Eudaimonia as a way of living: Connecting Aristotle with self-determination theory

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Abstract: The chapter starts with a discussion of eudaimonia as originally used by Aristotle and his contemporaries. We argue that eudaimonia should not be understood as referring to any kind of subjective experience or 'richer feeling of happiness' but is rather about a good and valued way of living that can produce happiness, vitality and wellness as its byproducts. Furthermore, eudaimonia is especially found in those manners of living and pursuits that reflect our positive human nature. Based on self-determination theory, we then suggest a number of ways of living that we see as good candidates for an eudaimonic way of living: pursuing intrinsic goals, living autonomously, being mindful, and being benevolent. We review evidence showing how these ways of living seem to lead to enhanced wellness for human beings, and accordingly we see these as modern answers for the Aristotelian call to find intrinsically worthwhile ways of living.

Eudaimonia, although an ancient concept, has reemerged in modern psychology for clear reasons. Across the globe the spread of market capitalism and consumer-based economies has led to increasing material wealth, without necessarily yielding expected rises in happiness or well-being (see Easterlin 1995; Kasser, Cohn, Kanner & Ryan, 2007; Clark, Frijters & Shields 2008). Moreover, changes in societal structures in more economically advanced cultures have allowed many (though far from all) people more choice and leeway in choosing the pathways of their lives, while at the same time traditional sources of guidance and belief are diminished. This leaves open the question of what is good and worthwhile to pursue in life. For individuals, both of these trends raise concerns about the qualities of a good life that comprise and give rise to fulfillment and well-being (Ryan & Deci, 2001; Waterman, 2013). Many people have become disillusioned by the materialistic life and its capability to produce happiness, but have a hard time identifying the alternative way of living that would be more worthwhile. Eudaimonia, as a psychological concept and a target of research, presents for many the hope of finding something beyond hedonistic happiness worth striving for.

Despite its currency, eudaimonia is also a widely misunderstood concept, particularly within the discourse of positive psychology. The main issue is a tendency for some theorists to construe eudaimonia as a specific type of happiness or subjective experience, one that sits alongside other experiences like pleasure or engagement. In contrast, when relying on the fundamental roots of the concept in Aristotelian philosophy, one would not construe eudaimonia as a psychological state, or a kind of happiness (see e.g., Bartlett & Collins 2012). Rather it is understood as a good and fulfilling way of life, the ingredients of which then contribute to happiness and thriving. This latter view is

embraced within the *self-determination theory* (SDT) approach to this concept (see Niemiec & Ryan, 2013; Ryan, Huta & Deci, 2008; Ryan, Curren & Deci, 2013).

In this chapter we describe both ancient and modern views of eudaimonia, and why we have highlighted the eudaimonic tradition as critical for current empirical work in the psychology of well-being. We also review some specific research findings relevant to these ideas, and that concern people's ability to experience happiness and thriving in the context of the modern social forces affecting us all. Throughout our thesis and findings are guided by our overarching theoretical and empirical framework of SDT (Deci & Ryan, 2000; Ryan & Deci, 2000).

Aristotle, Eudaimonic Thinking and Positive Psychology

The pre-philosophical history of eudaimonia in ancient Greece saw the concept to denote a "broad idea of a life's going well" (Annas 1995, p. 44). Eudaimonia was the word used to describe the kind of life all people sought to live, but there were many contradictory ideas about what this optimal way of life included. Some emphasized material prosperity, others living honorably, still others health, pleasure, or living according to virtues (see Aristotle 2012). Yet what eudaimonia was not was a mere subjective feeling¹. It was an evaluation of life as a whole to see whether the good things were present in that life, with the discussion focusing on what exactly the relevant good things should be.

¹ This is perhaps most strikingly demonstrated when Solon claims that the eudaimonia of a man can only be settled after his death (Herodotus 1.32), and when Aristotle ponders whether a dishonor befalling a dead person can still alter that person's eudaimonia (Aristotle 2012, p. 18-19). These remarks would be very strange to make about eudaimonia as a fleeting subjective state, but make more sense when we see eudaimonia as an evaluation of one's life as a whole.

