Expressing and Developing Wisdom: A Self-Determination Theory Approach

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I thank Marietta Papadatou-Pastou, Antonios Karampatzos and Anastasia Efklides for helpful comments on earlier drafts. I also thank Janet Mowery for proofreading the manuscript and making editorial suggestions. Above all, I am indebted to Matt Stichter and Igor Grossmann for their generous and invaluable help.

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Abstract

While wisdom is recognized as a key aspect of human development, it remains unclear how people may be motivated to express and pursue this cherished quality over the course of their development. Here, I investigate the promise of the motivational factors typically covered in Self-Determination Theory (SDT) for offering insights into the expression and development of wisdom. I explore wisdom as conceptualized by the Common Wisdom Model (Grossmann, Weststrate, Ardelt, et al., 2020), which emphasizes moral aspirations and perspectival metacognition. SDT, with its focus on intrinsic tendencies and psychological needs (autonomy, competence, and relatedness), provides a unique lens through which to examine how these wisdom components develop. It offers a view of an agentic person as expressing and developing wisdom in a social context, while navigating life's difficulties in an unbiased manner. Finally, it offers insight for educational strategies aimed at fostering wisdom, highlighting how an understanding of motivational underpinnings can inform approaches to nurturing wise thinking and behavior.

Keywords: wisdom; metacognition; morality; intrinsic motivation; autonomy.

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Aristotle's *Metaphysics* begins with the phrase "All men by nature want to know" (Meta. 980a2 1), which means that they seek knowledge for its own sake and not only for the utility that knowledge might offer (Lear, 1988). From a psychological perspective, Aristotle's phrase has been interpreted to mean that individuals have intrinsic motivation to learn (Deci, 1975). The same can be argued about the development of wisdom. Csikszentmihalyi and Rathunde (1990) asserted that the development of wisdom is an intrinsically motivating experience and called for more research on this neglected motivational aspect of wisdom. This call was never really answered. Here, I aim to address this call by drawing on Self-Determination Theory (SDT, Deci & Ryan, 1985a; Ryan & Deci, 2017; Ryan, Deci, et al., 2021). As a robust theoretical framework in motivation science, SDT can shed light on whether people have a natural propensity to express and develop wisdom. Building on this framework, I argue that people indeed have a natural propensity for developing wisdom, but that the development of wisdom is not always intrinsically motivated or always attained. First, I discuss current conceptions of wisdom and their convergence with the two pillars of moral aspirations and perspectival metacognition. Next, I argue that SDT can begin to fill an important gap in our understanding of the motivational aspect of wisdom. Subsequently, I discuss SDT's emphasis on intrinsic tendencies and their two manifestations, intrinsic motivation and internalization, as well as how they relate to the main pillars of wisdom. Finally, I focus on the importance of the SDT view of human agency and offer some thoughts on an SDT view of educating for wisdom.

Why SDT Is Useful for the Study of Wisdom

In the field of psychology, there is no shortage of definitions of wisdom. Different definitions lead to different operationalizations, which in turn lead to contradictory findings, such as those concerning the relationship between wisdom and age (Glück & Weststrate,

2022). These diverse perspectives led a team of wisdom researchers to meet in Toronto in 2019 to reach a consensus on the concept of wisdom. They converged on the idea of "morally-grounded excellence in certain aspects of meta-cognition" (Grossmann, Weststrate, Ardelt, et al., 2020, p. 108), establishing two main pillars for what they called the Common Wisdom Model: moral aspirations (e.g., shared humanity, balancing self-protective and other-directed interests, pursuit of truth, general virtuousness, prosocial inclinations) and perspectival metacognition (e.g., balance of viewpoints, context adaptability, consideration of multiple perspectives, epistemic humility). In simple terms, wise individuals are highly competent in metacognitive processes that guide them to make decisions in pursuit of truth and the common good. The consensus view of these pillars of wisdom among psychological scientists offers a common denominator model of wisdom's central elements (Glück, 2020), rather than a comprehensive view of all theoretical positions on the construct. While it is consistent with approaches stressing wise reasoning such as the Berlin Wisdom Model (Baltes & Staudinger, 2000) and Sternberg's Balance Theory (Sternberg, 1998), it does sidestep elements for which there is no consensus on a psychological wisdom construct, such as specific emotions (e.g., Ardelt, 2003; cf. Grossmann, Weststrate, Ferrari, & Brienza, 2020) or the exact mechanisms of its integrative function (Kristjánsson et al., 2021).

