# The Big Five Personality Traits (OCEAN) and Financial Planning: A Narrative Review and Recommendations for Advisors

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#### **Abstract**

Financial planning has moved beyond a purely economic model and now incorporates aspects of behavioral economics and counseling psychology to better serve clients. In this review, we suggest that personality psychology, particularly the *Big Five* or *OCEAN* model of general personality, might also be useful in financial planning. Financial planners understand different clients with different personalities bring different opportunities and challenges into the planning session, but planners might benefit from a more formal understanding of client personality. To this end, we describe the Big Five traits—*Openness to experience*, *Conscientiousness*, *Extraversion*, *Agreeableness* and *Neuroticism* or *OCEAN*—and the basic personality science surrounding them. We next examine how each of the OCEAN traits is associated with key financial outcomes including: *income*, *net-worth* or *wealth*, *financial literacy*, *financial risk tolerance*, and *financial happiness*. We discuss profiles of the Big Five traits, including *Resilient*, *Under controlled*, and *Over controlled* profiles. Finally, we discuss some potential benefits associated with incorporating personality science into financial planning research and practice.

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#### Introduction

The field of economics assumes "rationality" in decision making (Tucker, 2023). However financial planning professionals regularly observe what they perceive to be "irrationality" in decision making. It is clear that individuals are basing financial decisions on more than optimal economic outcomes. In response, the CFP Board

of Standards has added psychology to the CFP exam curriculum with topics such as behavioral finance, interpersonal financial conflict, basics of counseling, communication, and coping with crises (CFP Board, 2023). These topics can be categorized into two broad psychological fields of study: behavioral finance (also referred to as judgment and decision making or JDM) and counseling psychology. This is a great start for

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appreciating that individuals do not think about finances in purely rational ways and that discussions between a financial planner and a client often will tap into psychological issues and demand some level of counseling-like skills.

Noticeably missing from this list, however, is personality psychology. Personality psychology defines and measures individual differences in personality traits, dynamics, and narratives, and relates these individual differences to important applied and theoretical outcomes. Two recent working papers by the Federal Reserve (Green et al., 2023) and the National Bureau of Economic Research (Jiang et al., 2023) suggest that economists are beginning to explore and research personality and financial outcomes, and a

growing body of literature in financial planning, psychology, business, and related fields suggest an emergent interest in this topic. Given our backgrounds, we have written this review from the perspective of personality psychology, but the movement toward understanding clients through the lens of personality traits is widespread across disciplines. For example, a recent meta-analysis (Alderotti et al., 2023) examined over 60 peerreviewed articles (with nearly 900 effects analyzed) published between 2001 and 2020 that explored personality's relationship to income alone. We imagine a more complete model of financial psychology to include (a) personality, (b) behavioral finance, and (c) counseling and therapy as shown in Figure 1.



Figure 1. An Integrated Model of Financial Psychology

The goal of this review is to introduce the field of financial planning to this third aspect of financial psychology, personality psychology. To this end, we will review the most widely accepted general model of personality: the *Big Five model* of personality, also known as the *Five Factor model* or by its acronym *OCEAN*, and its relationship with important financial outcomes. We hope to convince researchers and financial planners that an individual's financial behavior—which may seem irrational or at least sub-optimal economically—may become more rational when factoring in the individual's unique personality. (Note: we can imagine an expanded financial

psychology that includes other individual differences like attitudes, or numeracy [Peters & Bjalkebring, 2015], positive psychology like happiness, relationships science, cultural psychology, and even neuroscience; our argument for the utility of personality is not meant to be exclusive.)

We will explore the OCEAN model in detail below, but briefly the Big Five OCEAN traits are: *Openness to experience*, or a creative, aesthetic, and philosophical approach to life; *Conscientiousness*, or a dutiful and organized approach to life; *Extraversion*, or an outgoing or

assertive approach to life; *Agreeableness*, or a kind and cooperative approach to life; and *Neuroticism*, or an emotionally unstable and anxious approach to life.

We hope that our arguments surrounding the importance of personality will not come as a surprise to financial planners. When a financial professional looks at a client base, they may notice that there are different kinds of people. Some clients lean toward aggressive risk taking. They might work in fields like finance or real estate development. Some clients are competent, thoughtful, and serious who have done well across a range of industries and professions. And there will be some anxious and uncertain clients who have surprising amounts of wealth. They may be people who inherited wealth or people who find themselves in unstable life situations. For example, clients who inherited money might show a different personality structure than someone who took chances to create first generation wealth. The Vanderbilt family is an interesting example with young the "Commodore" starting a dangerous boat business in New York Harbor in his early teens as a precursor to his adventures in railroad building. Generations that followed continued the family business, but with different personality traits and skills (Smith, 2007).