Of different ancient views on eudaimonia, it was Aristotle who laid out the first systematic work on eudaimonia in particular and ethical theory in general, and subsequent Greek schools of philosophy walked in his footprints (Annas, 1995). Aristotle is also the figure on which contemporary discussions of eudaimonia within psychology focus, and whose views we see as resembling many views of SDT. Thus it is on Aristotle's view on eudaimonia that we concentrate.

Aristotle's view was that every living being has a telos, some good that it naturally strives to actualize (Aristotle 2012). Aristotle saw that what was especially unique to our human nature (and what separates us from animals) was our ability to live in accord with reason, and the most complete way to live according to reason was to live virtuously. Thus Aristotle arrived at his famous conclusion that eudaimonia is about a "certain activity of soul in accord with complete virtue" (Aristotle 2012, p. 23). The virtues and excellences specific to human beings included living in a reflective way that embraced our best values and engaged our highest talents and civic concerns. They also included other-oriented virtues such as friendship, justice and truthfulness. Accordingly, a person could be more or less characterized as person who lives (or has lived) a good life, insofar as that individual pursued or lived in accordance with the specific human virtues. By engaging in these personal and civic virtues and excellences, and when conditions allow, actualizing them, Aristotle expected persons to be most fulfilled. Happiness, being a reflection of that fulfillment, was also a likely outcome of living in a eudaimonic manner.

Aristotle of course had his own quite historically defined, and in some ways culturally circumscribed view of the features and characteristics of such an ideal or

fulfilling human life. For him, for example, the pinnacle of human excellences was the philosophical or contemplative life, which just happened to be his own profession (he notes that "philosophy seems to have pleasures that are wondrous in purity and stability" Aristotle, 2012, p. 224). He also had ideas about who was most apt at eudaimonic living (e.g., men rather than women). Also valuing civic engagement, he considered this the domain of citizens rather than slaves. Yet acknowledging such historically conditioned limitations to his ideas does not demean the many qualities he did highlight that still pertain in our modern world. Specifically, he saw the excellent life as one in which a person lived virtuously, and in all endeavors living up to his or her potential by pursuing, in a reflective and chosen manner, one's best competencies and talents.

In providing a contemporary application of eudaimonic thinking, we draw from Aristotle's several central points. One is that there are certain ways of living that are more conducive to, and reflective of a good life and a well person (Ryan & Huta, 2008).

Second, when these qualities are embraced and lived, a common result is happiness in the fullest of senses understood as subjective well-being. Thus a person pursuing virtuous living is expected to feel fulfilled and satisfied with his or her life, including not only positive affect, but also a sense of meaning, connection, and depth. Importantly, happiness and well-being are for Aristotle not the primary aims of living (that is, in fact, an hedonic view). Rather these subjective experiences are byproducts of living well.

These claims are of course not merely philosophical in nature—they are also speculative and psychological. That is, whether a life of virtue and reflective engagement in one's activities leads to happiness and thriving more than, for example, a life of hedonic pursuits, selfishness or materialist excess (which would not express virtuous

ideals) is an empirical question. For indeed it is plausible, and not uncommonly expressed, that it is not virtue that makes us happy, but achievement, economic success and self-interest in the narrow sense. We do not have to look far for exemplars of this alternative philosophy; they surround us in the modern media, which contains both implicit and explicit messages that money, fame and image are the royal roads to happiness (Kasser et al., 2007). It is thus important that we investigate whether indeed there are certain sensibilities and aims that more readily facilitate human thriving and wellness, and others whose pursuit, even when successful, do not yield these benefits.