Whereas the Common Wisdom Model focuses on the question about the common elements of the construct, it does not preclude consideration of motivational and other social factors that may enable its development (Glück & Weststrate, 2022). For instance, the model does not aim to address whether and why individuals would strive to express and develop wisdom. Indeed, some critics have postulated that without motivation, wisdom-related features of metacognition merely reflect disengaged intellectuality, and that moral aspirations concern procedural content rather than a more substantive content that motivates action (Kristjánsson et al., 2021). In a similar vein, others have proposed that the development of

wisdom in adulthood relies on a motive to understand the human condition and a motive to achieve the common good (Glück, 2019)—i.e., motives that in a way require some features of metacognition and moral aspirations to be effective. It is not easy, however, to discern within current theorizing on wisdom why individuals develop these motives in the first place or whether there is an overarching psychological process that binds them together. To some wisdom researchers, the motivation for the development of wisdom reflects goals that are constituent elements of the wisdom construct itself, such as a striving for excellence (Baltes & Staudinger, 2000), a commitment to both self-enhancing and other-enhancing values (Kunzmann & Baltes, 2003), a concern for a deeper understanding of phenomena (Sternberg, 1990), and a pursuit of personal growth (Ardelt, 2010). But this view may be conceptually confusing: the same characteristics appear both as antecedents and as constituent elements. To other scholars, the development of wisdom depends on access to resources such as openness, effective emotion regulatory skills, and reflectivity that can help a person manifest and nurture wisdom when facing challenges (Glück & Bluck, 2013; Glück et al., 2019; Webster 2003, 2007, 2022). Together, these theoretical claims highlight the role of motivational processes for wisdom and its development, although their implementation may be situation-specific (Grossmann, 2017) and the process through which motivational processes afford the expression and development of wisdom remains underspecified.

Currently there is no overarching motivational paradigm that can be consistently applied to understand the expression and the development of wisdom. As a general metatheory of motivation, SDT has the potential to offer such an account of wisdom. Consistent with an Aristotelian view of human flourishing, SDT assumes that people are active, growth-oriented organisms with intrinsic tendencies to actualize their human potential (Ryan & Deci, 2002; Ryan et al., 2013). SDT is consistent with the work of early humanistic theorists such as Maslow (1943) and Rogers (1951) in referring to self-actualizing tendencies,

even though the term “self-actualization” is not used within SDT (Deci et al., 2013). Instead, consistent with Rogers (1963), SDT uses the notion of a “fully functioning” person (Ryan & Deci, 2001).

To offer an SDT perspective on wisdom, the unfolding of a person’s inherent potential has to be tracked along the two main pillars of wisdom, metacognition and morality. There are several reasons why the SDT framework may be a useful start for a broad exploration of the role of motivation for wisdom. First, in relation to other theories that posit intrinsic tendencies, SDT is strongly empirically based. The founders of SDT made an explicit decision to refrain from offering a broad theoretical framework from the start and attempted to build theory brick-by-brick on the basis of empirical results (Ryan & Deci, 2019). What started as a theory of intrinsic motivation gradually developed into a broad evidence-based theory of human motivation, personality development, and wellness. Therefore, suggested applications of intrinsic tendencies on the topic of wisdom have not only conceptual but, also, empirical foundations. Second, it has been studied in different contexts such as school, sports, work, family, and health. Arguably, as wisdom is related to living a good life (Kekes, 1983), it is important to use a theoretical framework that has been studied in many areas of life. Third, SDT does not propose a unidirectional drive toward human flourishing but focuses on the conditions under which developmental processes can function most effectively. These conditions are specified by the support they offer to three basic psychological needs—namely, autonomy, competence, and relatedness (Vansteenkiste et al., 2023). This needs-driven approach of SDT can offer insight into the conditions under which people could express and develop their wisdom.

From Individual Tendencies to Wisdom: A Complicated Conceptual Path

Discussing wisdom as the hallmark of human development can be understood to imply that wise individuals develop into an optimal form of their potential selves. To

approach wisdom in this way, we need to understand how individuals are able to grow in ways that fully capitalize on their potentialities. SDT explicitly assumes that individuals have built-in, intrinsic tendencies to grow and live well, and specifies the conditions that are conducive or harmful to such optimal development (Ryan & Deci, 2017). These intrinsic tendencies are not linked to wisdom in an obvious way, and it has been argued that they fail to account for the complex paths through which wisdom develops (Bauer et al., 2019). Indeed, because intrinsic tendencies do not seem to have a direct connection to wisdom, unlike motivational concepts such as "striving for excellence" (Baltes & Staudinger, 2000), it is important to examine in detail how the expression of intrinsic tendencies could be linked to wisdom.

