-mail and over the phone, instead of face to face.

Who looks for financial advice?

Next, we consider the role and characteristics of the client in the financial advice process. Many studies find that women are more likely to seek out financial advice than men (Hung and Yoong, 2010; Hackethal et al, 2012), although not in all contexts (Grable and Joo, 1999, 2001). Another important factor is people's financial literacy. Hung and Yoong (2010) report data from a laboratory portfolio selection task and find that people with low financial literacy are more likely to accept financial advice and pick more efficient portfolios as a result. But the results of representative surveys show that this abilitycorrecting mechanism may not actually work in everyday life: typical financial advice clients are richer, older, better-educated and more experienced investors (Lee and Cho, 2005; Hackethal et al, 2012).

Going beyond demographic variables, other factors known to affect demand for advice are people's psychology and emotional state. Meier and Sprenger (2013) report that those who value the future more are more likely to use

financial advice. Gino *et al* (2012) find that people who experience anxiety are more likely to seek out, and rely on, advice. The latter two findings could be related, as expressed by this quote from Barlow (2004): '... the capacity to experience anxiety and the capacity to plan are two sides of the same coin'. Some anxiety about the future might indeed be good for people's financial decisions – Dolan and Metcalfe (2012) find that people with a negative attitude are more likely to open a savings account, and Hershfield *et al* (2011) find that showing people a computer-aged image of themselves increases their propensity to save.

Advice delivery – the communication channel

We now look at some aspects of how the advice is delivered, abstracting from the advice content and the parties involved. First, there is plenty of evidence that the communication channel matters. Ciccotello and Wood (2001) simulate the process of procuring investment advice from live advisors (student participants) and from online sources. They report that the recommendations from both sources of advice are similar, but live advisors are better at taking the particularities of wealthy clients into account. Riegelsberger et al (2005) present laboratory participants with financial advice provided through different channels: video, audio, virtual chat, text only and text accompanied by a photo of the advisor. They find that participants have a preference for audio and video advice, but that their financial risk taking is sensitive to any form of advice provided. Obviously, the latter result may not arise in real-world settings, where investors have access to more than one type of advice and typically choose their own preferred channel.

When evaluating different types of on-line advice, Sillence and Briggs (2007) report that consumers are highly sensitive to indicators of trustworthiness, such as known financial brands and personal recommendations, parallels with the off-line advice process (tailored information, personal involvement in the advice process and

identifiability of the people behind the Website) and Website design in line with the rest of the financial sector. Pi *et al* (2012) find that consumers' level of trust in advice Websites is influenced by perceptions of transaction security, reputation, design quality and ease of navigation.

Advice delivery – packaging, framing and priming

How FAs 'package' their advice is another important factor. These effects can be very subtle: Brown et al (2008) show that the majority of people prefer a savings account to a life annuity when the choice is framed as an investment decision, but this pattern reverses when the choice is framed as a future consumption decision. Presentation effects also affect people's willingness to invest in riskier and more rewarding assets, such as stocks. Laboratory and field studies suggest that the extent to which this happens depends on how portfolio risk is presented. Anagol and Gamble (2013) report that people select riskier portfolios when asset portfolio data is presented as aggregates, instead of a list of individual assets. Bateman et al (2014) report that people choose riskier portfolios when risk is presented in a graph, rather than expressed as text percentages. The authors also report that people with lower financial literacy are more susceptible to presentation effects. Furthermore, letting people 'experience' risk by letting them draw sample returns from a historical returns distribution leads them to choose riskier and more rewarding portfolios, without increasing regret or anxiety afterwards (for example, Kaufmann et al, 2013).

People's decisions are also greatly sensitive to what is presented to them as the default option. Madrian and Shea (2000) report that people treat the default investment option in a US retirement plan as a *de facto* endorsement of this fund, and 71 per cent of people select it. Data from Swedish pension system reforms show that the default option is strong even when many alternatives are available, fund companies aggressively advertise their offerings and the government runs a nation-

wide information campaign: Engström and Westerberg (2003) report that 33 per cent of Swedes stuck with the default investment option. Defaults are not just effective because they signal endorsement – they are also effective because they capitalise on people's inertia and turn inaction into a choice by itself.