In the few paragraphs above our attempt has been to characterize the Aristotelian view on eudaimonia, going back directly to his own writings. Our discussion has been brief and is not reflective of all the nuances in Aristotle's view, but nevertheless aims to highlight the main thrusts of his theses. For further discussion of these ideas, we refer the reader to a discussion by Ryan, Curren, and Deci (2013) as well as to even the greater exactingness of philosophers such as Annas (1995) and Curren (2014). Such careful specificity has an important place in this tradition, especially because of how readily eudaimonic thinking has at times been mischaracterized or misunderstood, perhaps especially within the fast moving positive psychology movement.

In fact, it seems important from the outset of our discussion to highlight one specific misunderstanding in modern applications of eudaimonic thinking within positive psychology, namely the idea that the specific experience or quality of happiness and affect derived from eudaimonic endeavors is different in kind from the happiness or elation one might experience through other positive events. Eudaimonia, that is, is not a special type of immediate experience, or necessarily a deeper, richer feeling of happiness.

Instead eudaimonia is rather a depiction of the kinds of pursuits and a manner of living that would most reliably give rise to a life accompanied by a sense of wellness, vitality and thriving. This does not mean that one cannot look to eudaimonic living for more frequent experiences of awe, meaning, or deep fulfillment or the like (Huta & Ryan, 2010). Yet one can also be awed or struck by meaning or feel temporarily fulfilled even when not living eudaimonically.

We thus emphasize that eudaimonia is defined by a way of living that is likely to produce many beneficial outcomes like greater happiness and integrity than other pathways in life, such as non-virtuous living, hedonism, or indolence (Ryan & Huta, 2009). Therefore we see it as incorrect to put eudaimonia alongside other forms of happiness (Seligman, 2002) or to imagine that there is a specifically distinct eudaimonic experience of wellness. Instead, eudaimonic philosophy argues that a life of virtue and a pursuit of excellences leads more frequently to fulfillment and happiness. Other forms of "success" (dominance, greed, acquisition, hedonism for example) should, on average, not. It is this question that can be pursued using modern empirical methods. We thus separate eudaimonic way of living as referring to certain practices and pursuits from happiness and other subjective experiences of well-being. A eudaimonic way of living may *cause* subjective well-being, but it is not a *type* of subjective experience.

We will also revisit an even more speculative idea within Aristotle's framework, namely the proposition that eudaimonic living produces these outcomes *because it reflects our human nature*. Virtue was a central part of eudaimonia for Aristotle because it presented "the activity and hence the way of life that are best for human beings as such, as the kind of beings we are" (Bartlett & Collins 2012, p. x). Some of the virtues Aristotle

saw as natural for humans were other-oriented: for example friendliness and goodwill toward others. Yet in what ways can we argue that being virtuous, caring for others, and developing our excellences is *natural* to humanity, any more than the obvious selfishness, cruelty or avarice people so often display? This question of human nature, being clearly complex, is also worth pursuing, especially given that we now have new methods to examine these issues using developmental and evolutionary psychology, both of which can offer more definitive answers than one might expect (Ryan & Hawley, in press).

Thus in what follows we shall tackle both of these speculative questions raised by the eudaimonic tradition and see what answers, and remaining questions, can be identified. We thus first discuss the relations of eudaimonic living to happiness and wellness outcomes; and then we consider the topic of human nature, and evidence that Aristotelian goodwill and caring for others represents a natural proclivity, especially under nurturing conditions of development.

Does Eudaimonic Living Make us Happy?

Insofar as eudaimonia concerns a way of living rather than merely the subjective outcomes of a life, one must have a model of what such a life entails. As we said, Aristotle, particularly in his *Nichomachean Ethics* (2012), had his own list of virtues and excellences that comprised the good life, just as do some modern eudaimonic philosophers (e.g., Nussbaum, 2001). As it turns out, in reading Aristotle's views we see many parallels with the tenets of a good life specified within our more contemporary (and more pedestrian) views in self-determination theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2000).

Previous papers within SDT have specifically argued that certain principle elements of Aristotle's view are modeled in SDT (Ryan, Curren & Deci, 2013; Ryan, Huta & Deci, 2008). More generally, SDT has aimed to find those elements of human experience that are in accordance with human nature and thus intimately connected with human thriving, and thus could be seen as modern answers to the Aristotle's call to find ways of living through which to actualize the human *telos*.

