1. Introduction

Judgments and wise decisions are by now taken to be one of the most crucial aspects of leaders' responsibilities (Nonaka et al., 2014; Wright, 2022). But there is a large question mark looming over the topic of what a wise decision looks like. Eikeland (2008, p. 53) remarks that *phronesis*, commonly translated as 'practical wisdom', is 'both an intellectual virtue and an ethical virtue'; *phronesis* includes being wise, aware of the situation, and open to dialogue and to the other (Contu, 2023). Moberg (2007, p. 536) sums up the idea like this: "I define practical wisdom as a disposition toward cleverness in crafting morally excellent responses to, or in anticipation of challenging particularities." The problem with these definitions is that they are vague as to how exactly a wise or phronetic decision comes about. Dedeke (2015) lays open these different steps conceptually and contends that both intuitive and cognitive elements contribute to moral judgment. The two rival moral traditions of intuition and deliberation compete for bringing about wise or phronetic decisions (Julmi, 2024). We zoom in more on decision-making as a thinking process and look deeper into its psychology to advance the dialogue between moral traditions (see also, Grossmann et al., 2020). We must deconstruct the idea into operational pieces to objectively examine intelligent decision-making, as there is a scarcity of psychological tools to assess it.Based on the existing business management literature (e.g., Sadler-Smith, 2012), we can ascertain the following overview. Conscious, inferential, non-emotional cognitive processes involve deliberative analysis and reflection within established principles and frameworks; conversely, unconscious, non-inferential, affective cognitive processes encompass intuitive holistic pattern recognition in complex scenarios (Provis, 2017, p. 11; Shotter & Tsoukas, 2014, p. 387). This shows a distinct relationship with the dual process theory of decision-making (e.g., Epstein, 1994; Kahneman, 2011; Sloman, 1996; Stanovich & West, 2000), wherein the

deliberative aspect aligns with System 2 and the intuitive aspect aligns with System 1 processes within the theory.

The next question is which side, the deliberative or the intuitive, wise decision-making comes down on. On the dual-process model, while people use both thinking processes, they are assumed to display a preference for one (of the two) thinking profiles (Betsch, 2004). In contrast with this, our proposal, and thus our subsequent assumption in this paper is that the term 'phronesis', or 'practical wisdom' *integrates* the thinking processes of intuition and deliberation. That is, a wise decision-making profile, as we will later call it, is neither purely intuitive nor is exclusively deliberative but has elements of both: it strikes the right balance between the two. Like Sadler-Smith and Burke-Smalley (2015), who bring up 'cognitive versatility' to describe the capability of using both processes, we consider it a conceptual merit to account for people displaying both high intuition and high deliberation, as this would allow a peek at decision-makers who are able to skilfully use both thinking processes through meta-cognition, or phronesis.

With this approximate picture of practical wisdom in the background, we would like to establish connections to two further fields of study: trust and personality. One of the most researched topics in organization studies as well as in business ethics is trust (de Jong, et al., 2017; Vu & Tran 2019). This is not surprising. Trust is at the heart of almost all interactions within and between organizations. Previous research has shown that trust can make people less worried about opportunism, which lowers partner conflicts and transaction costs (Anderson, et al., 2017; Zaheer, et al., 1998). Trust can also increase job satisfaction, reduce stress, increase productivity and organizational commitment (Kramer 1999; Levin & Cross 2004). In fact, if extended to the social level, i.e., when trust becomes a feature of societal interactions, pervading entire communities (for example, the so-called Nordic model has a significant role for such 'social trust'), trust helps these

communities promote not only economic efficiency and growth, but positively contributes to the provision of public goods, social integration, and co-operation (Delhey & Newton 2004).

This growing importance of trust in business ethics and organizational as well as management studies has happened at the same time as another trend has been taking shape: more and more people have realized that personality is linked to trust, which affects how well people are accepted and interacted with (Thielmann & Hilbig, 2014). We have explored relationships between general behavioral preferences for the use of thinking preferences (in particular, intuition, deliberation, wisdom), a trait-like personality (in particular, the so-called 'Big Five' personality traits) and a psychological state (in particular, trusting people). We recruited survey participants based on this plan. The article thus, in a sense, is a triangulation exercise - we would like to see how these three crucial elements connect to one another: what shape decision-making takes in people with certain personality types and how, if at all, this connects to these people's trust in others (in particular, in management settings, their co-workers, and others in social environment at the workplace).

This article contends that managers ought to adopt a more integrated approach to decision-making that accounts for Aristotle's virtue ethics. This to say that it is not only about high-speed decision-making, but also not only about taking one's time to make decisions. Both temporal aspects of time need to be considered. Thus, our attention on wise decision-makers is twofold: they are a significant group in management decision-making research. Researching this group offers a valuable perspective through their strong commitment to use both intuition and deliberation in the decision-making process. One might expect that wise decision-makers have certain personality traits that define how they act and what they do (Shanteau, 1988). Personality traits are partly formed by

the way people are raised, socialized, and taught. These implicit traits are also shaped by the values and beliefs that a person holds, and they play a significant role in how wise leaders think (Zacher et al., 2014). So, it seems to us, a person's personality traits can affect their psychological state of trusting people. We believe that if wisdom is to be effective and have an impact, education in business and management can help people develop these important traits as well as their ways of thinking (see also, Rooney et al., 2021). Therefore, the first purpose of this article is to highlight what a wise decision-making profile looks like, conceptually (or in theoretical terms) by integrating both intuitive and deliberative thinking styles and empirically by documenting the actual effects of moral traditions. Our second aim is to find out the roles of decision-making styles in the problem context of trusting people at the workplace. Lastly, we aim to explore the interactional impacts of decision-making styles and big-five personality traits on the degree of trust in individuals.

To spot the distinctiveness implicated by different types of cognitive processing, we used survey data from 5578 participants, who provided responses regarding decision-making preferences, the Big Five Personality Questionnaire, and their propensity to trust people. With this empirical study we contribute directly to the debate about (wise) decision-making as well as further the study of the connections between wise decision-making, trusting people, and the role of personality (McLoughlin et al., 2025). In what follows, we will first provide further theoretical background to our focus areas - decision-making profiles, trusting people, and personality types - before moving on to the presentation of our empirical study, its results, and their discussion. In sum, we contribute to the pervasiveness of particular moral traditions across the globe.