In the present article, we argue that these personality traits can be described and measured scientifically. Further, these same personality traits predict important financial behaviors, from income to risk tolerance, and thus might be useful for financial professionals to consider. Much like the financial industry agrees on general definitions of income, net-worth, cash flow, and even financial literacy, the world of psychology agrees on a general framework of personality. Our hope is that this article will spur the financial industrial complex to explore, research, and adopt existing psychological personality models in hopes of preventing a long process of recreating the wheel with less-thanmeasures that are not properly psychometrically vetted. The reward to the financial planning field for adopting Big Five personality psychology, for example, is over 3,000,000 peer reviewed research publications ready and waiting (Google Scholar, 2023).

## A Brief Overview of Personality Science

### Dynamics, Narratives, and Traits

Personality can be thought of as a process or dynamic, like a person who self-sabotages new opportunities without knowing why, or someone who is constantly seeking status or attention and then feeling empty inside, only to repeat the pattern (Baumeister, 2010; DeYoung et al., 2014). Understanding personality dynamics is central to much of classic psychotherapy and psychoanalysis. Personality can also be thought of as a *narrative*, the story you tell about yourself (McAdams, 1993). The Hero's Journey (Campbell, 1949) is the most well-known of these narrative structures, but there are many patterns to the stories that we tell about ourselves. Most commonly, though, personality can be thought of in terms of *traits*, or patterns of thoughts, feelings, and behaviors that are consistent across time and across situations (Allport & Odbert, 1936). Trait approaches to personality are sometimes referred to as quantitative approaches because of the sophisticated statistical techniques developed to measure and compare different traits—and explore how traits are related to other outcomes like close relationships, health behaviors or job performance.

There are many personality traits that have been studied—both more targeted traits like "Type A" and "narcissism" and more general trait models like the Eysenck's (1994) three factor model (PEN: psychoticism, extraversion, neuroticism), or Lee and Ashton's (2004) six factor model (HEXACO: honesty-humility, emotionality, extraversion, agreeableness, conscientiousness, and openness). Our focus will be on the most prominent and integrative model in personality psychology, the Big Five or Five Factor model of OCEAN: openness, conscientiousness, extraversion, agreeableness, and neuroticism (Goldberg, 1990; Costa & McCrae, 1992).

Importantly, general personality traits are scored as continuous variables from low to high and are neither strictly "good" nor "bad" in terms of their benefits to the individual. Instead, personality traits typically offer trade-offs in differing social contexts. For example, a person scoring high in self-control may exercise every day and resist temptations. A person with a lower self-control

score may be described as impulsive. A high self-control score may be helpful for a student, while a lower self-control score may be more helpful for an expressive artist. Averaged across contexts, though, a pattern of higher scores on all the OCEAN traits (with a lower score on neuroticism) is considered somewhat more adaptive in modern western cultures.

# Advantages of Trait Approaches

As noted, the key properties of personality traits are consistency across time and situations. What this means is that an individual will have a similar personality today and in six months or a year. Also, that an individual will have a similar personality at work, at home, and at play. For example, somebody who is brave should be brave six months from now or in a few years. That person is likely to be brave across situations. They might provide leadership at work, they might fiercely defend their family's values, and they might be adventurous at play.

Importantly, personality consistency is not absolute but probabilistic people are not machines but are constantly growing and changing. Personality at Time 1 correlates about .80 with personality two months later (Gnambs, 2014). But the situation matters too. During a strong situation like a funeral or final exam you may see people act in similar ways, but at a less defined social gathering like a neighborhood block party are more likely to see a range of personality traits expressed.

It is also important to know that there are some common developmental changes to personality traits. For example, when people get married or start jobs, they on average become more psychologically mature (Bleidorn, Another interesting finding is that people become less likely to worry about things in old age outside of major health issues (Donnellan & Lucas, 2008). This can be thought of as a sort of mellowing process that happens to many people. But even with these developmental changes, you will see that the rank order of traits is relatively stable. A highly impulsive teenager is likely to become more organized and self-disciplined with age and experience, but so are all other teenagers, so the relative self-discipline might stay the same even as the absolute level increases.

# The Big Five Traits: OCEAN

It turns out there are many different personality traits, which are apparent when one examines language. We have many ways to describe a person's behavior or personality style such as energetic, cheerful, self-confident, domineering or kind. Each of these words, in a sense, reflects a personality trait. Of course, it is very hard to build a personality science around a thousand different individual personality traits—each with its own adjective. In response, what researchers have done over the last hundred years is figure out the best way to group these words or traits together into higher order combinations depending on the needs of the practitioners or researchers.

This search was aided by the development of quantitative tools like factor analysis and the newfound ability to reduce traits into simpler structures. Early personality models varied, with 13 to 5, and sometimes fewer, factors (Goldberg, 1993). There is no best or right personality model, but what proved most useful over time in modern, largely western culture, is a Five Factor structure.