SDT distinguishes between two types of intrinsic tendencies: (1) exploratory tendencies that are manifested in intrinsic motivation and (2) tendencies to assimilate social norms and regulations that are manifested in internalization. The first, intrinsic motivation, is characterized by an individual's engagement in an activity because it is of interest and because of the optimal challenge it poses. The individual derives pleasure and satisfaction from the activity itself. For instance, in the early stages of life, SDT theorists suggest that intrinsic motivation leads infants and toddlers to identify and develop interests (Deci & Ryan, 1985a; cf. Silvia, 2008). The second, internalization, refers to the assimilation of aspects of the environment that are valuable to the individual, even though they are not enjoyable per se or immediately related to the individual's interests (Vansteenkiste et al., 2018). Ideally, internalization in Self-Determination Theory (SDT) involves a profound and reflective process through which individuals integrate external influences, such as cultural values and societal norms, into their personal value systems. Consider, for example, someone in a community that values environmental conservation. At an optimal level of internalization, this person does not just acknowledge the importance of conservation superficially but deeply

integrates this value into their sense of self. Their actions, like recycling or supporting green policies, reflect this value, showcasing the integration of their community's environmental ethic. In SDT, such integration ensures that individuals not only become aware of their interests and values but also act in harmony with them (Weinstein et al., 2013) and exhibit consistent alignment between attitudes, behaviors, and personal goals (Koestner et al., 1992; Sheldon & Kasser, 1995). The aforementioned two types of intrinsic tendencies facilitate vertical growth (expansion of interests and capabilities) and horizontal growth (integration within the social matrix; Ryan, 1991). The direction of this growth is influenced by individuals' pre-existing interests and the values they have integrated, demonstrating the nuanced interplay between personal development and environmental factors in SDT.

Psychological growth, as outlined in SDT, is not guaranteed. After all, individuals might struggle to find joy in activities or fail to internalize them when they are not inherently pleasurable. SDT identifies six motivation types (Deci & Ryan, 1985a): amotivation (no interest or perceived capability), external regulation (driven by external rewards/punishments), introjected regulation (influenced by internal rewards/punishments like pride or guilt), identified regulation (behavior seen as personally important), integrated regulation (activity aligns with personal values), and intrinsic regulation (characterized by interest/enjoyment). The last three, which are considered autonomous motivations, are linked to better health and well-being (Pelletier & Rocchi, 2023) and are manifestations of the successful enactment of intrinsic tendencies in specific contexts. Psychological growth comes as individuals engage in situations with autonomous motivation (thereby enacting their intrinsic tendencies), but this type of engagement depends on how individuals experience these situations.

From an SDT perspective, social environments provide support for intrinsic tendencies and autonomous functioning if they facilitate the satisfaction of the three basic

psychological needs of competence, relatedness, and autonomy (Vansteenkiste et al., 2023). Before the advent of SDT, these needs were put forward either under the same name, as in the example of autonomy (e.g., Murray, 1938), or with similar content, as in the example of affiliation (e.g., Atkinson et al., 1954; Murray, 1938). Compared to these initial conceptions, SDT researchers have offered a more restrictive view of needs as necessary nutrients for adjustment, well-being, and growth (Vansteenkiste et al., 2020). The only previous conception of need that is entirely consistent with SDT was offered by White (1959), from which SDT derived its conception of competence. *Competence* refers to the experience of effectiveness and mastery. When this need is frustrated, individuals experience failure and helplessness. While it is often associated with Bandura's (1989) notion of self-efficacy, it is not only a cognitive assessment of effectiveness; it relates to the intrinsic satisfaction one feels when successfully meeting an optimal challenge (Ryan & Moller, 2017). *Relatedness* denotes the experience of warmth and bonding and reflects a striving for contact and support on an interpersonal and a group level. It is the basis for the internalization of social structures and fundamental to the transmission of culture (Ryan, 1991). *Autonomy* refers to the experience of volition and self-endorsement. When this need is satisfied, individuals have a sense of harmony between their behavior and their aims and values, as opposed to experiencing inner conflict and pressure. SDT does not view autonomy as independence and detachment, but allows for autonomous dependence, such as in the cases of young adults volitionally continuing to live with their parents (Kins et al., 2009) or individuals relying emotionally on their best friends (Ryan et al., 2005). Moreover, SDT research has demonstrated that autonomy is of equal importance across cultures (e.g., Chen et al., 2015; Church et al., 2013; Nalipay et al., 2020).

How can the SDT framework of motivation be applied to the topic of wisdom expression and development? Psychological growth, as explained in SDT, does not

automatically equate to wisdom development, although certain aspects may overlap. On the one hand, the short version of SDT's account of growth is that individuals grow if they often exercise autonomous motivation—i.e., regulate their behavior on the basis of intrinsic motivation and integrated processes. On the other hand, the short version of the development of wisdom, consistent with an Aristotelian view regarding the central role of habit, is that individuals become wise if they often exercise wise reasoning (Grossmann et al., 2021). If we can establish a link between autonomous motivation and wise reasoning, it would bridge a motivational gap, explaining why individuals consistently engage in wise behavior and how wisdom develops within a person in a gradual, consistent, and coherent manner.