Another subtle influence on decisions are socalled peer effects: Duflo and Saez (2003) show that people are more likely to enrol in a university pension plan when their co-workers attend a retirement benefits information fair. People like to imitate their peers: Bursztyn et al (2014) show that investors are more likely to invest in a certain asset when others have done so or have simply indicated a desire to do so. However, providing information on peer choices does not always move people towards the planned or socially desirable outcome: Beshears et al (2011) find that informing employees of a manufacturing firm of their coworkers' savings rates actually *lowers* the chance that these employees would subsequently enrol in their employer's pension plan.

A final aspect of financial advice that can be packaged in different ways is its price. There is plenty of evidence that people place a value on paid-for advice: they are more likely to follow advice they paid for than free advice (Gino, 2008). Presentation of the advice service matters: Godek and Murray (2008) report laboratory evidence that people pay more for advice when they are primed to think about future investment decisions, than when they are primed to think about past decisions. How advice is best paid for is another question. Owing to policymakers' concerns around the impartiality of commissions-based advice, some jurisdictions have now moved to a fees-based advice model. This solution may exclude some people from the benefits of financial advice, as people are reluctant to pay for advice before they see the benefits (Hoffman et al, 2012).

FA characteristics

The characteristics and behaviour of the FA are an important aspect of the financial advice



process. Perhaps unsurprisingly, people value advisors with more experience (Harvey and Fischer, 1997). Interestingly, this does not mean that FAs should be looking to come across as very technical: Joiner and Leveson (2006) find that clients give higher ratings to FAs who use less technical language and investment jargon. It is also not given that more confident advisors always have a bigger impact. Although there is evidence that people are more likely to follow advisors with extreme and confident judgments (Van Swol and Sniezek, 2005; Sah et al, 2013), this bias tends to disappear when information on advisors' accuracy is available (Tenney et al, 2008). Moreover, Karmarkar and Tormala (2010) present results from an experiment in which experts are actually perceived as more persuasive if they admit some uncertainty about their recommendations.

People also take more advice from trusted advisers (Siegrist *et al*, 2005). This finding is in line with the research on financial advice Websites presented earlier – clients look for indicators of trustworthiness such as personal recommendations, trusted financial brands and a degree of tailoring and personal involvement in the advice process (Sillence and Briggs, 2007; Pi *et al*, 2012). These findings provide an explanation for why Websites with generic financial advice are unlikely to have a strong influence – they offer little personalisation and it will take them time to become a trusted source.

There may be a 'dark side' to trustworthiness, however. Paradoxically, advisors who disclose a conflict of interest to clients thereby build so much trust that their clients follow biased advice that is in their advisor's, but not their own, best interest (Loewenstein *et al*, 2011). Other experiments show that this social conflict is somewhat mitigated if the disclosure is done by a third party, or when the client is given time and privacy to make his advised decision (Sah *et al*, 2013).

Finally, there is some evidence that FAs' similarity to their clients matters. Gino *et al* (2009) report that people in a phone survey experiment are more likely to follow advice

from hypothetical advisors that are similar to them in terms of gender, education, age, region and political affiliation. These effects may be similar to the findings on social influence on retirement and investment decisions (Duflo and Saez, 2003; Bursztyn *et al*, 2014).

THEORETICAL FRAMEWORK

The empirical evidence presented in the preceding section shows that people's demand for, and response to, financial advice is sensitive to many aspects of the advice process. But what does this evidence teach us about human behaviour more generally? Can we use it to learn how to better influence people's financial decisions? In this section, we present a comprehensive theoretical framework that helps organise the empirical evidence on financial advice.

The framework we use is based on the 'COM-B system' for behaviour change (Michie et al, 2011). In this system, Capability, Opportunity and Motivation (COM) interact to generate Behaviour (B). The three 'sources' of behaviour are thus necessary and sufficient for the performance of a specified volitional behaviour. This framework serves particularly well as a didactic tool: its simplicity makes it tractable, vet it is comprehensive enough to accommodate all of the evidence. In addition, it was specifically designed to '[link] to an overarching model of behaviour' (Michie et al, 2011, p. 4). This feature makes the framework particularly suitable for the data that is the focus of this article: empirical evidence from the behavioural sciences. Finally, the framework is also useful for designing evidence-based behaviour change interventions - both FAs and researchers can use the framework to come up with new ways of influencing people's financial decisions. Although we do not claim that our framework of choice is the definitive theoretical framework for the study of financial advice, we believe it is a useful, intuitive and compelling way of presenting the empirical evidence from the behavioural sciences.