The Big Five are "Big" because the traits that they capture are so broad and "Five" because it captures five traits—OCEAN: Openness, Conscientiousness Extraversion, Agreeableness, and Neuroticism. It can be useful to consider these traits as five big buckets because they are large and hold a great number of adjectives. For example, the Big Five traits of extraversion include both sociability and desire to be with others but also achievement drive and ambition. Extraversion is possibly the most misused as people tend to focus on the sociability portion of extraversion rather than the assertive portion. Therefore, strong leaders who enjoy reflective time alone often misclassify themselves as introverts discounting their drive for achievement and leadership qualities.

Because these Big Five traits capture such a large amount of the naturally occurring personality space, most personality descriptions can be thought about as refined pieces of Big Five traits or combination of Big Five traits. For example, the Type A personality has been shown to be primarily driven by neuroticism (Bruck & Allen, 2003). The trade-off is breadth versus

specificity—the Big Five is useful for getting a broad personality profile or overview, but if you are interested in specific traits, from risk-taking to creativity, it is typically better to use a purposebuilt measure.

Simply put, there is a lot of bang for the buck applying the thinking and research encompassing the Big Five personality model to new fields. Theoretically, the Big Five model captures much of the human personality space and, practically, the Big Five predicts much of the human behavioral space. But this does not negate the importance of more specific personality tools in fact, research in any field of social and behavioral sciences will have researchers using global personality measures like the Big Five, and also specific or niche measures that are highly important to that field. One well-known example is the trait of "grit," or goal focused determination. Grit is an aspect of the Big Five trait of conscientiousness, but many people simply target grit (Duckworth et al., 2007).

Some readers may be more familiar with other popular models of personality—like the Meyers-Briggs or the Enneagram. While these approaches are also oriented around giving people a vocabulary for discussing personality, scientists often use trait approaches instead of type approaches for methodological reasons. Two people who have similar Meyers-Briggs profiles (two ENTJs, for example) may be very different in terms of how extraverted they are. Despite being in the same group, the person with a high extraversion score may be much more willing to be the center of attention than the other who may have only barely crossed the cusp to an ENTJ from an INTJ. The Big Five is not necessarily more right, but it's certainly more specific. One of the challenges of this social-evolutionary process of personality construction is what is called the founder effect, which asserts that early personality models tend to stick around and shape the later ones. To give an extreme example, the Sensing, Thinking, Feeling, and Intuition that make up the very popular Meyers-Briggs scale came from the work of Carl Jung, and he borrowed them from Classical elemental psychology: Earth, Air, Fire, and Water. So, an Intuitive-Thinking type could be a Fire-Air type. Researchers and practitioners should thus avoid getting too fixated on which personality traits are "right" and instead appreciate that different cultural and psychological systems will produce different maps of personality the same way different cultures mapped similar skies into different constellations.

# **Principles of Personality Assessment**

How do personality traits get defined, operationalized, and measured? Let's start with measurements. Personality can be assessed in many ways, including structured interviews, observation, analyzing content from personal websites or twitter feeds, peer, spouse or employer reports, experimental tasks (e.g., gambling tasks), and projective tests (e.g., Rorschach inkblots). Each of these ways has different strengths and weaknesses and a case can be made for using a range of strategies and assessment in order to triangulate on individual personality. For example, if someone is doing research on a specific personality traits in leadership—or wanted to identify potential high level managers at an organization—they ideally want self-report personality data, 360-degree other-report data (e.g., reports from followers, peers, and supervisors, and even spouse or friends outside the organization), some historical data to see the stability of traits, some behavioral data like past job performance, etc. This type of dense personality measurement allows researchers or practitioners to triangulate on the key personality constructs of interest. Unfortunately, this kind of research is highly expensive and timeconsuming, so it is reserved for large grant funded science or executive testing firms.

Even with all the options available, the simplest strategy for measuring personality is the self-report questionnaire. Self-report methods are remarkably accurate and straightforward. Typically, self-report assessment involves individuals answering a series of questions about specific aspects of their thoughts, feelings, or behaviors using a multi-point numerical scale. In a low stakes environment where there is little motivation to lie on the test, individuals are willing and able to report on themselves quite readily. This low stakes environment is typical in academic research settings and in places like financial planning using general personality

measures. Self-report can be more challenging in high stakes settings like forensic or legal settings and with some personnel selection.

Many non-academics are surprised at how well self-report works as it seems simplistic compared with lab-based tools like reaction time measures, cognitive response tasks, and neuroimaging. However, decades of research have demonstrated that self-report personality assessment is a reliable and stable scientific tool (Paulhus & Vazire, 2007). There are at least three good reasons why self-report personality measures work. First, researchers developed these tests so that they are worded with appropriate language and complexity so that most people can respond to them easily. In contrast, some risk tolerance measures ask about equities and bonds, terms many individuals cannot define. Additionally, the word "risk" is more heavily associated with "danger" than opportunity and often has a negative connotation (Clifton, 2022). Second, very sophisticated psychometric techniques are used so that the smallest possible number of items can be used in the making of the self-report assessment. This reduces testing fatigue and test administration scheduling challenges. And third, self-report personality tests have been repeatedly validated and improved in the real world for over a century, often in military and business settings but also in social media (Liu & Campbell, 2017). We know these tests work because they have worked over and over.