To further understand the potential link between SDT and wisdom, consider the example of prosocial behavior, which is linked to the moral aspirations pillar of the common wisdom model. Autonomous motivation has been linked to prosocial behavior for different types of individuals such as MTurk workers (Peetz & Milyavskaya, 2021), adolescents (Hardy et al., 2015), university students (Weinstein & Ryan, 2010), volunteers (Gagné, 2003), young athletes (Mallia et al. 2019) and Masters athletes (Sheehy & Hodge, 2015). In each of these cases, integration is conceptualized and measured within a specific domain. It refers to the extent that prosocial behavior takes place in accordance with a person's values in that particular domain. A person in this sense may be integrated when engaged in sports (e.g., prosociality taking the form of sportsmanship) but not necessarily at work or at home. While integration can indeed be thought of as domain-specific, it can also be conceived at the person level, where a person is concurrently integrated in different domains (Ryan, 1995) and acts in accordance with prosocial values when engaged in sports, at work, and at home. The level and extent of need support is a determining factor of the extent to which a person becomes integrated across situations and domains in a trait-like fashion.

The same logic can apply to features of wisdom. Similar to the SDT insights on the domain specificity of attitude and behavior alignment, wisdom can manifest differently across different situations and domains of one's life (Grossmann, 2017). But, in contrast to SDT, there is no broad motivational framework that would account for why people would persist in wise thinking across situations and gradually develop wisdom in a trait-like fashion. The question is whether autonomous motivation facilitates the expression of wise thinking in specific situations and whether, in the long term, it contributes to the development of wisdom. I now turn to each pillar of wisdom separately to discuss the potential contribution of SDT.

Perspectival Metacognition

Although SDT has been broadly applied in the field of cognitive development (Ryan & Deci, 2013), there is no organized framework for its application in the field of metacognition or in the specific domain of perspectival metacognition. Nevertheless, SDT researchers have indirectly done relevant research when studying unbiased thinking, which permeates the study of metacognitive features of wisdom such as intellectual humility and adopting different perspectives (Brienza et al., 2018; Grossmann, Weststrate, Ardelt, et al., 2020). SDT research has found that unbiased thinking is associated with autonomous functioning, which lowers cognitive and emotional defensiveness and reduces a number of biases (Hodgins & Knee, 2002). To understand more specifically how autonomous functioning can reduce bias, it is useful to approach it on two levels.

First, autonomous functioning is found on an individual level, as an individual difference: there are individuals who tend to maintain a high level of self-determination and intrinsic motivation irrespective of the types of environmental stimuli (Deci & Ryan, 1985b). These individuals exhibit a reflective autonomy orientation in the sense of feeling that they are the origin of their behavior; they do not exhibit a reactive autonomy orientation in the

sense of simply resisting influence or coercion (Koestner & Losier, 1996). Importantly, they are open when processing stimuli. For example, they are less prone to self-serving bias (Knee & Zuckerman, 1996) and engage less in defensive coping (especially denial) and self-handicapping strategies (Knee & Zuckerman, 1998) if their controlled orientation is also low. They are expected to exhibit high self-congruence, high interest-taking, and low susceptibility to control (Weinstein, Przybylski, & Ryan, 2012), as well as a high Authentic Inner Compass (AIC) that guides them away from distortion and extreme beliefs in response to ambiguity (Assor, 2017; Assor et al., 2021). Moreover, they are less likely to employ an us-them divide than individuals with a controlled orientation (Chang et al., 2014). Conversely, individuals with a highly controlled orientation are more ego-defensive and more likely to attempt to deflect blame, thereby ending up using more provocative statements toward people that were harmed by their behavior (Hodgins, Liebeskind, & Schwartz, 1996) or displaying anger while driving (Neighbors et al., 2002). They are also less accepting of negative past identities than autonomy-oriented individuals are (Weinstein et al., 2011). Last, control-oriented individuals are more likely to exhibit prejudice through the mediating role of dehumanization (Fousiani, Dimitropoulou, & Michaelides 2016).

Second, autonomous functioning is found on a state level. It can be initiated by momentary activations or supported through long-term contextual parameters. For example, it can be initiated by simple priming techniques and reduce self-serving bias, self-handicapping, and a desire to escape (Hodgins et al., 2006). Or it can lead to individuals being less defensive during a stressful interview (subsequently performing better while delivering a speech), irrespective of their motivational orientation (Hodgins et al. 2010). Autonomous functioning can also be initiated through a mindfulness induction or intervention (Donald et al., 2020), which would, for example, be expected to reduce negativity bias (Kiken & Shook, 2011). Last, autonomous functioning can be supported by long-term environmental autonomy

support, such as that provided by parents, and possibly prevent defensive strategies such as reaction formation (Weinstein, Ryan, et al., 2012). Whether it is momentary or as a habit or a routine, autonomous functioning is associated with less bias and more openness in the processing of information.