These include: 1) pursuing intrinsic goals such as intimate relationships, benevolence and community, and personal growth rather than extrinsic goals such as image, popularity or material acquisitions and success; and 2) regulating behavior autonomously rather than being controlled or being a pawn to forces alien to one's sensibilities and values, and 3) living a reflective, mindful and aware life, rather than an unreflective life or one comprised of defensiveness or avoidance of conscious living. SDT argues that these qualities of awareness, intrinsic pursuits and autonomous regulation in turn fulfill very basic human psychological needs. Thus a fourth aspect of SDT is its prediction that these qualities of living lead one to experience a greater sense of autonomy and integrity, a greater sense of competence and effectiveness; and a greater sense of connectedness to others. As basic psychological needs the fulfillment of these three needs is an experiential sign that the person in question has been able to create a life yielding the nutrients most required by human nature (Deci & Ryan, 2000). These basic need fulfillments of autonomy, competence and relatedness in turn are predictive of subjective happiness and positive experience, including more stable senses of vitality and thriving.

Before examining the empirical evidence that eudaimonic living indeed makes us happier, it must be noted that happiness and similar positive feelings by no means are the only outcomes that should be used when evaluating whether a certain form of living is eudaimonic. They indeed are merely one of the better things to which eudaimonic living should lead. In fact, eudaimonia as a broad notion of a good life allows us to consider other criteria as well. For example, Haybron (2008) has argued that a life can be good in (at least) three different ways: It can be good for the well-being of the person living that life, it can be good in a moral sense, and might also be evaluated as better or worse in aesthetic terms.

Moreover, a life of excellence and virtue can, in some circumstances, lead to less day-to-day positive affect and even a premature death (e.g. when a person is fighting an oppressive political system instead of supporting it). However, from a moral point of view the person living that life could choose not to live in any other way and thus might feel that despite the sacrifices, it is the only virtuous way of living in that particular situation. Of course, even in that situation, although the person might experience less joyous feelings, the person might still have more of other positive states such as a sense of autonomy and integrity. We will not delve into these complexities more here, but just want to remind the reader that in addition to happiness, there are other things that should be considered when evaluating a life as more or less eudaimonic. For example, in the future it would be interesting to see more research on what conditions and strivings increase people's sense of meaning in life and having a life worth living (Weinstein, Ryan & Deci 2012; Martela & Steger, in press).

The empirical case for SDT's eudaimonic model

As it turns out there is quite a bit of emerging evidence supporting the four empirically testable ideas about happiness and well-being we outlined above. In what follows we review some of the empirical contributions supporting the idea that these elements of living well indeed predict positive outcomes associated with truly thriving.

Pursuing more intrinsic versus extrinsic goals in life.

Aristotle made a distinction between two forms of action: *praxis*, which refers to action that is virtuous and an end in itself; and *poiesis*, which means production that has only an end beyond itself (Aristotle, 2012, p. 120). Echoing this distinction, Ryan, Sheldon, Kasser and Deci (1996) proposed that all life goals are not created equal when it comes to fulfillment and happiness. In arguing this they built upon studies by Kasser and Ryan (1996), who found that the goals of financial success, becoming socially recognized, and having an attractive image loaded together on a factor they labeled extrinsic aspirations, whereas personal growth, meaningful relationships, and community contribution loaded on a factor they called intrinsic aspirations. Kasser and Ryan (1996) further showed that a stronger relative focus on intrinsic aspirations was positively correlated to well-being indicators such as self-actualization, self-worth, and vitality, and negatively related with negative indicators such as symptoms of anxiety and depression. The opposite pattern was observed when people gave greater weight to extrinsic goals.