Personality is relatively measurement straightforward. The trickier question is how researchers established the personality traits for which they would later build assessments. For example, "Type A" personality exists in common language today. We can go to work and call somebody Type A and there is a pretty good chance they'll know what we mean. This description of a personality trait grew out of the literature—specifically scientific psychology and cardiology where researchers were attempting to identify personality factors correlating with hypertension (Caplan & Jones, 1975; Rosenman, 1990). Calling somebody "anal" or "anal retentive" is another old personality trait that made it into the common language. This term was started by Sigmund Freud (Freud, 1932) based on his theory of libidinal types.

The same can be said for the Big Five traits. Extraversion was the term coined by the Swiss psychiatrist Carl Jung, along with its opposite introversion. Neuroticism is a classic psychiatric term used to describe emotionality. Openness to Experience was popularized by McCrae and Costa (1997) to capture broad creative and philosophical mindedness (see McCrae, 1987). other two. agreeableness conscientiousness, are common words used in a technical way (for a history of the Big five see Goldberg, 1993). The key point is that traits are not natural types. They are not like teeth or bones. Traits are constructed based on trends in human culture, and should be as they change and evolve.

The name for the scientific process of developing and refining these personality traits is *construct* validation (Cronbach & Meehl, 1955). Construct validation is an iterative or cyclical process whereby a concept, in this case a personality trait, gets defined, operationalized, and tested. This process results in a new understanding of the construct and better assessment tools and repeats continuously. To use an example from clinical psychology, melancholia was seen as an untreatable deep despair and that construct evolved into what we now call major depression, which is now seen as a treatable disorder. The point is that researchers in various scientific disciplines are constantly creating and refining psychological constructs and these constructs often overlap or compete with each other—which makes personality science a social and historical process.

One of the advantages of trait-based approaches to personality—as opposed to dynamic or narrative approaches—is that the measurement of personality allows researchers to explore how all the different personality traits are related to each other. Sometimes referred to as the *nomological network*, quantitative measurement of traits allows test developers to calculate the correlations between them, much like the lines that connect stars within a constellation. The result is a large web of interconnecting personality traits that relate to each other in meaningful ways.

# The Organization and Structure of the Big Five Traits

The Big Five can be placed into a hierarchy from a more complex personality structure to a simpler personality structure. In the direction of a complex structure, the Big Five traits can be broken down into smaller units, called *facets* or *aspects*. For example, extraversion can be broken into a three-facet structure of *assertiveness*,

energy level, and sociability. When we say that someone is extraverted, we mean that they exhibit high levels of these facets, but there can be some variability between them. For example, an

extraverted leader might be assertive and energetic, but not as highly sociable. See Table 1 for the Big Five along with three facets (Soto & John, 2017) and Figure 2 for a graphic representation of hierarchical personality structure. There is no agreed upon number of facets for the Big Five; there are models that have more facets, such as the NEO that contains six facets per big five trait (Costa & McCrae, 1992) and those with less, such as two aspects per big five trait (DeYoung et al., 2007). Different models are better for different uses, and much is at the discretion of the researcher.

**Table 1. Big Five Personality Traits and Their Facets** 

Openness	Conscientiousness	Extraversion	Agreeableness	Neuroticism
Aesthetic sensitivity	Organization	Assertiveness	Compassion	Anxiety
Creative imagination	Productiveness	Energy level	Respectfulness	Depression
Intellectual curiosity	Responsibility	Sociability	Trust	Emotional volatility

Traits can also be organized into higher order models, like the Big Two that can refer to plasticity and stability (DeYoung, 2006). Extraversion and openness combine to form the meta-trait plasticity. An individual high in extraversion and high in openness might be described as flexible or having a high level of plasticity. Thinking practically about this trait combination, an outgoing communicative person who is also open to imaginative new ideas may be more willing to change their mind than someone demonstrating lower levels of extraversion and openness. Plasticity could be beneficial in artistic and creative endeavors such as music composition (DeYoung, 2006).

On the other hand, conscientiousness, agreeableness, and (low) neuroticism combine to

form the meta trait of *stability*. An individual high in conscientiousness and low in neuroticism can be described as having stability and is likely to demonstrate calmness in difficult or stressful situations. Stability could be a beneficial personality pattern for managers or modern astronauts (DeYoung, 2006).