2. Decision-making profiles, personality types, and trusting people

The dual-system model of cognition comprises System 1 (or Type 1, intuitive) and System 2 (or Type 2, deliberative) gives rise to broad *cognitive profiles* (Pacini & Epstein 1999). Cognitive profiles "have been defined as stable attitudes, preferences, and habitual strategies which determine an individual's modes of perceiving, remembering, thinking, and problem-solving" (Dewberry et al. 2013, 783, referring to Messick & Fritzky 1963). Thus, cognitive profiles can comprise as specific elements as applying certain rules, but also as general as certain trait-like characteristics such as dogmatism or absolutism.

The dual process theory of cognition can be sufficient for diagnosing people in a way that can assist them in developing their cognition in their decision-making process. But to do more illuminating research on this, the notion of *decision-making style* is introduced in the literature. When faced with a particular decision situation, people's regular response patterns are their decision-making styles (Thunholm, 2004).[1] Decision-making styles are thus considered a sub-component of cognitive profiles: a relatively stable personality disposition. The number of decision-making styles in the literature vary but the approach is always that there is a single dominant trait that helps categorize individual decision-makers.[2]

While the dual-process theory provides a foundational framework for understanding decision-making through the lens of intuition (System 1) and deliberation (System 2), our study extends this perspective by incorporating additional dimensions that capture the complexity of decision-making styles. Specifically, we operationalized intuition and deliberation through four distinct components: emotional and heuristic

[1] Often 'style' and 'profile' are used interchangeably. We will explain the difference later. For now what matters is that we use 'style' where some authors might use 'profile' as synonymous in meaning.

[2] Harren (1979) has 'rational', 'intuitive', and 'dependent'; Johnson (1978) distinguishes two dimensions, 'systematic v spontaneous' and 'introvert v extrovert'. Scott & Bruce (1985) adds 'avoidant' and 'spontaneous' to Harren's original three, while Nevo (1989) proposes altogether 13 different styles. See also Leykin and DeRubeis (2010) for a more recent categorization.

processes for intuition, and unconscious and rational processes for deliberation. This multidimensional approach aligns with recent critiques of the dual-process theory, which argue that intuition and deliberation are not monolithic constructs but encompass a range of cognitive and affective processes (Evans & Stanovich, 2013; Pennycook et al., 2015). For instance, emotional decision-making reflects the affective and visceral aspects of intuition, where decisions are influenced by feelings and immediate reactions (Dane & Pratt, 2007). Similarly, heuristic decision-making captures the reliance on mental shortcuts and pattern recognition, which are hallmarks of intuitive thinking (Gigerenzer & Gaissmaier, 2011). On the other hand, unconscious processes, often associated with intuition, refer to the automatic and implicit cognitive operations that occur without deliberate effort (Bargh & Chartrand, 1999), while rational decision-making emphasizes the systematic, analytical, and rule-based aspects of deliberation (Kahneman, 2011). By incorporating these dimensions, our study provides a more granular understanding of decision-making styles, moving beyond the simplistic dichotomy of intuition versus deliberation.

In addition, the use of a single dominant trait to describe a person's decision-making style offers a parsimonious procedure and is helpful for grouping people into ostensibly homogeneous groups for research (e.g., Mau, 1995). However, this strategy only partially accounts for individual differences in decision-making (Shiloh, Salton, & Sharabi, 2002). Instead of using the term ‘decision-making style’, Gati (et al. 2010) therefore use the term *decision-making profile*. They are using ‘profile’ instead of ‘style’ for two main reasons, one is general, the other specific to their research topic (career decisions). The general reason is to indicate that they are dealing with a complex, multidimensional construct rather than a single dominant trait, and as a result, several characteristics are required to adequately characterize the way an individual makes

decisions (i.e., individuals may differ in many dimensions even though their most dominant trait is the same). In our research we have opted to use 'profile' instead of 'style' to emphasize the possible multidimensionality of individual decision-making. We pose our first research question, *"Do decision-making preferences form distinct profiles?"* and we hypothesize that they do. Our results in fact show this to be correct: we can clearly delineate three decision-making profiles, discerning them from empirical data. These are the 'Intuiter', the 'Analyzer', and the 'Wise' profiles. The wise profile combines the first two, being both highly intuitive and highly deliberative at the same time. We will describe these results in more detail below.

As noted above, personality traits or dispositions constitute a major component of decision-making profiles. Hence it is natural to ask how these profiles connect to the decision-maker's personality. The five-factor model of personality is currently one of the most popular dimensional approaches to personality. The two dominant ways of measuring personality according to five higher-level dimensions are the 16 Personality Factors (16PF in Cattell et al., 1970) and the Big Five (Goldberg, 1990; Costa and McCrae, 1992). In our study we've used the latter. It distinguishes five personality dimensions: Extroversion (vs Introversion), Neuroticism (vs Emotional Stability), Conscientiousness (vs Lack of direction), Closedness to experience (vs Openness), Antagonism (vs Agreeableness).[3]

Very briefly, following Nga & Shamuganathan (2010, 267-8), *Openness* is manifested in individuals' being open to new experiences and in being curious. Those

[3] The corresponding categories by Cattell et al. (1970) are the following: Extroversion vs Introversion; High anxiety vs low anxiety; Self-control vs lack of restraint; Tough-mindedness vs receptivity; Independence vs Accommodation. In addition, Cattel et al. also provide 16 so-called personality factors, which we haven't used. As Gambetti & Giusberti (2019, 15) note, "[A] range of studies have shown strong correlational and factor-analytic alignment between the 16PF and the Big Five Models", in particular, between Anxiety and Neuroticism, between Self-control and Conscientiousness, between Receptivity and Openness, and between Independence and Disagreeableness.

who score high on this dimension are typically not afraid of new challenges, versatile, imaginative, and often display high creativity. They may, however, be impulsive, overly inquisitive, and may be easily bored. *Extroversion* is characteristic of outgoing individuals who are sociable and assert themselves. *Agreeableness* "concerns the ability to foster social consensus while upholding mutual understanding and trust." Agreeable persons are good listeners, patient, and emphatic. They are very useful for creating and maintaining trusting and cooperative environments. *Conscientiousness* correlates with meticulousness, rule-following, and maintaining high standards of performance. Conscientious individuals are "driven by a high sense of responsibility, industriousness and need for achievement which promotes their dependability at work." Finally, *Neuroticism* "is the degree of emotional stability of the individual." Neurotic individuals display mood swings, impulsiveness, self-consciousness, low self-esteem and depression.