The above-mentioned research suggests that autonomous functioning contributes to less bias in a variety of social situations and points to an inherent metacognitive property of humans. If habitually practiced and/or maintained through personal dispositions, autonomous functioning will arguably lead to the development of wisdom through engagement in social situations with openness and non-defensiveness, as well as acceptance of the perspectives of others. At the same time, bias is undoubtedly prevalent, thereby raising the question of why a person would fail to engage in such perspectival metacognition consistently. This question could be answered from an SDT perspective on the basis of the antecedents of autonomous functioning: support for the basic needs of autonomy, competence, and relatedness. Simply put, thinking about our thoughts and emotions, as well as the thoughts and emotions of others, in conditions that are accompanied by the experience of self-endorsement, effectiveness, and warmth, is more likely to result in quieting the ego (Niemiec et al., 2008) and allow us to appreciate the perspectives of others. Conversely, in need-thwarting conditions, ego-defensive processes and difficulty reassessing prior cognitive beliefs are likely to surface, both of which are associated with bias (Klaczynski & Narasimham, 1998). At this point, empirical work is needed to clarify these processes, and in this section I have only alluded to the potential explanatory power of SDT.

A last point relates to thinking about emotions. Since metacognitive processes involve the regulation of emotions (e.g., Davis et al., 2010), special emphasis, from an SDT perspective, should be placed on *integrative emotion regulation* (Roth & Benita, 2023) as the way to handle threat and negative emotions. While strategies for regulating emotion, such as

down-regulation, may seem beneficial for handling threats and negative emotions, research suggests that such strategies may be maladaptive (Gross, 2015). Moreover, wisdom researchers have shown that emodiversity (the richness of emotions felt and their evenness in a given situation) is positively associated with wisdom-related metacognition, irrespective of emotional intensity (Grossmann et al., 2019). What is arguably needed to accommodate wise thinking in difficult situations is finer emotional attunement to the situation at hand, a balanced experience of positive and negative emotions, and finding meaning in adverse experiences. This kind of openness and acceptance is reflected in SDT's notion of integrative emotion regulation, which—in comparison with other regulating strategies, especially emotion suppression—is associated with greater acceptance of a negative event and greater well-being (Houle & Philippe, 2020), less arousal from and less defensive processing of fear-eliciting stimuli (Benita et al., 2019; Roth et al., 2014; 2018), and higher-quality pursuit of valued goals, which is undeterred by the potential negative effects of goal-related depressive mood (Benita et al., 2021; 2023). Importantly, consistent with the view that optimally emotionally regulated individuals are more likely to engage in perspective-taking and prosocial behavior (Eisenberg et al., 2006), SDT researchers have shown that integrative emotion regulation is associated with empathy and prosocial behavior (Benita et al., 2017; Roth et al., 2017). The Common Wisdom Model includes emotion regulation in perspectival metacognition (Grossmann, Weststrate, Ferrari, & Brienza, 2020), but does not elaborate on its processes. SDT may prove useful in studying the expression of wise reasoning about one's emotions.

Morality

Morality features prominently in everyday life (Hofmann et al., 2014; cf. Atari et al., 2023) and, thus, may often become the subject of metacognitive processes. In the Common Wisdom Model, moral grounding of metacognitive processes is the second common

denominator in empirical approaches to the study of wisdom. Here, SDT can help shed light on the development of wisdom by explicating the link between intrinsic tendencies and moral aspirations. For example, SDT researchers have demonstrated that beneficence, although without the stature of a psychological need, supports well-being (one of the main criteria for qualifying as a psychological need; see Vansteenkiste et al., 2020) in a way that alludes to a prosocial inclination that is part of human nature (Martela & Ryan, 2016a). It is important to note here that this prosocial inclination is connected to the pattern of horizontal growth that takes the form of occupying spaces in the social matrix. Although it might be argued that this horizontal growth into the social world involves building oppressing relationships and power differentials, there is research to support that intrinsic tendencies are typically intertwined with prosociality, not with oppression or violence. Especially when findings concern toddlers, there are grounds to support the idea that humans have a natural prosocial inclination. One prominent example is a study in which extrinsic rewards were offered to children 20 months of age and resulted in the reduction of their altruistic propensity, the same undermining motivational effect that we see in intrinsically motivating activities (Warneken & Tomasello, 2008).[1] For adults, it also seems that benevolent acts contribute to the well-being and vitality that are associated with intrinsic motivation, even when there is no contact with the recipients of these benevolent acts (Martela & Ryan, 2016b).

Apart from research directly focusing on prosocial inclinations and the conditions that support them, there is also an indirect way to investigate whether growth tendencies often take the form of prosocial inclinations: investigate what type of behavior surfaces in conditions of autonomy support and autonomous functioning. For example, adolescents value and practice honesty more when their autonomy is supported (Bureau & Mageau, 2014).

[1] SDT scholars have consistently found that rewards undermine intrinsic motivation, although this effect has been challenged by other findings (Deci et al., 1999), including the finding that such undermining is short-lived (Goswami & Urminsky, 2017).