At the highest level combining each of the five OCEAN traits, psychologists have found what is referred to as the Big One personality (Musek, 2007). The Big One personality is an individual who demonstrates a high level of each of the Big Five personality traits excluding neuroticism. A Big One personality would be highly open, highly conscientious, highly extraverted, highly agreeable, and exhibit low neuroticism.

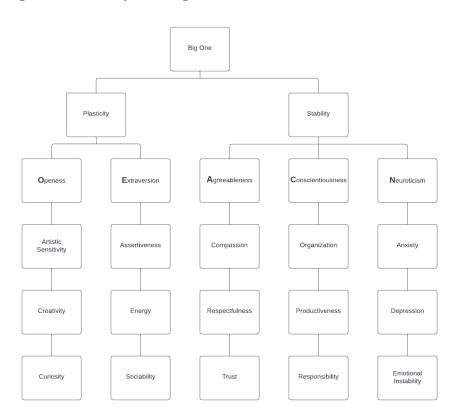


Figure 2. Big Five Personality with Higher and Lower Order Factor Structures

There is no right or wrong level of abstraction for the Big Five traits. The Big Two of *plasticity* and *stability* are probably a little too big for assisting individuals in day-to-day activities but may provide an interesting way to look theoretically at specific behaviors such as investing. A fifteen-facet model of the Big Five can be useful for getting more nuance around the Big Five traits when needed. However, the Big Five model seems to strike the right balance between generality and utility in most cases.

# Measurement Scales for the Big Five

As researchers and financial practitioners begin to more thoroughly implement personality into their work, there are many available Big Five measures in the literature. The most common include the Big Five Inventory (BFI; John et al., 1991), BFI-2 (Soto & John, 2017), which contains three facets per trait, and the NEO (McCrae & Costa, 1991) and NEO-IPIP (Johnson, 2014; Maples-Keller et al., 2019) which contain six facets for each trait.

There are also short measures of the Big Five.

These include the very commonly used Ten Item Personality Scale (TIPI) (Gosling et al., 2003). The TIPI is often used in large survey research and also used as an adjunct variable in studies when researchers are just curious about the function of personality. There is also a miniature version of the NEO-IPIP (Donnellan et al., 2006).

Researchers need to consider the following when selecting a Big Five measure. First, use a well-established (i.e., valid and reliable) measure such as those listed. Next, focus on length and availability of facets. Longer scales are generally better statistically but cost more in time and fatigue. Facets give more analytic flexibility, but that isn't always theoretically necessary. Finally, there is the question of open access. The BFI and NEO-IPIP are available without charge to researchers, as are the shorter scales.

## The Big Five Personality Is Everywhere

Our focus of this paper is on financial behaviors, but we would be remiss in not noting that Big Five personality traits make themselves known everywhere. Because Big Five personality is easy to measure at scale using short self-report measures like the TIPI, millions of people have provided personality data in exchange for feedback. These data, along with decades of focused research, has mapped the Big Five personality onto many aspects of life.

The Big Five traits are related to the state that you live in. Californians have been shown to demonstrate a collective higher level of openness while Georgian's have been shown to exhibit a higher level of conscientiousness (Rentfrow et al., 2008). In fact, each of the 50 states has a predominant personality trait. The Big Five traits are related to how your office or home is decorated (Gosling et al., 2008). Your office and your clients'-say something about the people who work there. Big Five traits relate to your language. Highly open individuals will use words like "ideas" while highly conscientious individuals will use words like "hard work". The Big Five traits are related to the music you prefer—for example, if you are high in openness, you are more likely to be more drawn to jazz or other improvisational and experimental music (Rawlings & Ciancarelli, 1997; Rentfrow & Gosling, 2003).

The Big Five traits predict a wide range of occupational job performance and occupational preference (Barrick & Mount, 1991). Big Five traits correlate with your Facebook profile and the number of friends you have on social media. Social media companies are aware of an individual's OCEAN traits which reflect what is shown on your screen (Liu & Campbell, 2017). In fact, OCEAN Personality was seen in the background of a scene of the documentary The Social Dilemma (2020). And finally, most mental disorders can be described by the Big Five traits. For example, a prominent model known as the HiTOP (Kotov et al., 2017) describes five "spectra" that correlate in part with the Big Five. And Krueger et al. (2013) developed a measure of the pathological Big Five, the Personality Inventory for the DSM-5-which can be used to measure pathological extremes of the Big Five.

In summary, the Big Five traits are projected throughout a person's life from what they say, to the music they listen to, to the state they live in, to their physical and mental health. It is no surprise, then, that the Big Five are linked to a range of important financial outcomes.

# The Big Five and Financial Outcomes

Financial psychology is broadly defined and includes a handful of classic variables that have been well studied and many others that have research interest. Well studied variables include income, net-worth or wealth, financial literacy, financial risk tolerance, and financial happiness.