The connection between decision-making profiles and personality types seems natural to pose since both concern habitual response patterns (but there are differences, as noted below).[4] In fact, according to Riaz et al. (2012), each of the Big Five personality dimensions identified by Costa and McCrae (1992) could be related to a certain pattern of behavior that involves making decisions as put forward in Scott & Bruce (1995).[5] Conscientious people often adopt a rational decision-making profile, going through a multi-stage process of decision-making where they analytically discover potential correlations between the factors being considered and, as a result, potential alternatives for the resolution (Rahman, 2014). The intuitive decision-making profile is favorably correlated with the characteristic of openness to experience (Riaz et al., 2012). Extroversion is positively correlated with the intuitive profile (Sagiv, 2014).

[4] Again, bear in mind that 'style' and 'profile' are not typically distinguished in the literature cited here.

[5] To be precise, what Riaz et al. (2012) have shown is that the Big Five personality traits account for 15% to 28% of variance in some decision-making measures.

Agreeableness goes well with the dependent decision-making profile, while Neuroticism positively correlates with the avoidant decision-making profile.

Thus, it is natural for us to ask how our designated decision-making profiles relate to the personality – understood along the Big Five dimensions – of the decision-maker. However, we do this while focusing on the level of trust the decision-maker has in people in their social environment at the workplace. It is crucial to note that personality types and decision-making profiles may be related, although they are not identical concepts. Personality refers to an individual's global pattern of thought, feeling, and behavior, whereas decision-making profiles assess a more constrained construct that is only limited to the preferred way of approaching decisions (Gamberti & Giusbetti, 2019). Since both of these constructs are reasonably constant throughout life and permanent, they can be viewed as separate stable inputs when making decisions on whether to trust someone (e.g., Thunholm, 2004). Moreover, the number of studies that have specifically looked into the connection between decision-making profiles and trusting people is, to our knowledge, quite few (Gamberti & Giusbetti, 2019 is an exception but they look specifically at investment decisions, while we are interested in managerial decisions in general).

What is meant by 'trust' here? When we trust someone, we rely on that person to do something important for us, something we are not in a position (or have the ability) to do, but that the trustee, we think, has the competence as well as the willingness to do *for us*.[6] This means that the concept of trust involves two notions that are central to our understanding of trust: reliance and vulnerability (Mayer et al., 1995; Rousseau et al.,

[6] Trust goes hand in hand with another concept: *trustworthiness*. However, while trust is an attitude or disposition, trustworthiness is a property. Moreover, while trust, being an attitude, is more on the descriptive side (one either has it or one does not, understood perhaps in terms of degrees), trustworthiness has a normative element, potentially: one is trustworthy if we can trust that person, in the sense that it is *fitting* to trust them or we have *good reasons* to trust them. See Carter (2023) for details.

1998; Carter, 2023). Whoever trusts someone to do something becomes vulnerable to that person: the trustor becomes exposed to a certain level of risk and betrayal since there is a risk that the trustee won't do what the trustor has trusted them with as well as that the trustee refuses – have no willingness – to do what the trustor has asked of them or expects them to do. To an extent, this risk or vulnerability can be overcome by monitoring or by imposing certain constraints on the trustee, but the more this happens, the less trust there is (normally). Hence trust is best understood, conceptually, without presupposing monitoring and imposing constraints.

There can be many kinds of trust. A notable contrast in the literature is between interpersonal trust (referred to as 'state trust') and the inclination to trust (known as 'trait trust' or 'dispositional trust'). The former is "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer et al., 1995: 712). The latter shares, unsurprisingly given the general conceptual analysis offered above, some of these elements but emphasizes the general (or universal) as opposed to the concrete. Unlike interpersonal trust, the propensity to trust focuses not on concrete individuals in concrete situations with specific past experience as background. It is instead a "generalized and enduring predisposition", which "may be related to lifetime experiences but also to temperament, and thereby to genetics and biophysiological structure" (Mooradian et al., 2006: 525). As Mayer (et al., 1995: 715) puts it, the propensity to trust is "a stable within-party factor … the *general willingness to trust others*". People with this propensity have a "tendency to make attributions of people's actions in either an optimistic or pessimistic fashion" (DeNeve and Cooper, 1998).

As is clear from the above, trusting people, *both* as interpersonal trust (the state or attitude of trusting someone) and as propensity to trust (the trait of trusting someone) varies among people with various developmental experiences, personality types, and cultural backgrounds (Ibid.). A person with a high level of trust takes it for granted that most others are honest, fair, and well-intentioned. People who lack trust perceive others as being self-centered, cunning, and sometimes harmful. However, while there is a connection between trait trust and state trust, and some of these trait-state linkages have been both conceptually and, to a lesser extent, empirically, investigated (Mooradian et al. 2006: 525-6), we have opted, in our study to focus only on state trust setting trait trust, the propensity to trust aside for the moment.[7]

As mentioned, our interest, besides identifying decision-making profiles in our sample, lies in connecting these profiles to trust in people where trust is understood as state-trust (the attitude of interpersonal trust). Therefore, our second research question is "*How do decision-making profiles affect trusting others?"* We already see possible connections between decision-making profiles and trusting people. The thinking processes of intuition and deliberation have been advanced as good predictors of important psychological outcomes in many areas of everyday life (Pennycook et al., 2015). For example, people who prefer deliberation might have a lower trust in others (Bago, 2020: 697; blinded for review). In contrast, people who prefer intuition might have a greater trust in others because the preference for intuition is thought of as the tendency