Moreover, individuals who are autonomy-oriented are more honest in their relationships (Hodgins, Koestner, & Duncan, 1996). In physical education, adolescents engage more in prosocial behavior when their needs are supported, and they engage more in antisocial behavior when their needs are frustrated (Cheon et al., 2018; Jang et al., 2020). Aggression in young children also seems to result from the frustration of autonomy (Joussemet et al., 2008), rather than from its support. Parental psychological control directly predicts aggressive acts such as cyberbullying (Fousiani, Dimitropoulou, Michaelides, & Van Petegem, 2016), and children that are controlled by their caregivers are more prone to aggression (Shields et al., 2001). The positive effects of autonomy and the negative effects of controlling environments on prosociality are consistent across geographic location and age, as a meta-analysis drawing on correlational, longitudinal, and experimental data from 167 studies shows (Donald et al., 2021).

In addition to the support that autonomy offers to intrinsic motivation, the underlying explanation of these outcomes also entails the fact that autonomy support facilitates integration. As a process that establishes synthesis among different aspects within the self, integration is likely to ensure that values that end up integrated will be consistent with each other. For example, the value of having friends is more likely to be integrated with the values of care and fairness and not with the value of aggression. Aggression might be seen as valuable in circumstances where it protects individuals and their loved ones but is not likely to be integrated as a whole value to the level that it would eventually present an obstacle to healthy relationships. From deontological and rule utilitarian perspectives (Arvanitis, 2017; Arvanitis & Kalliris, 2020), as well as a virtue ethics perspective (Arvanitis & Stichter, 2022), morality is more associated with integrated regulation than with intrinsic motivation. One reason is that any intrinsic prosocial tendencies, such as empathy, have a narrow scope and are likely to be enacted for the benefit of friends, relatives, and in-group members, even

at the expense of other parties, thus making these actions especially prone to bias (Bloom 2017a; 2017b). If individuals think about equality, which is a more abstract value, in deciding whether to help a person, they are probably not drawing on intrinsic motivation alone but are thinking about integrated values as well.

Regulating one's behavior on the basis of integrated moral aspirations and values requires that moral integration has taken place beforehand. Moral integration, like other types of integration, occurs in conditions of need support, with the added prerequisite that it take place in situations that call for a moral judgment, such as a moral dilemma (Arvanitis & Kalliris, 2020). Proximal environments, such as school and work environments, that support the needs for autonomy, competence, and relatedness are conducive to the integration and the consistent application of moral norms. Pervasive economic and political environments can also influence basic resources, such as healthcare and education, and basic freedoms in ways that consistently support or thwart the basic needs on a more systemic and organized level (Ryan & Dehaan, 2023). Moreover, it can be argued that political systems that are built on the basis of principles of solidarity and justice create the need-supportive conditions that would allow these very principles to be integrated, whereas authoritarian regimes are need-thwarting and their ideologies cannot be integrated (Arvanitis, 2017). Through moral integration, consistency in wise reasoning arguably leads to the eventual development of wisdom. Hence, from an SDT perspective, the development of moral aspirations takes place in morally laden situations during a complex dynamic interplay between broad economic and political factors, proximal social environments, and individual intrinsic tendencies, providing that there is support of basic psychological needs.

To summarize, on the one hand, individuals whose intrinsic motivation is supported, autonomy-oriented individuals, and individuals who experience long-term autonomy support seem to act prosocially. The development of wisdom further entails moral integration, which

takes place during a complex interplay between environmental support and intrinsic tendencies in morally laden situations. On the other hand, in conditions that undermine intrinsic motivation and internalization (i.e., need-thwarting conditions), the dark side of human nature is bolstered (Ryan & Deci, 2017). A special area of research from the perspective of wisdom would be to examine the relationship between moral integration and perspectival metacognition, as aspects of metacognition might be useful in solving conflicts between social values and norms and, thus, determine which ones will be integrated in the end (Arvanitis & Stichter, 2023). This relationship arguably unites metacognition and moral aspirations within the overarching concept of wisdom.

Agency and the Role of Basic Psychological Needs

A theoretical question worth posing is whether individuals operating solely on intrinsic motivation, the prototype expression of intrinsic tendencies, would become wise. If the answer is yes, those individuals would be predisposed to become wise. But this is not an easy question to address because intrinsic motivation, as argued above, is not a product solely of a person's tendencies but also of the properties of potential activities and contextual conditions. Therefore we would have to ask whether wisdom would develop in a world where only ideal activities and ideal conditions exist. But the world does not present only ideal settings. In fact, the opposite tends to be the rule. The world presents activities and conditions that thwart intrinsic motivation because they present obstacles to the fulfillment of the needs of autonomy, competence, and relatedness. Individuals may indeed find themselves in situations that stimulate growth by promoting intrinsic motivation or the integration of extrinsically motivated activities; but they will often find themselves in situations that thwart growth by imposing rewards, punishment, or deadlines (undermining autonomy), by providing negative feedback or non-challenging activities (undermining competence), and by offering experiences of cold interactions (undermining relatedness). Perhaps precisely

because life poses such difficulties, finding a way to be virtuous presupposes deeper reflective thinking that is associated with wisdom. Moreover, this is why there are perspectives in the development of wisdom that focus on difficult circumstances (Weststrate & Glück, 2017; Webster, 2022). Whichever view of wisdom we adopt, we must account for its development in these different types of social situations. According to SDT, I propose that an individual who successfully navigates these social situations by drawing as much as possible on intrinsic motivation and by integrating aspects of the environment that will serve intrinsic growth tendencies is more likely to attain wisdom in the process. This view of course is intertwined with some form of human agency.