This general pattern has been widely replicated using varying methods and measures. For example, evidence also shows that among adolescents, those with stronger materialist tendencies show lower vitality and self-esteem, and more symptoms of depression and anxiety, just as adults do (Kasser & Ryan, 1993). Materialism has also been related to higher narcissism and behaviors that reflect stress such as substance

abuse. Echoing this, a recent longitudinal study by Ku, Dittmar and Banerjee (2014) showed that students who were higher in materialism reported lower levels of mastery goals, and higher levels of both approach and avoidance forms of performance goals, which concern comparisons with others. They also showed worse school performance. There is in fact a growing body of evidence around the globe indicating that materialism and well-being are negatively related (e.g., Ahuvia,& Friedman, 1998; Kim et al., 2003; Ryan, Chirkov, Little, Sheldon & Temoshina, 1999; Saunders & Munro, 2000; Schmuck, Kasser & Ryan, 2000).

In addition, emphasis on extrinsic goals tends to be associated with a number of "non-eudaimonic" attitudes and beliefs. For example Duriez, Vansteenkiste, Soenens and De Witte (2007) showed in both cross-sectional and longitudinal studies that those with stronger extrinsic goals also evidenced more interest in social dominance, and expressed more racial and ethic prejudices.

Niemiec et al. (2009) examined such positive and negative effects in a longitudinal study, including the issue of the extent to which people not only valued, but actually attained, intrinsic or extrinsic aspirations. They found that over a two-year study period well-being was increased to the extent that intrinsic goals were desired and met. Conversely, even when extrinsic aspirations were successfully attained, well-being was not significantly increased, whereas symptoms of ill-being were. Thus, as Aristotle might have predicted, placing importance on, and even attaining extrinsic life goals did not necessarily lead to greater well-being. Important for SDT, Niemiec et al. also showed that this pattern of effects was mediated by satisfaction of basic psychological needs for autonomy, competence and relatedness. Intrinsic pursuits yielded greater need

satisfaction, in turn fostering greater well-being.

In SDT people's investment in materialism is seen in part as a byproduct of insecurities, stemming in part from earlier frustrations of basic psychological needs. Conversely, when in nurturing and supportive environments, SDT predicts people grow to focus more on intrinsic goals, and thus to move in even greater directions of actualization and wellness. For example, in a study of adolescents and their mothers, Kasser et al. (1995) showed that mothers of materialistic teenagers showed a more cold and controlling parenting style. In contrast adolescents who were oriented towards more prosocial and eudaimonic values were more likely to have a more autonomy-supportive, warm and democratic parenting style. Kasser et al. (1995) argued, accordingly, that a parenting environment that nurtures essential psychological needs fosters more prosocially oriented and psychologically thriving adolescents.

Researching high school students, Williams, Cox, Hedberg, and Deci (2000) found that the less autonomy support teenagers reported receiving from parents, the more they placed value on extrinsic, relative to intrinsic aspirations. This in turn was associated with more tobacco, alcohol, and marijuana use. It seems that social contexts that thwart young people's basic psychological need satisfaction can turn them toward compensatory goals and activities that pose serious risks for psychological and physical health. More recently, Chaplin and John (2010) reported that more supportive parents had less materialistic children, a relation that was in part mediated by self-esteem, consistent with Kasser et al.'s, (1995) insecurity hypothesis (see also Grolnick, 2002). In sum, such empirical findings support the SDT view that the pursuit of extrinsic goals – such as acquiring money, image and fame – does not lead to wellness, but instead to ill-being.

Parenting contexts that thwart satisfaction of basic psychological needs are more likely to result in children developing desires for wealth, fame, and image, or the most visible indicators of worth, presumably, to compensate for the low personal worth that stems from basic need thwarting.

Why autonomy is important to eudaimonia.