[7] Since the propensity to trust is a personality trait, it unsurprisingly figures as a component, a so-called 'facet', in the Agreeableness personality dimension in the Big Five as devised in Costa and McCrae (1992). In their own words: "High scorers have a disposition to believe that others are honest and well-intentioned. Low scorers on this scale tend to be cynical and skeptical and to assume that others may be dishonest or dangerous" (Ib. 17). There is thus, potentially, a hierarchy in play here (Mooradian et al., 2006: 529, Figure 1). At the base, there is someone's temperament as determined by physiology and genetics (among others). Next, there are broad personality domains, defined by the Big Five. These then have as their components personality facets, among them, the propensity to trust.

to trust one's first impressions (blinded for review).[8] Swami (et al., 2014) and Pennycook (et al., 2015) show results according to which intuitive thinkers are the ones who are more likely to believe in conspiracies and, according to Pennycook and Rand (2020) also more likely to fall for fake news since they have decreased trust in high-quality news sources. Similar results have been produced by Fuhrer and Cova (2020), investigating how decision-making profiles influence trust in people in the French context regarding COVID-19 vaccinations. They have found, among others, that more intuitive thinking predicted higher trust in the theories of Didier Raoult (concerning the treatment of COVID-19 infection).

The extent to which the intuitive vs deliberative factor contributes to these theories remains ambiguous for two reasons. One is that these thought processes are often associated with, as we saw, more general cognitive profiles, as opposed to the more specific decision-making profiles. The other is that the proposed dichotomous conceptualization of decision-making profiles may well not be sufficient. In particular, practical wisdom (phronesis)-focused studies of decision-making profiles do not feature in the body of business ethics literature to our knowledge. There are several studies using qualitative methods to analyze the explicit narratives of decision-makers, e.g. Steyn & Sewchurran (2021), to learn about practical wisdom and phronesis. Given the lack of studies on trust beyond the established cognitive profiles of intuition and deliberation, we take the initiative to examine how the implicit Analyzer, Wise, and Intuiter decision-making profiles may influence trust in others. This exploration sheds new light on understanding and fostering trust in various interpersonal dynamics.

[8] However, this is mostly measured in terms of social judgment such as "I trust my first feelings about people". See Epstein (et al., 1996).

Lastly, as has not yet been done in the literature (to our knowledge)[9], we have also set out to connect these three constructs: decision-making profiles, Big Five personality types, and the state of trusting people. Thus, we have asked our third research question: *"Do decision-making profiles interact with the Big Five personality types in ways that significantly impact the levels of trust in others?"* Again, we have found this to be confirmed, albeit not, interestingly, in the Wise decision-making profile, which has proven to be insensitive when controlled by personality type of the decision-maker. The results and how we have reached them are detailed in what follows.

3. Methods

Sample and data collection

The data was gathered as part of a larger online survey on intuition and digital trust in the workplace (blinded for review). Participants from more than 30 countries and various industries completed the survey online after being invited. The invitation was sent to 7000 individuals using social media platforms to gather a snowball sample. The first and fourth authors, along with their professional and personal networks in various countries, facilitated this process. In two countries (the United States and Slovakia), a participant recruitment agency sent out invitations. The sample for this study consisted of 5578 participants (42.2% female, 50.3% male, 8.4 % LGBTQ) after excluded incomplete surveys (5626 in total). The 10 countries with the highest number of completed participant questionnaires were Germany (n = 791), Philippines (n = 427), China (n = 406), India (n = 354), Thailand (n = 276), the US (n = 273), Brazil (n = 253), Slovakia (n = 251), Romania (n= 234), and Kenya (209). The percentages of age categories were 1% of 18

[9] We know of two exceptions: Gambetti & Giusberti (2019) and Mooradian (et al., 2006). However, the former is interested specifically in investment decisions and establishes connections only between decision-making and personality. The latter connects trust and personality in the specific context of knowledge sharing at the workplace and is not interested in decision-making profiles.

or younger, 24.2% between 19 and 28 years old, 24.4% between 29 and 38 years old, 28.7% between 39 and 48 years old, 19% between 49 and 58 years old, 2.5% 59 and older. The percentage of individuals with a bachelor's degree or higher was 84.2%. The professional experience of individuals with 4 years or higher was 59.8%. The percentage of participants in managerial positions ranging from first level to top level were 75%. After the cluster analysis the distributions of clusters were 23.7% for the cluster-1 (rational & unconscious, n= 1323), 50.4% for the cluster-2 (wise, n= 2813), and 25.9% for the cluster-3 (intuition, fast heuristic, n= 1443).

Instruments

Decision-making profiles. To measure the preference for decision-making styles, four different types of subdimensions taken from the Preference for Intuition and Deliberation (PID) Inventory by Betsch (2004; 2008) and the Types of Intuition Scale (TIntS) by Pretz et al. (2014) were used. The named types were: Rational (Deliberation in Betsch study), Emotional (Affective in the study of Pretz et al., 2014), Unconscious (Holistic in the study of Pretz et al., 2014), and Heuristic (Inferential in the study of Pretz et al., 2014). The sample items are “Before making decisions I think them through” (Rational), “My feelings play an important part in my decisions” (Emotional), “My intuitions come to me very quickly” (Heuristic), “I enjoy thinking in abstract terms” (Unconscious). Sixteen self-disclosure items (the highest loaded 4 items for each style), inspired by the original inventory, were translated into the respective national languages by expert researchers from each country. Items were assessed on a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree), with higher scores indicating greater agreement with the respective decision-making style.

Trust in people. To measure trust in people, we centered the answers on the question of

"*What is the level of your trust with the following people who you have directly or indirectly met at work?*" towards individuals from different groups at the workplace. The groups of people who answered were the following: top managers (CEO, board members, president, etc.), middle level managers (department heads, branch managers, etc.), first-level managers (supervisors, foremen, office managers, etc.), contributing individuals (clerical, secretarial, technicians, etc.), and co-workers (colleagues, workmates, friends, etc.). Items were assessed on a 4-point Likert scale ranging from 1 (not trusted at all) to 4 (highly trusted), with higher scores indicating greater trust with the respective group of people.