Components of the framework

Figure 1 shows the components of the COM-B system – the source components *Capability*, *Opportunity*, *Motivation* and the outcome component *Behaviour* – and their interactions. Each of the three sources of behaviour consists of two sub-components. Capability is either physical or psychological; Opportunity is either social or physical; Motivation is either reflective or automatic. Opportunity and capability do not only affect behaviour directly, but also indirectly through motivation. Behaviour has a feedback effect on all three source components. Next, we explore each of these components and mechanisms in the context of financial advice.

Capability

Physical capability

The physical component of behaviour change is unlikely to affect healthy individuals' capability to use financial advice. People with disabilities or the elderly, however, might be physically impaired in their abilities to receive advice. To cater to these groups, FAs should offer their advice in various formats while being aware of the limitations of these media – as suggested by the literature on advice packaging, text-based investment descriptions in braille or read out to a visually impaired client might be less persuasive than graphical illustrations. In essence, the key capability is psychological: it is the FA's responsibility to ensure that the delivery format for those with a physical impairment is appropriate.

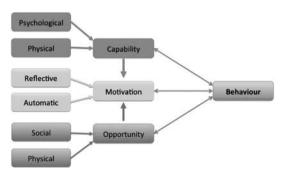


Figure 1: The COM-B framework of behaviour change.

Psychological capability

Psychological capability means having the necessary knowledge and cognitive skills to engage in purposeful behaviour. People can increase this capacity through acquiring knowledge and training their emotional and cognitive skills. Some clients may need to be educated about the concept of interest compounding before they decide to allocate more funds to retirement savings. Others may require education on the principle of diversification, whereas yet others will already have a well-diversified investment portfolio. For the latter client group, it is important that FAs resist the urge to tinker with the portfolio but instead focus on other aspects of investing. Clients may instead be in greater need of information about fund fees, tax efficiency or ways of effectively monitoring their investments.

With respect to providing information, the behavioural science evidence suggests that FAs should be seen to provide accessible, unbiased advice. There is little to gain from using overly technical language, and neither should the FA come across as too confident in her recommendations. Both of these strategies increase the social distance between the FA and client, focusing the latter's attention on the lack of similarity between the two. The advisor who admits a degree of uncertainty about the outcome of certain investments and markets, as is appropriate for risky investments, will be more persuasive. Another important aspect of information provision by the FA is that she should be aware of the different ways of presenting the same information, as discussed in the section on advice packaging above.

Emotional skills are an important part of an effective FAs toolkit, too. One particularly important skill is detecting key emotions in clients. One of these key emotions is anxiety. The evidence suggests that a degree of anxiety or at least concern for one's future well-being is an important motivation for clients to start saving and investing. But when clients start to accumulate significant assets, their anxiety can be a hindrance to the performance of their



portfolio. The evidence suggests that the more frequently people check their portfolio, the smaller their appetite for risk. And people with a safer portfolio will have to accept lower returns, forcing them to work longer or put more money aside to achieve a certain level of comfort in retirement. FAs can play a role in mitigating their clients' anxiety, for example, by carefully choosing the frequency with which clients receive updates about their portfolio. This frequency can even be negotiated with the client beforehand.

There is another reason why FAs should be mindful of their clients' emotions and other intangible needs. According to the research on brokered funds discussed above, there are two types of investors in retail funds: those who look for the lowest fees and those that put a value on advised choices. Although the majority of an FA's clients will not necessarily lie on the extremes of this scale, it is important that the FA identifies which of these types most closely corresponds to the client in front of her. The former type of investor may simply be looking for information to supplement her own independent research. The latter type of investor may be looking for more coaching, personalisation and a human component in the investment process – conversations about what a given strategy will afford them in retirement and regular updates about their investment portfolio.

Opportunity

Social opportunity

Social opportunity is afforded by the cultural milieu that dictates the way that people think, including the set of shared values and practices that characterise institutions and groups. As discussed above, social influence and people's perception of the default option can be tremendously powerful. Therefore, statements like 'most of your colleagues follow this strategy' or 'the default for people of your age is to set 40 per cent of your income aside' are likely to be more convincing than the FA's

personal opinion. This strategy of using information on social norms and choices of peers is also likely to be an effective way of acquiring new clients — as the evidence discussed above shows, people often pick their FA based on personal recommendations. The one caveat with the use of social proof is that FAs should be careful not to give clients the impression they are using a 'one size fits all' approach — clients value a personalised service and a portfolio that is designed to suit the particularities of their financial situation.