Aristotle maintained that eudaimonia involved being able to live according to the virtues that are inherent to one's nature. A general principle within SDT is that when people are afforded autonomy they are more able to fulfill all of their basic needs. Autonomy is in a sense architectonic, in the sense that it represents an affordance of selection in the direction of greater fulfillments. It is thus not surprising that when people have opportunities to act with autonomy they tend to show more eudaimonic qualities. They show more propensities to act toward intrinsic values (Sheldon, Ryan, Deci, & Kasser, 2004) and more propensity to give to and help others (Weinstein & Ryan, 2010). In contrast, heteronomous or controlling forces often push people away from their core values, as they attempt to meet the demands or pressures put on them from others.

Indeed, it is a long standing theme within SDT that controlling rewards contingencies, contingent approval, and ego-related pressures often drive people away from their interests, and give external impetus to behaviors that may not be in accord with their moral or social values. Thus athletes who are ego involved are more likely to cheat or treat opponents as objects (Vansteenkiste, Mouratidis & Lens, 2010). Teachers under pressure of high stakes tests, and executives under constraints of contingent bonus systems often act in ways that, even as they may successfully reach their goals, lead to less satisfaction and congruence (Ryan & Brown, 2005).

An excellent example of this was recently reported by Sheldon and Kreiger (2014). They studied a large sample of lawyers across the US, and divided them into: money lawyers who were primarily seeking wealth and financial gain; social advocates who were attempting to use their profession to do good; and a middle group that was mixed or indeterminate. As it turned out, even when controlling for income (or not) the money lawyers were less satisfied and happy than the social advocates. This effect was in part mediated by their lower autonomy. In their pursuit of extrinsic rewards they were on a day-to-day basis less able to do things that they found of interest or personal value. Instead they did "what they had to" to get ahead.

When one acts with autonomy, one by definition is acting in ways that are truly self-endorsed. As we shall argue, when people really get to act in accord with what they endorse, they are more likely to appear benevolent, moral and to pursue a life that can be characterized as eudaimonic.

Evidence on mindful living.

Aristotle (2012, p. 13) argues that eudaimonia entails living "in accord with reason" and being considerate in approaching one's actions and pursuits. Although these sentiments advocate a contemplative life, the nature of that contemplation is quite open. Around the same time in the Buddhist tradition, the idea of mindfulness, or being open and receptive to, and aware of what is occurring in present moments (Brown & Ryan, 2003), was born. This concept of mindfulness has in recent years attracted significant scientific attention in the Western world (see Brown, Creswell & Ryan, 2015). In our contemporary view, mindfulness allows an individual to authentically experience what is occurring, and thus is central to a self-regulated, and well-chosen life path. In order to

live according to reason one has to be aware of what is occurring both internally and externally, and accordingly mindfulness could be seen as one aspect of such a reflective life. When more mindful, people are able to more fully observe and less defensively cope with the various demands that face them (Weinstein, Brown & Ryan, 2009). Mindfulness also facilitates more openness towards both pleasant and unpleasant experiences, helping individuals to work through life difficulties, and to integrate their lessons (Weinstein, Deci, & Ryan, 2011).

Mindfulness and autonomous regulation.

There is additionally an empirical connection between mindfulness and more autonomous self-regulation. For example, early in their work on measuring mindfulness Brown and Ryan (2004) reported that both autonomous regulation and the satisfaction of the basic psychological needs were related to greater mindfulness. In fact, evidence showed that mindfulness, assessed as both a general individual difference and as a state measure, was reliably associated with more autonomous functioning. In studies with both student and adult samples it was shown that greater mindfulness at both between- and within-person levels predicted more autonomy in everyday activities as well as less negative affect.

Mindfulness and intrinsic aspirations.

A greater focus on intrinsic aspirations is positively linked to being mindful. Both Brown and Ryan (2004) and Brown and Kasser (2005) reported positive relations of mindfulness to people's ratings of the importance of intrinsic (relative to extrinsic) aspirations. Still other research demonstrates that people high in mindfulness are more likely to act in ways that are congruent with the intrinsic aspirations. For example, Brown

& Kasser (2005) reported that people high in mindfulness were higher in their endorsement of intrinsic aspirations and were more ecologically responsible in their behaviors. Brown, Kasser, Ryan, Linley, and Orzech (2009) also found that people higher in mindfulness were less vulnerable to consumerist messages, more likely to savor their experiences, and were significantly more accepting of their life circumstances. In fact, those higher in mindfulness showed lower discrepancy between their current financial situation and their desired income. In turn, this lower discrepancy was predictive of higher subjective well-being.