Personality. To measure personality, the 10-item Big Five Inventory by Rammstedt and John (2007) was used. The inventory evaluated each of the Big Five factors using contrasting descriptions of personality dimensions, with one at each end of the scale. Items were evaluated using a 4-point Likert scale, ranging from 1 (strongly disagree) to 4 (strongly agree). Higher scores indicate a stronger association with the respective personality type (extroversion, agreeableness, openness, neuroticism, conscientiousness).

The richness of communication (as a covariable). The dynamics of trust in the workplace, including trust in supervisors, co-workers, and others, have been significantly influenced by online interactions (Mackenzie, 2010). Online communication tools, which include visual, verbal, and text-based content, have reshaped how employees perceive and trust each other. For instance, the immediacy and sometimes impersonal nature of online communication can either bolster or undermine trust, depending on the context and the medium used (Tanis & Postmes, 2005; Babutsidze, Hanaki & Zylbersztejn, 2021). Research also indicates that different online communication channels, such as video conferencing, emails, and instant messaging, affect trust development differently compared to traditional face-to-face interactions (Yang et al., 2022; Wilson et al., 2020).

Therefore, we have controlled the use of online communication tools in the ANCOVA analysis by asking participants' preferences of messaging, email, video conferencing, or phone calls. The higher scores being summed up from multi-select options indicate the richness of the communication.

Statistical procedure

The statistical tests were performed in Jamovi (The Jamovi project, 2024) that was founded to develop a free and open statistical platform which is intuitive to use and can provide the latest developments in statistical methodology. Firstly, we have tested the validity and reliability of the 16 items taken from PID & TIntS for determining the decision-making profiles and the 10 items Big Five Inventory scale for determining personality types. The confirmatory factor analysis (CFA) with the maximum likelihood estimation method and Cronbach's alphas were calculated for these multidimensional scales. Then Average Variance Extracted (AVE) and Composite reliability (CR) values have been found for the confirmation. After confirming the dimensions, cluster analysis was conducted to explore the possible distinct profiles, answering the first research question. The optimal number of clusters with the value of k was 3 for the data based on the result of the gap-statistics, choosing the number of k, where the biggest jump in within-cluster distance occurred. In the analysis, the k-means clustering method in Jamovi (Snowcluster package) was used with the Hartigan and Wong (1979) methodology, aiming to minimize the Euclidean distances of all points with their nearest cluster centers, by minimizing within-cluster sum of squared errors. For the second and third research questions, the ANCOVA analyses for determining the differences in decision making profiles and the interactions of decision-making profiles and personality types were conducted on trust in people at the workplace.

4. Results

The results of CFA on the 16-item decision making profiles scale indicated that the four-latent factorial structure has acceptable fit indices (X2/df= 2.25, TLI= 0.98, CFI= 0.98, RMSEA= .044). For the item consistencies, the calculated Cronbach's alpha coefficients were 0.80 for rational, 0.80 for emotional, 0.80 for unconscious, and 0.80 for heuristic. The Average Variance Extracted (AVE) and Composite reliability (CR) values of the dimensions were 0.80 and 0.80 for rational, 0.80 and 0.80 for emotional, 0.80 and 0.80 for unconscious, and 0.80 and 0.80 for heuristic in order. For the personality scale, the results of CFA showed that the five-factorial structure of inventory has acceptable fit indices (X2/df= 2.25, TLI= 0.98, CFI= 0.98, RMSEA= .044). Cronbach's alpha coefficients of the traits were .80 for extroversion, .80 for agreeableness, .80 for openness, .80 for conscientiousness, and .80 for neuroticism. The AVE and CR values were .80 and .80 for extroversion, .80 and .80 for agreeableness, .80 and .80 for openness, .80 and .80 for conscientiousness, and .80 and .80 for neuroticism. After ensuring the instrument's validity and reliability, we performed a cluster analysis on the confirmed decision-making profiles to explore the possible combinations of decision-making preferences especially for the higher-levels of each preference that indicates a 'wise-style'.

The result of the K-means clustering method with Hartigan-Wong algorithm presented an optimal solution with three clusters (total sum of square (SoS) is 22312; between clusters is 8829); cluster 1 (SS is 2905), cluster 2 (SoS is 5108), and cluster 3 (SoS is 5470). The centroids of the cluster 1 (n=1323, *Analytic*: represents a group with high rational (.623) and unconscious (.615), with low emotional (-.862) and heuristic (-.914)), cluster 2 (n=2813, *Wise*: represents a group with higher levels for all profiles (ranged from .191 to .437)), and cluster 3 (n=1443, *Intuition*: represents a group with

high emotional (.450) and heuristic (.011), with low rational (-1.357) and unconscious (-1.050)) were presented in Figure 1.