Physical opportunity

Physical opportunity concerns the technology or choice infrastructure available to people. In terms of technology, the FA will often be able to access a range of technical tools that can add value to the advice process. FAs regularly use technology on their clients' behalf for calculating the risk and return of a portfolio or retirement fund contributions to produce a desired retirement income and age. The evidence suggests that in performing these tasks for a client, it is important that the FA comes across as knowledgeable, but not too technical. The same applies to using technology to make investment risk intelligible to clients. The behavioural science evidence shows that certain ways of presenting investment risk (aggregate portfolio measures, graphical displays, sampling annual returns from a historically representative distribution) can make clients more comfortable with the risk associated with higher-return assets.

The FA may also act as 'enabler' for investment in funds and other assets. Clients who are unfamiliar with the procedures for investing will turn to the FA for assistance. In some cases, the FA will actually take over the management of the client's investments and savings. Combined with the behavioural science evidence that more anxious and less financially literate people are more likely to follow advice, this position gives the FA both power and responsibility. For example, FAs who manage their clients' funds are responsible

for giving clients regular updates on their portfolio. If these updates are too frequent or focus too much on short-term performance comparisons, clients might get nervous in bear markets and exit the market at low price levels. FAs should therefore make sure their update frequency strikes a balance between regular information provision and over-reporting. The solution proposed by Looney and Hardin (2009), to use a Decision Support System restricting clients' opportunities to withdraw their investment, could be a step in this direction.

Clients may actually want to voluntarily restrict their opportunities for changing their portfolio. For many savings accounts and funds, this makes financial sense - investment opportunities without immediate access to funds typically have higher rates of return. Second, clients may use their agreement with the FA as a so-called commitment device to leave their investments alone (Bryan et al, 2010). The underlying logic is one of creating barriers to undesirable behaviour: it is a lot harder to withdraw funds from a savings account managed by an FA than one that is self-managed. Furthermore, clients will often welcome the opportunity to pre-commit to certain savings and investment goals (Thaler and Benartzi, 2004). The research on pre-commitment suggests that FAs can play a role as external enforcers of pledges to save a certain percentage of their income or refrain from spending windfall gains. Even if the FA cannot strictly enforce a client's commitment, simply prompting clients to write down the commitment can increase the likelihood they will follow through with their plans (Martin et al, 2012).

Motivation

Reflective mechanisms

Motivation is defined as brain processes that energise and direct behaviour, encompassing *reflective* and *automatic* mechanisms. Reflective processes involve evaluations and plans – these are the variables usually targeted by traditional

financial marketing, which is focused on providing information and economic incentives (see Campbell, 2006). The lessons here are straightforward: FAs should provide prospective clients with a financial incentive to use their service and follow their recommendations. As illustrated in the discussions on client anxiety and commitment devices above, psychological factors affect long-term investment outcomes throughout the investment cycle. Reflective motivations to take up advice should therefore also take into account the FA's value beyond forecasted improvements in portfolio and tax efficiency.

When it comes to motivating the client's own behaviour, for example, putting money aside for retirement, reflective motivation is part of familiar techniques such as planning and goal setting. The evidence suggests that these techniques are most effective when combined with physical opportunity restrictions such as the commitment devices discussed above.

Automatic mechanisms

The process of reflection could be viewed as a cost-benefit analysis, but there is an important question to answer first: which costs and benefits? The evidence discussed above strongly suggests that clients will be influenced by choice context. But it is not obvious what will attract their attention in a given context: depending on being in a savings or a consumptions mindset, their attention may be drawn to different aspects of the investment options. Furthermore, attention also matters for the weighting of outcomes in reasoned tradeoffs: people will put more weight on their future well-being if they have been primed to think about their future self. These attention effects are just two examples of motivational factors that are automatic - they happen quickly and unconsciously.

Automatic processes are associative in nature and comprise a class of mental phenomena such as habits, impulses and heuristics. Much of the research discussed above, such as the results on FA similarity, trustworthiness and advice



packaging, provides evidence that such processes exist. These processes can be broken down into more basic motivations that drive human behavior in general, as is done in dualsystem models of behaviour like the 'emotional brain' concept of LeDoux (1996), Stanovich and West's (2000) 'System 1' or theories that focus more explicitly on automated behaviours, such as the NUDGE (Thaler and Sunstein, 2008) or MINDSPACE framework (Dolan et al, 2012a, b). For example, the latter framework uses the concept of inertia to explain why setting defaults is a powerful way of influencing people's choices. Another example concept from this framework is people's tendency to imitate others: it is used to explain why people are sensitive to seeing their own behaviour as divergent from a social norm (Dolan et al, 2012b).