There are a few different approaches to reviewing literature. We could either go through the financial process variables—income, net-worth, financial literacy, financial risk tolerance, financial happiness—and then discuss how each is related to the different Big Five traits. The other approach is to work through the Big Five traits and then examine how each individual trait is related to the range of financial outcomes. We are choosing the latter approach because we think this framework is most closely aligned with how these observations would likely occur in a financial planning setting. That is, a professional would collect and examine the OCEAN trait profile of an individual as well as a balance sheet, income and cash flow summaries. Our reasoning for this format is that we and other researchers (e.g., Bogan et al., 2020) perceive that the future of financial planning is primarily a client centered profession and not just a money centered profession, and focusing on client OCEAN personality is one way to center practice on the client. The CFP Board's recent inclusion of psychology into CFP® training confirms this more client-centered orientation.

## **Openness**

The results for openness are mixed. Interestingly, high openness has not shown a consistent correlation with higher income (Judge et al., 1999; Duckworth et al., 2012; Exley et al., 2021) or net-worth (Duckworth et al., 2012; Nabishima & Seay, 2015). However, with very high net worth clients you do see high openness scores (Leckelt et al., 2019). This might reflect the openness of creative individuals who work in cutting-edge industries and live in elite urban environments. After all, Silicon Valley is in California where openness is higher (Rentfrow et al., 2008). Or it might reflect the association

between openness and entrepreneurship (Zhao & Seibert, 2006). High openness has shown mixed correlations with financial literacy. In general, openness seems to correlate with overall risk taking (Nicholson et al., 2005) but more research is needed on financial risk taking specifically. Also, openness does seem to be a predictor of overall happiness (Furnham & Petrides, 2003) but more research is needed on financial happiness.

One challenge working with high openness clients is that they might seek novelty and may prefer to invest creatively rather than developing a discipline and refining that discipline. An individual with high openness may know a lot about finance and value creativity over results in the short run but be disappointed in not achieving their financial goals in the long run. Trying new things may be a great way to learn but may not be a way to get repeatable results. We like to say that "openness is expensive". Understanding that a client is high in openness from the beginning of the relationship allows for conversations about these varying and often opposing outcomes.

#### Conscientiousness

Conscientiousness is what we conceptualize as the primary wealth trait. High conscientious individuals have consistently shown to have higher incomes (Alderetti et al., 2023; Fenton-O'Creevy & Furnham, 2023; Exley et al., 2021; Nabishima & Seay, 2015; Duckworth et al., 2012; Judge et al., 1999), higher net worth (Duckworth et al., 2012; Exley et al., 2021; Fenton-O'Creevy & Furnham, 2023; Nabeshima & Seay, 2015;) and higher financial literacy (Exley et al., 2021; Pinjisakikool, 2017; Letkiewicz & Fox, 2014). However, Exlev et al. (2021) demonstrated that individuals high in conscientiousness may not take enough risk financially and may simply be "gritting" themselves into higher net worth through hard work, higher income, and spending less. High conscientiousness individuals have been shown to be financially happier over time (Joshanloo, 2022).

Understanding that a potential client is high in conscientiousness could lead a financial practitioner to design a plan that encourages spending and enjoyment, which may seem counterintuitive based on accepted professional practices. But overall, conscientious clients should take well to a consistent and disciplined approach to investing.

#### Extraversion

Extraversion is a bit of a trade-off. Individuals high in extraversion have shown to be happier about their life in general (Kim et al., 2018). A google scholar search (2023) of extraversion and income yields over 50,000 results with higher extraversion consistently predicting higher income (Alderotti et al., 2023) and leadership (Campbell et al., 2003). However, it seems that on average, extraverted individuals are better at acquiring income, but struggle with converting that income into wealth (Fenton-O'Creevy & Furnham, 2023; Exley et al., 2021). Interestingly, individuals high in extraversion consistently demonstrate higher financial risk taking. In some samples, extraversion has correlated with lower financial literacy (e.g., Exley et al., 2021; Killins, 2017; Pinjisakikool, 2017), which may provide clues to the lack of wealth creation.

Understanding a client's extraversion is important, and as said above, is a bit of a tradeoff. A person high in extraversion may be willing to have less net worth for the tradeoff of fun and experiences. However, the financial planner and client need to be clear about the goal.

# Agreeableness

Agreeableness is a conundrum. Nice people are happy (DeNeve & Cooper, 1998). Agreeable people can make ideal friends and clients because they can be nice and cooperative, but they can suffer when it comes to finances. Disagreeableness—a trait associated with narcissism and psychopathy—predicts income positively (Alderotti et al., 2023). Put another way, nice people make less money (Judge et al., 2012), have lower net-worths (Exley et al., 2021; Fenton-O'Creevy & Furnham, 2023; Weir & Duckworth, 2012), and prefer less financial risk (Pinjisakikool, 2017; Wong & Carducci, 2013). While financial literacy results have been mixed, a recent study found that nice people do have higher financial literacy (Exley et al., 2021) but are unable to overcome the other confounding factors that their high agreeableness brings them.