Mindfulness and virtue.

Also consistent with a eudaimonic portrait of friendliness as one of the main virtues, mindfulness is related to greater compassion and empathy for others (see Beitel, Ferrer, & Cecero, 2005; Brown, Ryan & Creswell, 2007. Shapiro et al. (1998) showed medical students trained in mindfulness displayed higher empathy over time when compared to a control group. Thus it appears that mindfulness may reduce people's susceptibility to the seductive power of extrinsic rewards and materialistic goals, resulting in more autonomous self-regulation and higher well-being (Brown et al., 2009; Schultz, Ryan, Niemiec, Legate & Williams, 2014).

Basic psychological need satisfaction as central to a good life.

One of the common pathways through which both more intrinsic goal pursuits and mindful living positively affect well-being is through their facilitation of people's basic psychological need satisfactions. In fact, as we have cited, research shows that people experience more autonomy, relatedness to others, and competence when they pursue intrinsic goals and live mindfully.

In fact SDT has a long history of showing that social supports for, and experiences of basic psychological need satisfactions predict greater well-being (Deci & Ryan, 2000) and vitality (Ryan & Deci, 2008). What is most interesting is that these need satisfactions, as we have reviewed, rise with more intrinsic pursuits, more mindful living, and with prosocial behaviors (Weinstein & Ryan, 2010).

New evidence also suggests that basic psychological needs at least partially mediate the negative effects of poor economic conditions on people's flourishing.

Gonzalez, Swanson, Lynch and Williams (2014) found in a sample of U.S. workers that basic need satisfactions mediated the relations between their socioeconomic status (SES), evaluated in terms of occupational status indicators, and both physical and mental health. Di Domenico and Fournier (2014) similarly examined relations between socioeconomic status and well-being, and whether these were mediated by SDT's basic need satisfactions. They specifically assessed the relations between self-reported SES, household income, and the degree of socioeconomic inequality in one's surroundings as predictors of health and wellness. In this work, all three of these indicators were related to greater self-reported health and wellness, and importantly, SDT's basic need satisfactions mediated these relations.

Martha Nussbaum (2001), a philosopher who has made conditions for eudaimonia a central focus of her work, provided a list of 10 specific capabilities understood as providing the necessary foundations upon which a good life can be established (see Anand, Hunter & Smith, 2005). Her list included: 1) a reasonable life expectancy; 2) ability to have bodily health; 3) ability for bodily integrity, including freedom of movement and freedom from fear of violence; 4) ability to use one's senses, imagination,

and thought; 5) ability and freedom to experience and express emotions, including love; 6) ability to exercise practical reason; 7) ability to experience affiliation, including freedom to live with others, and to have the respect of others; 8) ability to have an appreciation of and contact with other species; 9) opportunities for play; and 10) ability to have control over the environment, both political and material. DeHaan, Hirai and Ryan (2015), examining adult samples from both the USA and India, applied a capability indicator tapping the attributes specified by Nussbaum. They found as expected that the capability indicator was highly positively correlated with well-being, and negatively with ill-being. Also consistent with extensive previous work in SDT (Vansteenkiste & Ryan, 2014), basic psychological need satisfaction was highly positively correlated to wellbeing, and highly negatively related to ill-being whereas basic psychological need frustration was highly positively correlated to ill-being, and negatively correlated to wellbeing. Finally, consistent with their hypotheses, DeHaan et al. found that basic psychological needs were both related to and partially accounted for the positive effects of Nussbaum's capabilities list.

Is Aristotelian Goodwill or Benevolence Part of Human nature?