As shown in Figure 1, behaviour can also have an effect on itself: simply performing an action can make someone more likely to perform this action again in the future. This process of habit formation is largely driven by automatic processes. The MINDSPACE framework explains this tendency through the 'Ego effect' – people want their future actions to be consistent with their past actions. The FA can play a role in this process: by making clients put money aside for their pension, the FA can change the clients' perception of themselves as people who care about their future well-being.

The FA may also take automatic motivations into account when communicating the price of advice. If clients put the price of financial advice and the long-term wealth gains in the same 'mental account' (Thaler, 1985), they may be more willing to pay for financial advice services than if they evaluate the decision to purchase advice separately. If FAs succeed in getting their clients to integrate financial advice fees in a bigger picture of wealth accumulation, it may not be necessary for the FA to rely on commissions.

INTERVENTIONS IN PRACTICE

We hope that our theoretical framework will serve a useful tool for those wishing to design behaviour change interventions. In the previous section, we have given many examples and ideas. We will now discuss some ethical and practical considerations.

Ethics

Putting behavioural science knowledge to use will undoubtedly raise concerns about whether using this knowledge is ethical. For example, an FA could frame final product recommendations in ways that yield greater commissions for the FA without offering any value for the client. Although we recognise that this is possible, we would suggest that most FAs would see this approach for the fool's game that it is. Evidence supports the notion that not only can the unethical deployment of these techniques lead to an irreversible erosion of trust, it can also negatively impact more broadly on the reputation of the FA or her employer (Neidert and Cialdini, 1995). We assume that the majority of financial advisors will be interested in creating long-term, sustainable relationships with their clients based on suitable advice. In any case, it is important that advised purchases of financial products are recorded clearly and clients are provided with all relevant information and documentation, should they change their mind.

When a conflict of interest nonetheless exists, we believe that any resulting unethical behaviour does not originate with the knowledge of behavioural science techniques. Just as with any sales or marketing technique, knowledge of behavioural science does not in itself give rise to unethical advice. In principle, therefore, it seems entirely ethical to provide recommendations in a way that 'goes with the grain' of how consumers make decisions. Indeed, if the FA has worthwhile advice or a financial product that meets the client's needs and circumstances, techniques such as advice packaging are simply didactic devices. What is important, however, is that consumers retain the freedom to choose. Especially, the arrangements between FA and client in which the client commits to a certain course of future

Table 1: The MINDSPACE effects in practice

Effect	Definition	FA application
Messenger	We are heavily influenced by who communicates information to us	 FA demonstrates their industry knowledge, credentials and experience before making any recommendations or arranges for some else to do this FA ensures credentials are made salient on business cards, letters of introduction and Website pages FA is willing to admit small weakness to recommendations before pointing out advantages FA looks for and points to genuine similarities that exist themselves and the client
Incentives	Our responses to incentives are shaped by predictable mental shortcuts such as the avoidance of loss, hyperbolic discounting and mental accounting	 FA frames products optimally for example less that \$1 per day rather than \$350 per year FA frames recommendations in terms of losses rather than gains FA aligns their recommendation to people's tendency to have high discount rates for today for example, by presenting scaled fees FA seeks to understand the various 'money pots' that a client uses to divide up their income and expenditure, and then focuses on those mental accounts with the most discretionary expenditure or 'wriggle room'
Norms	We are strongly influenced by what others do	 FA point to the desirable behaviours and decisions of comparable others FA ensures that mechanisms are put in place (for example, at annual review meetings) to reinforce these desirable behaviours over time FA uses injunctive norms (what others believe ought to be done) to drive the adoption of new products and financial behaviours
Defaults	We 'go with the flow' of pre-set options	 FA considers client situations where a single best course of action exists to employ defaults FA enhances the influence of defaults by including lost language to enhance message persuasiveness
Salience	Our attention is drawn to what is novel and seems relevant to us	 FA pays attention to the initial anchors they use and the order in which they present options FA considers splitting product and professional fees into several components FA ensure that written communication are succinct, accessible and have clear call to action
Priming	Our acts are influenced by sub-conscious cues	 FA considers in advance, the locations of client meetings (for example, uses a home office rather than a kitchen or living room) FA uses insignia on Websites and images on letters and communications that are appropriate to the context and that prime a client's attention to the topic at hand
Affect	Our emotional associations can powerfully shape our actions	 FA uses case studies and stories to 'orientate' clients to a future feeling they may encounter for example, guilt and regret as well as positive emotions FA asks clients to consider their 'future self' as a mechanism for future financial planning