SDT identifies human agency with autonomous functioning.[2] There are two potential criticisms of the SDT approach, especially with regard to the account of wisdom proposed here. First, while SDT views agency as a natural proactive property of the organism, it also accepts that the expression of this property is very much dependent on the satisfaction of the basic psychological needs. There is evidence suggesting that individuals become more adaptive and skilled when their needs are met than they do when their needs are frustrated (Ryan et al., 2019). A critic might argue that overemphasis on environmental qualities that nurture the basic psychological needs fails to acknowledge that wisdom should be actively developed by the individual, not passively transmitted by the environment. It is important, however, to emphasize that SDT proposes that the psychologically growing person is actively engaging with the environment. In the classroom, proactivity takes the form of "agentic engagement," the active participation of students in the flow of instruction that they receive,

[2] Autonomy comes from the Greek word "αυτονομία," which literally means self-rule. According to SDT, consistent with its literary meaning, autonomous functioning is behavior that emanates from the self—that is, the structure with which functions, values, and interests are integrated (Ryan, 1993). That is also how SDT treats agency. While there are similarities with Bandura's (1989) concept of agency, such as a similar emphasis on the interaction between the self and the environment, on the role of self-reflection, and on the compatibility of agency with determinism, Bandura (1989) explicitly rejects autonomy (defined as complete independence from environmental constraints) and does not distinguish between autonomous and more alienated forms of functioning (Ryan & Deci, 2004; 2006).

which is important in the achievement of valued learning outcomes (Reeve, 2013; Reeve & Shin, 2020). Individuals can even create conditions that are supportive of the three needs, a process called need-crafting. Need-crafting refers to both an awareness of activities, situations, and relationships that are need-supporting and a proactive tendency to create them (Laporte et al., 2021). Individuals who engage in need-crafting are aware of what they like to do (which concerns autonomy), what they are good at (which concerns competence), and the people that care about them (which concerns relatedness). More importantly, they try to act on the basis of this awareness and seek out or create need-supportive conditions. Therefore, growth does not entail a passive process of "nutriment consumption" but is a more active process of nutriment creation, seeking, and subsequent consumption. Wisdom expression and development are related to this form of proactivity.

Second, supporting intrinsic tendencies does not at first glance guarantee a broad metacognitive understanding of morality and virtue (Bauer et al., 2019) or an objective knowledge of the standards of morality that would be captured by the notion of "moral autonomy." Moral autonomy is linked to self-endorsement of moral rules that can only come from integrated regulation and may even exist in opposition to intrinsic motivation in certain situations (Arvanitis & Kalliris, 2023). For example, an empathic, intrinsically motivated response might be to favor a person we love at the expense of another person's well-being; but, taking into account moral principles of equality, fairness, and care, we may decide that the right thing to do is not to engage in such favoritism. Integration involves a constant synthesis of different stimuli, rules, values, and opinions and leads us down a path to the eventual creation of a harmonious system of cognition, emotions, and motives at the core of the self (Arvanitis & Kalliris, 2020). The more diverse the stimuli, the more opportunity exists for the development of a broad metacognitive knowledge of moral goals and strategies. As argued above, for an individual to attain wisdom, environmental stimuli should also

include difficult life experiences (Weststrate & Glück, 2017; Webster, 2022). Wisdom develops as the person successfully achieves integration when faced with diverse and challenging situations. The broader the integration of moral values, the greater the extent of moral virtue (Arvanitis & Stichter, 2022) and the achievement of moral autonomy as a form of agentic self-legislation (Arvanitis & Kalliris, 2023). Of course, the extent of integration is not guaranteed, but its antecedents can be accounted for by SDT.

A Note on Educating for Wisdom

SDT's emphasis on the role of autonomous functioning in learning is inconsistent with carrot-and-stick educational approaches such as high-stakes testing (Ryan & Weinstein, 2009). These approaches are especially ill-advised in the field of virtue development as virtue involves a pursuit of the good *because* it is good and not for the attainment of outside rewards (Curren & Kotzee, 2014). The ideal motivational state for education is intrinsic motivation (i.e., learning for the sake of learning). However, because learning challenging concepts can be a hard task that is not always enjoyable, educators should also support high-quality, autonomous extrinsic motivation (Niemiec & Ryan, 2009). By fostering both intrinsic motivation and autonomous extrinsic motivation, the support of the three basic psychological needs plays a central role in facilitating students' flourishing in the classroom (Ryan et al., 2023). Considering the two pillars of the Common Wisdom Model, SDT can offer further insights as to how integration can be supported over the long term to facilitate the development of wisdom.