A practitioner understanding a client's high

agreeableness might encourage them to take more financial risk if appropriate and possibly even ask for a raise at work.

#### Neuroticism

Neuroticism is associated with some of the larger problems and challenges in an individual's financial life. People who are neurotic are more psychologically vulnerable to risk. Being in an uncertain environment is experienced more painfully. Investing demands the acceptance of some level of risk over time and neurotic individuals seem to prefer safer investments (Oehler & Wedlich, 2018). This may explain why people who are neurotic have challenges making money (Alderotti, 2023) and have lower networth (Exley et al., 2021; Fenton-O'Creevy & Furnham, 2023; Furnham, 2023; Weir & Duckworth, 2012). In higher interest rate environments where a reasonable return is offered by investments like CDs, more neurotic individuals should do reasonably well. However, low interest rate environments that offer little in terms of risk-free returns will be a challenging for a more neurotic, fearful investing style. In addition, one study found individuals high in neuroticism also demonstrated lower financial literacy (Exley et al., 2021).

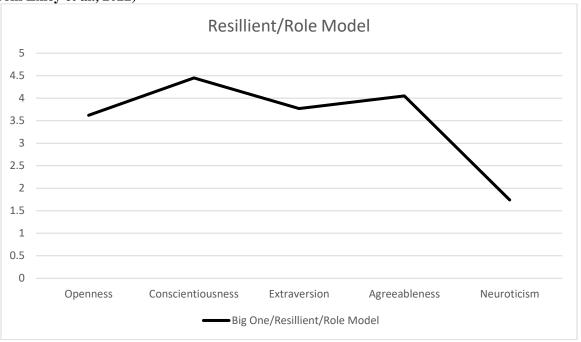
Understanding a client's neuroticism level may be one of the most important pieces of information a financial planner can gather based on neuroticism's negative correlations with income, net worth, and financial risk tolerance. To make matters worse, people high in neuroticism may find it difficult to be financially happy over time (Joshanloo, 2022). A financial planner who can provide a buffer to this neuroticism and keep their clients in higher risk assets over the longer term will be helpful.

#### **Trait Profiles**

The Big Five traits can also be assessed together in the form of a trait profile. Statistical procedures like Latent Profile Analysis and clustering can further be used to assess relatively stable profile patterns of personality across the general population. Gerlach et al. (2018) identified four of these Big Five profiles which included what we call a "muted" profile with the Big Five traits being average across each of the five traits. Beyond this muted profile, three classic profiles emerge: Resilient, Under Controlled, and Over Controlled. These three are sometimes known as the ARC types after the authors of the seminal studies that found three profiles: (Asendordorpf et al., 2001; Caspi et al., 1995; Robins et al., 1996). Specific to financial outcomes, a recent latent profile study using financial outcomes confirmed these three personality profiles— Resilient. Under Controlled, and Over Controlled—supporting the ARC model (Exley et al., 2022).

The pattern with the four more positive Big Five traits elevated (and neuroticism lowered) is seen in Figure 3 and is called a *Resilient* (Exley et al., 2022) or *Role Model* Gerlach et al., 2018). As the name suggests, in many cases this will be the healthiest and highest functioning personality profile.

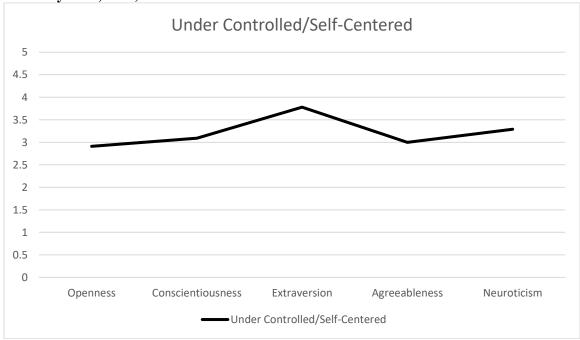
Figure 3. Big Five Personality Traits Associated with Big One, Resilient, and Role Model profiles (Data from Exley et al., 2022)



The second pattern identified has higher extraversion and neuroticism and lower agreeableness, conscientiousness, and openness

as shown in Figure 4. This is known as a *Under Controlled* (Exley et al., 2022) or as a *Self-centered* type (Gerlach et al., 2018).