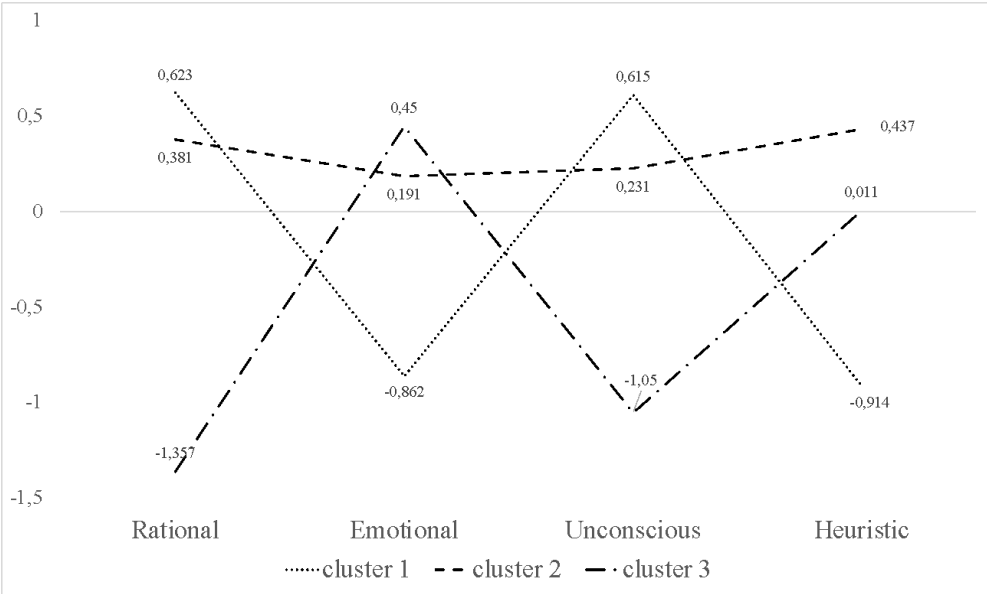

Figure 1 The centroids of the clusters

All these results confirmed the existence of distinct decision-making profiles thereby answering research question 1 in the affirmative and thus confirming our hypothesis. More precisely, we have found that the analytic, wise, and intuition decision-making profiles differ in their composition of their preferences. In the first profile, the analytical profile, people highly prefer analytical and unconscious decisions, and less emotional and fast-heuristic decisions *(Analyzer*). In the second profile, the intuitive profile, people prefer more emotional and fast-heuristics decisions, but to a lesser degree analytic and unconscious decisions (*Intuiter*). In the third profile, the wise decision-making profile, people prefer relatively high levels of each decision-making style concurrently (*Wise*).

To answer the second and third research questions, we have used ANCOVA for determining the differences in the level of trust in people based on the decision-making profiles we document. Firstly, normality and homogeneity assumptions were tested for

determining the calculations. Relative to the decision-making profile, the kurtosis values of trust in people were -.60 (SD=.13) for the analytical profile (*Analyzer*), .069 (SD=.13) for the wise profile (*Wise*), and 1.03 (SD=.092) for the intuitive profile (*Intuiter*), and the skewness values of trust in people were -.49 (SD=.065) for the analytical profile (*Analyzer*), -.66 (SD=.066) for the wise profile (*Wise*), and -.62 (SD=.046) for the intuitive profile (*Intuiter*). All these results indicated normal distributions for the decision-making profiles with regard to trust in people. The Levene's F value was .0331 ($p<.967$) indicating homogeneity of variances across profiles. Thus, the ANCOVA (Ordinary Least Squares method for estimation) was conducted with the post hoc analysis by using the Bonferroni test for the differences in profiles.

The big-five correlates of the profiles with the richness of communication as a covariant variable in ANCOVA results (Table 1) showed that there is a significant difference among profiles in their trust in people ($F= 48.131$, $p<.01$). Based on the post hoc test (via Bonferroni corrections) comparisons there were significant differences among profiles, such as the analytic profile (Mean= 3.01, SD=.019), the intuitive profile (Mean= 3.11, SD=.013), and the wise profile (Mean= 3.17, SD=.017). According to these results, *Analyzer* has the lowest level of trust, while *Intuiter* has the highest level of trust in people (see Figure 2). In addition, extroversion (beta= .061, $p<.01$), openness (beta= .043, $p<.01$), agreeableness (beta= .068, $p<.01$) traits, and the richness of communication (beta= .571, $p<.01$) as a covariate have significant positive impacts in trusting people at the workplace. Thus, in response to our second research question, decision-making profiles vary depending on the level of trust in people. Trust levels range from high to low among intuitive, wise, and analytic profiles respectively.

To test the third hypothesis, we added interactions constructed from significant impacts of big-five personality traits and decision-making profiles on trust in people at

work. Accordingly, the interactions of extroversion, openness, agreeableness traits and the decision-making profiles have been added in the Model 2. The results have indicated that almost all the interactions (except the interaction of *agreeableness-profiles 2)* have significant impacts on explaining the trust in people (F= 245.311, p<.01). More specifically, for the analytic and intuitive profiles, extroversion (analytic profile mean-1 SD=2.85, SE=.026, mean+1 SD=3.16, SE= .026; intuitive profile mean-1 SD=3.09, SE=.026; mean+1 SD=3.25, SE= .024), openness (analytic profile mean-1 SD=2.92, SE=.023, mean+1 SD=3.09, SE= .029; intuitive profile mean-1 SD=3.14, SE=.025; mean+1 SD=3.19, SE= .025), agreeableness (analytic profile mean-1 SD=2.99, SE=.019, mean+1 SD=3.14, SE= .022; intuitive profile mean-1 SD=3.05, SE=.021; mean+1 SD=3.21, SE= .020) personality traits make significant differences in trusting people. Therefore, decision-makers (both analytic and intuitive profiles) with higher levels of extroversion, openness, and agreeableness trust other people more than do decision-makers with lower levels in all of the personality-types. However, for the wise profile personality types make no significant difference when it comes to trusting people (see in Figure 2). In conclusion, it is clear that decision-makers with a wise profile have a certain level of trust in people independent of their personalities. However, decision-makers with the analytic and intuitive profile have a higher level of trust when they are highly extrovert, open and agreeable, and have a lower level of trust when they are introverts, not open and not agreeable. Thus, personality only makes difference when used in connection with either analytic or intuitive profile decision-making profile. It doesn't make any difference when the decision-maker adapts a balanced decision style (wise).