Morality

As Grossmann has indicated (Grossmann, Weststrate, Ardelt, et al., 2020, Addendum), the exact nature of moral aspirations within the Common Wisdom Model remains underspecified. This serves as evidence that it is not easy to agree on common moral principles that underlie wisdom and that, further, should be the object of education. Perhaps,

consistent with the view that morals cannot be explicitly taught but only indirectly developed, it is easier to address the pillar of metacognition than the pillar of morality in educating for wisdom (for a review of different character education approaches, see Lapsley & Yeager, 2013; Lapsley & Narvaez, 2006). Still, SDT might offer such an indirect approach to fostering wisdom even with regard to the pillar of morality. Whatever the form of education, whether it is focused on academic content alone or includes aspects of explicit moral principles, framing the learning objectives using the SDT concept of *intrinsic aspirations* can potentially motivate students to construct a moral self (Lapsley & Woodbury, 2016). Individuals already tend to move toward intrinsic aspirations such as emotional intimacy and societal contribution because they are linked to the enactment of self-actualizing tendencies (Sheldon et al., 2003), and this move can be supported by important others such as parents (Wouters et al., 2014). Framing educational activities in terms of intrinsic aspirations leads to deeper engagement, better conceptual learning, and greater persistence in learning activities (Vansteenkiste et al., 2006). Arguably this effect will be stronger when the learning material has moral components because intrinsic aspirations focus on community contribution and personal growth; hence there is a potential match between learning objectives and morally grounded learning material (but also a match with natural prosocial and empathic propensities).

Perspectival Metacognition

With regard to the pillar of metacognition, one type of training that has been put forward for the enhancement of perspectival metacognition is mindfulness and decentering (Bernstein et al., 2015). SDT argues that mindfulness, a state of open attention to the present moment, reduces defensive processes that are associated with the me-self and facilitates intrinsic motivation and integration (Ryan, Donald, & Bradshaw, 2021; Ryan & Rigby, 2015). The mindful, no-self emphasis arguably shifts attention to other individuals and

therefore cultivates perspectival metacognition. Of course, it is also possible to affect metacognition through outside interventions such as offering controlling feedback and presenting external incentives. In the classroom, for example, such interventions offer mixed results on the accuracy of students' ratings of their performance (e.g., Hacker et al., 2008; Saenz et al., 2019). Even if controlling stimuli such as incentives and negative feedback seem to work for isolated tasks, they are not necessarily effective in the long-term process of the development of wisdom because they are associated with non-autonomous forms of motivation. What is needed for the development of wisdom is the strong behavioral persistence that is associated with autonomous forms of behavior (Ryan & Deci, 2017; Pelletier & Rocchi, 2023). Consequently, interventions for the development of specific metacognitive strategies could work if they are eventually integrated and employed by the person autonomously. Since integration is a process of taking in practices and bringing them in line with other aspects of the self, metacognitive practices should also align with intrinsic tendencies (which are ever-present within the self). Especially because metacognitive processes are so fundamental to how an organism intrinsically operates, whatever such processes we end up integrating should be expected to stay close to the organism's intrinsic tendencies. For example, a person is more likely to adopt and integrate multiple perspectives if that person is also inclined to understand the world objectively. Another example is that an individual is more likely to integrate metacognitive strategies when engaged in intrinsically motivating activities rather than in extrinsically motivating activities. In general, metacognitive development should be enhanced in learning conditions that allow individuals to manifest their intrinsic tendencies.

Concluding Remarks

Some experts believe that attaining wisdom is a rare and difficult task (e.g., Jeste et al., 2010). It is worth asking what motivates individuals to persevere in the pursuit of wisdom

and under what conditions they will succeed. From an SDT point of view, part of the answer is that in pursuit of epistemic and social ways to navigate life's challenges humans have intrinsic tendencies to grow in these domains, which are reflected in the areas of metacognition and morality. Wisdom-related growth is achieved through the enactment of these tendencies, and more specifically through intrinsic motivation and internalization. Optimal internalization—that is, integration—is especially important in making moral decisions. Intrinsic motivation and, generally, autonomous functioning are associated with less bias, more open processing of environmental stimuli, and greater understanding of the true and virtuous. However, autonomous functioning is often thwarted when a person's basic psychological needs are not met. In those circumstances, it is difficult for people to continuously enact their intrinsic tendencies while engaging with the world. Doing so consistently throughout one's lifetime is challenging and makes it difficult to develop wisdom. SDT offers a wealth of concepts—e.g., need satisfaction, autonomous functioning, need-crafting, agentic engagement, integrative emotion regulation, mindfulness, intrinsic goals—related to growth-related intrinsic tendencies that can be meaningfully applied to studying facets of this human developmental trajectory.

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