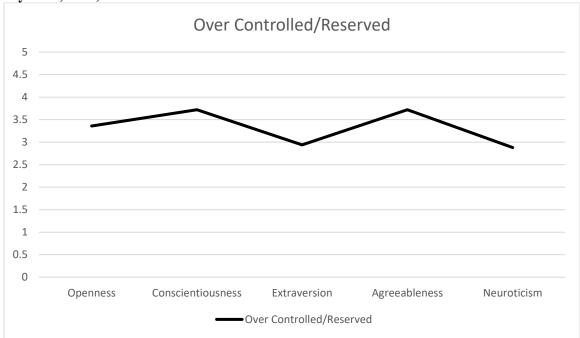
Figure 4. Big Five Personality Traits Associated with Under Controlled and Self-Centered profiles (Data from Exley et al., 2022)



The *Resilient* profile is more similar to a high performing manager and the *Under Controlled*, a more highly competitive sales position or risk-taker. Both of these profiles can generate wealth, but both will require a little different approach to wealth management, with the former demanding high competence and professionalism and the latter demanding more external impulse control.

A third profile—Over Controlled (Exley et al., 2022) or Reserved (Gerlach et al., 2018) as shown in figure 5—has muted extraversion coupled with elevated agreeableness and neuroticism. This profile might be described as a "Nervous Nelly" and may need help taking risks to achieve their desired financial futures.

Figure 5. Big Five Personality Traits Associated with Over Controlled and Reserved Profiles (Data from Exley et al., 2022)



#### Summary

Each of these trait profiles, of course, could benefit from different aspects of financial planning. A Resilient client will need to have competently produced information performance the same way a pro athlete needs a top trainer. This client might also need some encouragement to relax their conscientiousness from time to time to take more risk in their finances and enjoy their wealth. An Under Controlled or risky client, on the other hand, may need to calm their risk taking and benefit from the education, discipline, and conscientiousness that an advisor traditionally has provided. Finally, an Over Controlled or fearful client will benefit from some extraversion and risk taking on the part of the advisor, or else they may invest their money in low-risk assets and have a hard time keeping up with inflation. Trait profiles are a potentially useful way to approach personality from the perspective of financial planning as opposed to "one size fits all" financial advice that focuses on reducing risk. Trait profiles show how two of the three groups might at times need to take more risk—not less.

#### **Future Research and Applications**

The application of personality science to financial decision making is a relatively new and quite small research field. There is a need for a wide range of research simply to create foundational scientific literature. That said, there are a few areas that stand out for potential study.

One idea is tailoring financial advice or advice giving to client personality. The idea is that clients with certain personality traits or profiles will benefit from different advice. For example, highly extraverted and lower conscientiousness clients might well benefit from being reined in at times. The job of the financial professional might also benefit by framing the development of an investment plan and portfolio that highlights, for example, its novelty for open clients, its aggressiveness for more antagonistic and extraverted clients, its responsibility and discipline for conscientious clients, and its long-term stability for more neurotic clients. Obviously, financial planners do this intuitively all the time, but research might uncover some stable and teachable patterns.

Another step would be matching financial professionals to clients using client personality as one factor. For example, a more agreeable, neurotic client might benefit from a more therapeutic and supportive financial planner; whereas a more open client might do better with a wider read planner who can tolerate the clients harebrained schemes and novelty seeking.

Finally, personality can be used for selection, either selecting clients or employees. We are not suggesting using the Big Five as a selection tool; there are many considerations, including legal, that need to be taken to make any selection based on personality. But what we are suggesting is that any practice could be selecting certain kinds of clients. For example, a firm that attracts many state retirees will have clients with different personality profiles than a firm whose client list is heavy with urban professionals or with athletes and entertainers. It would be very useful for any practice to see if they are limiting themselves or perhaps becoming a niche for certain personality profiles.

# Conclusion: A More Complete Financial Psychology

Financial planning would be easy if it were just about building financial or accounting models—those models are simple to build, but it can be challenging for an individual to make their behavior conform to the model. The question of why individuals make poor and seemingly self-destructive financial decisions on a regular basis has puzzled economists for centuries. The growth of the heuristics and biases literature is a testament to this and Richard Thaler winning the Nobel Prize in economics for demonstrating many of these heuristics and biases is well

deserved. But beyond our shared heuristics, our different personalities predict different ways that we can self-destruct (or excel). There are predictable individual differences in financial performance—some people are risk-taking and aggressive and blow up, but others are fearful and take no risks and never acquire enough wealth to even blow it up, and still other people seem to have an almost supernatural discipline and calm that allows them to invest despite the chaos in the markets. Each of these people will need different styles of support and planning. For example, the up and coming "Wolf of Wall Street" will need some conscientiousness; the "Nervous Nelly" will need some confidence to buy equities for the long-term; and the "Warren Buffett junior" might need some encouragement to spend a little money having fun with his kids.

We hope that in addition to learning about judgment and decision making and some of the basics of therapy, and especially the ability to identify psychological problems that might need referral to a mental health professional, understanding the basics of personality psychology will make financial planners and advisors more effective across a range of clients. And while there are many excellent models of personality available, we suggest that the Big Five or OCEAN model would be an excellent starting place for the field of financial psychology.

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