Table 1 Decision-making profiles and the trait interactions in trusting people (ANCOVA results)

Model 1

	Estimate	*SE*	*Beta*	*t-value*	*p-value*
Constant	3.086	.009	.00	391.740	<.001
Extroversion	.069	.015	.061	5.595	<.001
Conscientiousness	.021	.016	.019	1.899	<.059
Neuroticism	-.009	.015	-.008	-.685	<.493
Openness	.044	.014	.043	3.831	<.001
Agreeableness	.067	.013	.068	6.075	<.001
Profiles1 (wise-analyzer)	.036	.023	.051	1.910	<.056
Profiles2 (intuiter-analyzer)	.087	.026	.125	4.066	<.001
The richness of communication	.538	.010	.571	51.697	<.001
R-squared	.373				
Adjusted R-squared	.372				

Model 2

	Estimate	*SE*	*Beta*	*t-value*	*p-value*
Constant	3.095	.007	.00	388.199	<.001
Extroversion	.084	.013	.074	6.470	<.001
Conscientiousness	.030	.013	.026	1.907	<.057
Neuroticism	-.011	.013	-.009	-.855	<.393
Openness	.048	.012	.048	4.135	<.001
Agreeableness	.078	.011	.080	6.988	<.001
Profiles1 (wise-analyzer)	.020	.019	.028	1.035	<.301
Profiles2 (intuiter-analyzer)	.067	.022	.095	3.093	<.002
The richness of communication	.528	.011	.559	50.248	<.001
Extroversion*Profiles1	-.153	.030	-.136	-5.098	<.001
Extroversion*Profiles2	-.131	.034	-.116	-3.840	<.001

Openness* Profiles1	-.095	.027	-.093	-3.453	<.001
Openness* Profiles2	-.104	.031	-.103	-3.385	<.001
Agreeableness* Profiles1	-.086	.025	.087	-3.390	<.001
Agreeableness* Profiles2	.007	.028	.007	.250	<.803
R-squared	.382				
Adjusted R-squared	.380				

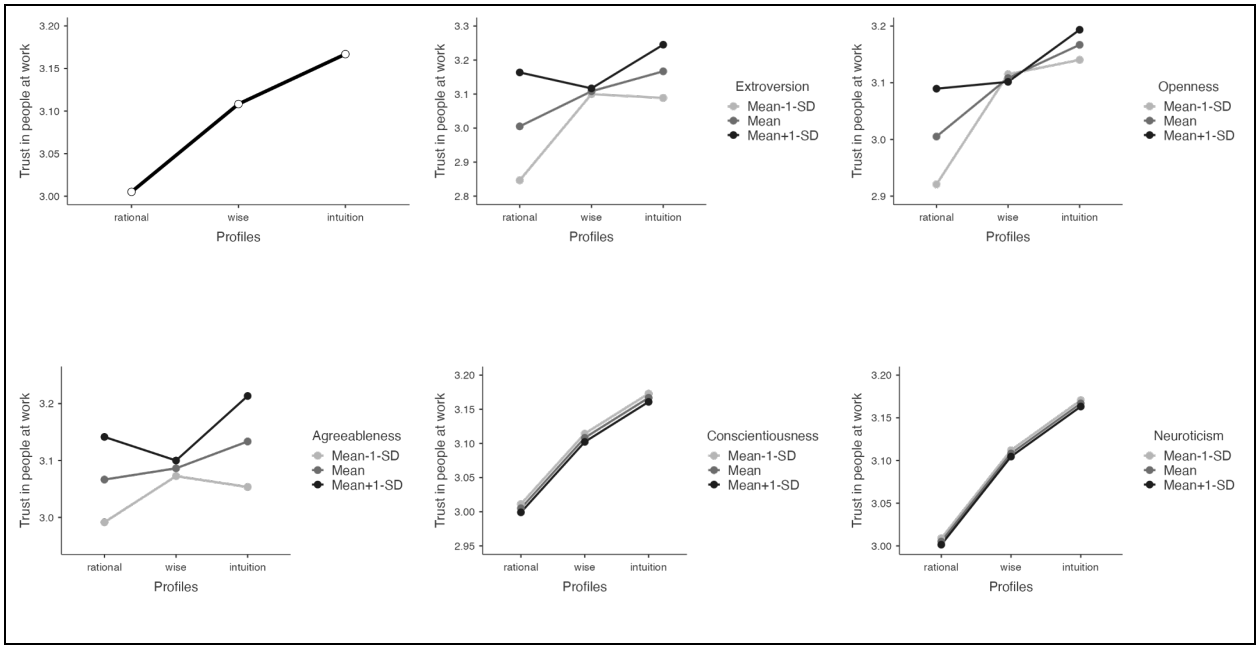

Figure 2 Profile and personality differences in trusting people

5. Discussion

We present a new perspective on decision-making that goes beyond the two systems of thinking described in Dual-Process Theory. McLoughlin, Thoma and Kristjánsson (2025) who also carried out empirical research on wise decision-making and the role of personality also found high correlations between personality traits and wise decision-making. Our contribution emphasizes that wise decision-making is fundamentally linked to the concept of trust, which authors like McLoughlin et al. (2025), Shotter and Tsoukas

(2014) and many others relate to wisdom, but only mention in passing. The contribution explores how a wise decision-making profile materializes by integrating two decision-making styles. The contribution further examines the roles of decision-making profiles in trusting people in the workplace environment, and highlights the interactions of decision-making profiles and big-five personality types in trusting people. McLoughlin et al. (2025) suggest that investigations by psychologists and philosophers of identical psycho-moral constructs may yield synergistic benefit drawing on Gulliford and Roberts (2018). The results have indicated that there are three distinct decision-making profiles, called Analyzer, Intuiter, and Wise based on different decisional preferences, corresponding to two systems of thinking. The first two of these decisional profiles correspond roughly to the moral traditions of deliberation and intuition as highlighted by Julmi (2024). The third decisional profile has been researched under the term phronesis, mostly with qualitative methodologies (e.g., Shotter & Tsoukas, 2014) and only recently with quantitative methodologies (e.g., McLoughlin et al., 2025). Secondly, decision-making profiles vary based on trust levels in people; the *Intuiter* profile exhibits the highest trust, while the *Analyzer* profile shows the lowest. Lastly, some big-five personality traits make significant differences in trusting people. For the *Intuiter* and *Analyzer* profiles, individuals with higher levels of extroversion, openness, and agreeableness tend to trust people more than decision-makers who possess lower levels of these personality traits. However, the personality types of the *wise* profile do not significantly differ in their trust in others. Therefore, personality does not influence trusting people when the individuals adapt the balanced decision profile as *Wise*.