Table 1 (Continued)

Effect	Definition	FA application
Commitments	We seek to be consistent with our public promises, and reciprocate acts	 FA looks for and asks for small commitments in the early stages of client development for example, to commit to completing a questionnaire To increase the likelihood of client action and where appropriate, FA looks for ways for the client to make public commitments and for those commitments to be active for example, written down FA seeks ways to create client obligations by providing personalised and significant help and assistance first
Ego	We act in ways that make us feel better about ourselves	 FA compliments clients on the previous good decisions they have made FA demonstrates how the small steps a client makes towards financial independence is both desirable and ego enhancing FA ensures that recommendations are aligned to a client's values

action require the chance to 'opt out' at a preagreed cost.

Choosing the right mix

The FA who wants to use behaviour change techniques to increase the take-up and effectiveness of advice will have to make a choice between the approaches we have discussed. The choice of technique depends crucially on the context and the kind of behaviour the FA is trying to influence. For example, in the early stages of client engagement the FA's focus is on developing a relationship and building trust. Behavioural insights on creating social opportunity will likely be most effective at this stage. But if the context requires accurate and efficient decision making, such as insurance product or pension plan choice, then techniques that act upon motivational factors are more appropriate.

Given the number of behavioural insights and techniques that we have discussed, not to mention currently ongoing research, the FA looking to apply these insights might feel overwhelmed or spoilt for choice. As a starting point, we recommend the use of a more specific behaviour change framework as a 'checklist' to explore the options available. Examples of such

frameworks are NUDGE (Thaler and Sunstein, 2008), MINDSPACE (Dolan et al, 2012a, b) and EAST (Behavioural Insights, 2014). These frameworks have been developed with the (non-academic) practitioner in mind and have played an important role in the rise of behaviourally informed policymaking (Shafir, 2012; Oliver, 2013). In the course of several years of helping policymakers and business leaders design interventions with the MINDSPACE framework, we have noticed that many practical, creative and effective applications of behavioural insights are generated by systematically discussing the nine MINDSPACE effects. To illustrate, we have included an overview of the MINDSPACE effects applied to financial advice in Table 1.

Finally, a word of caution: more behavioural insights are not always better. For example, in the case of the MINDSPACE model, not every single one of the nine effects needs to be 'covered' in order to design the optimal behaviour change intervention. In fact, the opposite will typically be the case. For example, Shu and Carlson (2014) find that the greater the number of persuasion techniques used in a communication or influence strategy, the more people will resist it. Other studies find that combining effects may result in one effect



crowding out another. This is especially true when the individual effects gain their persuasive power by triggering different motivations (Gneezy and Rustichini, 2000; Martin *et al*, 2014).

CONCLUSION

Helping people with their financial decisions requires a certain level of knowledge and skill. In this article, we have reviewed extensive evidence that this skill set comprises more than just financial knowledge. Advising people on their finances means not only knowing their choice set, personal situation and stated objectives, but also their emotional responses, decision-making mindset and other hard-toobserve factors. The FA who truly understands such 'behavioural' factors will be better placed to make recommendations that are sustainable and financially beneficial. Empirical evidence suggests that a substantial part of the population values the intangible benefits of good financial advice and will continue to pay a premium for them.

We believe that many of the behavioural insights we have discussed above apply not only to retail financial advice. Some of the insights on client characteristics, framing and priming will be valuable for the design of advertising materials. Moreover, financial advisors to governments and business will undoubtedly also benefit from taking some of the lessons from the literature on personal interactions to heart. But decision making in these environments is likely to feature more complex technology. More research is needed, especially on the inputs and outputs of the mathematical and computational models used by such institutional decision makers.

Turning the findings of a varied and evolving research programme into systematic knowledge has been a daunting task. Although we do not claim to have found the definitive framework for behavioural insights and/or financial advice, we hope to have shown the reader the benefit of organising empirical evidence in a behaviour change framework. We especially hope we have made the evidence more accessible. This is particularly relevant because one of the more

exciting developments in behavioural science research is the convergence of academic and practical best practice, based on field experiments. We welcome this development and encourage more collaboration between academics and practitioners in designing field experiments on the effects of financial advice. More generally, we look forward to seeing more progress in the scientific study of financial decision making, and the benefits it brings to consumers and their advisers.

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