This study contributes to the ongoing discourse on decision-making by introducing a nuanced perspective that transcends the traditional dual-process theory. By identifying three distinct decision-making profiles—Analyzer, Intuiter, and Wise—we

provide empirical evidence that decision-making is not merely a binary choice between intuition and deliberation but a complex interplay of both, ideally giving rise to a third decision-making profile. The *Wise* profile, in particular, embodies the integration of intuitive and deliberative thinking, aligning with the Aristotelian concept of phronesis (practical wisdom). This finding challenges the prevailing assumption that individuals predominantly favor one cognitive system over the other (Betsch, 2004; Kahneman, 2011) and underscores the importance of cognitive versatility in decision-making (Sadler-Smith & Burke-Smalley, 2015) to solve moral problems (Miller, 1985; Andringa et al., 2015).

The results also shed light on the relationship between decision-making profiles and trust in the workplace. The *Intuiter* profile, characterized by higher emotional and heuristic decision-making, exhibits the highest level of trust in others, while the *Analyzer* profile, which prioritizes rational and unconscious processes, shows the lowest. This aligns with prior research suggesting that intuitive thinkers are more likely to trust their first impressions and rely on holistic judgments (Pennycook et al., 2015; Swami et al., 2014). However, the *Wise* profile, which balances both intuitive and deliberative processes, demonstrates a moderate level of trust that is independent of personality traits. This suggests that wisdom in decision-making may act as a stabilizing factor, mitigating the influence of personality on trust. Therefore, our results add explanatory power to the concept of wisdom in decision-making.

Furthermore, the interaction between decision-making profiles and the Big Five personality traits reveals intriguing patterns. For the *Analyzer* and *Intuiter* profiles, higher levels of extroversion, openness, and agreeableness significantly enhance trust in others. This finding aligns with existing literature that links these personality traits to prosocial behaviors and cooperative tendencies (Nga & Shamuganathan, 2010; Riaz et al., 2012).

However, the *Wise* profile remains unaffected by personality traits, indicating that individuals who adopt a balanced decision-making style may possess a more universal and consistent approach to trust. This has important implications for leadership and organizational behavior, as it suggests that fostering wisdom in decision-making could lead to more stable and resilient trust dynamics within teams.

Theoretical Contribution

This study makes several theoretical contributions to the field of decision-making studies, organizational behavior, and business ethics. First, it advances the concept of phronesis by operationalizing it as a decision-making profile that integrates intuition and deliberation. This bridges the gap between abstract philosophical notions of wisdom and empirical research on decision-making, providing a framework for studying wise decision-making in organizational contexts. Second, the study extends the dual-process theory by demonstrating that decision-making profiles are not merely dichotomous but can encompass a spectrum of cognitive styles. By identifying the *Wise* decision-making profile, we challenge the assumption that individuals must choose between intuition and deliberation and highlight the value of cognitive versatility in achieving practical wisdom. Third, the study contributes to the literature on trust by exploring its relationship with decision-making profiles and personality traits. While prior research has examined trust in isolation or in connection with specific cognitive processes (e.g., intuitive vs. deliberative thinking), this study integrates these elements into a cohesive framework. The finding that the Wise profile is insensitive to personality traits offers a novel perspective on the stability of trust in wise decision-makers. Finally, the study enriches the discourse on personality and decision-making by demonstrating how the Big Five traits interact with decision-making profiles to influence trust. This provides a more

granular understanding of how individual differences shape organizational dynamics and underscores the importance of considering both cognitive and personality factors in leadership development. To display the qualities of the wise decisional profile is likely to require time, both for training cognitive versatility and to actually 'take some time' to allow for deliberation.

Practical Implications

The findings of this study have several practical implications for managers, leaders, and organizations. First, the identification of the *Wise* profile highlights the importance of cultivating cognitive versatility in decision-making. Organizations should invest in training programs that encourage leaders to balance intuitive and deliberative thinking, fostering a more holistic approach to problem-solving. This could include mindfulness practices, scenario-based training, and reflective exercises that enhance metacognitive awareness. Second, the relationship between decision-making profiles and trust suggests that leaders should be mindful of their cognitive preferences when building trust within their teams. For instance, leaders with an *Analyzer* profile may need to consciously work on developing emotional intelligence and interpersonal skills to bridge the trust gap. Conversely, leaders with an *Intuiter* profile should be encouraged to incorporate more analytical thinking to avoid over-reliance on gut feelings. Third, the interaction between personality traits and decision-making profiles underscores the need for personalized leadership development programs. For example, individuals with high levels of extroversion, openness, and agreeableness may naturally excel in building trust, but those with lower levels of these traits can still develop trust by adopting a *Wise* decision-making style. Organizations should tailor their training initiatives to address these individual differences, ensuring that all leaders have the tools to foster trust and collaboration.

Finally, the study highlights the importance of creating an organizational culture that values wisdom and cognitive versatility. By recognizing and rewarding leaders who demonstrate balanced decision-making, organizations can promote a more ethical and effective approach to leadership. This could include incorporating wisdom as a core competency in performance evaluations and leadership frameworks.

Conclusion

This study offers a comprehensive exploration of decision-making profiles, their relationship with trust, and the moderating role of personality traits. By identifying the Analyzer, Intuiter, and Wise profiles, we provide a nuanced understanding of how individuals approach decision-making and its implications for organizational behavior. The findings underscore the value of integrating intuition and deliberation in achieving practical wisdom and highlight the stabilizing influence of the Wise profile on trust. The study also contributes to the literature by bridging the gap between decision-making, personality, and trust, offering a holistic framework for understanding these interconnected constructs. Practically, the findings provide actionable insights for leadership development, emphasizing the importance of cognitive versatility, emotional intelligence, and personalized training programs.

In conclusion, this research advances our understanding of wise decision-making and its role in fostering trust within organizations. By embracing the principles of phronesis and promoting cognitive versatility, leaders can navigate complex challenges with greater ethical clarity and effectiveness, ultimately contributing to more resilient and collaborative organizational cultures. Future research could build on these findings by exploring the long-term impact of wise decision-making on organizational performance and employee well-being.

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