Eudaimonic ideas rest on the view that when we actualize the best of our human natures this results in both happiness and in living virtuously. The idea that people inherently strive to be both virtuous and benevolent and to grow and develop their talents has been doubted by many. Indeed, it is not hard to find authors and theorists who depict human nature in the most negative of terms. Rather than virtuous and self-cultivating some see humans as selfish and hedonically inclined.

Yet the more closely we look at the evidence the more it seems that humans indeed do have a positive proclivity—if they are positively nurtured. In contrast, when people grow up under circumstances where they are deprived or thwarted in their basic psychological needs they do show another nature. For example, they become concerned with image, ego and self over others.

Recently Ryan and Hawley (in press) addressed the issue of whether humans are good and benevolent by nature looking through the lens of both SDT and evolutionary psychology. They reviewed a number of experiments showing that even early in development humans show propensities toward helping others, including strangers. In fact, rewarding them for doing so even undermines this intrinsic propensity (see Warneken & Tomesello, 2008). Moreover there is a general finding that when people are given opportunities to autonomously help others, as opposed to doing it because of social rewards, approval or pressure, they derive greater positive feelings as a result (Weinstein & Ryan, 2010). Ryan and Hawley thus argue that these positive feelings resulting from truly being giving or altruistic in a phenomenal sense, reflect a design feature of humanity. Insofar as we find satisfaction in giving and helping we are more prone to do so, and this likely has its ultimate sources in the selective advantages associated with more giving and cooperative behaviors.

Naturally, this doesn't mean that humans wouldn't be interested in their own well-being and survival. Seeing humans as either totally egoistic or totally altruistic ignores the fact that humans can have many traits and tendencies that can sometimes contradict each other. We are thus not arguing that humans are not egoistic. Rather we are arguing that in addition to egoistic dispositions, humans are also equipped with other-

oriented and benevolent dispositions, which both have adaptive advantages and are proximately accompanied by inherent satisfactions. Indeed, the very existence of proximal satisfactions for prosocial and benevolent behaviors helps ensure that these adaptive human attributes will be expressed (Ryan & Hawley, on press)

Modern evolutionary theories include several mechanisms that separately or together can explain how proximally other-oriented behavior could be ultimately beneficial for the individual's evolutionary fitness (see e.g. Fehr & Fischbacher 2003; West, El Mouden & Gardner 2011). Inclusive fitness or kin selection (Hamilton, 1964) explains why it is beneficial to help kin, but because our ability to recognize kin is probabilistic and based on cues, rather than absolute (Lieberman et al., 2007), this care for one's kin can 'spill over' to non-kin as well. Reciprocal altruism (Trivers, 1971), where we help those who help us, is another mechanism explaining selective helping, and its explanatory power is increased when indirect reciprocity (Alexander, 1987; Nowak & Sigmund, 1998), where we help those who have a reputation of being helpers, and strong reciprocity (Fehr, Fischbacher, & Gächter, 2002; Gintis, 2000), where we punish those who don't reciprocate, are also taken into account. Multi-level selection processes (D.O. Wilson, 2012; D.S. Wilson, 2003) have also been suggested as explanations, although their explanatory power beyond other mechanisms continues to be debated (e.g. Gardner & Grafen, 2009; Henrich, 2004). The more general point about the discussion around modern evolutionary theories is that the question is usually not whether human prosocial tendencies can be explained, but rather about the relative merits of the different existing explanations (e.g. West et al., 2011).

This nod to natural goodness in no way denies that violence and aggression are often developmental trajectories, but this is by far more frequently the case for children who have been need thwarted rather than well-nurtured (e.g., Joussemet et al., 2008). In addition violence is at times culturally sanctioned, and so-called "virtuous violence" behaviors are not uncommon (Fiske & Rai, 2015). Yet even the occurrence of these communal and/or compliant acts of violence does not typically yield need satisfaction or enjoyment (e.g., see Legate, DeHaan, Weinstein, & Ryan, 2013). In short, violence, prejudice and malevolence do occur, but they are more often outcomes of threat, maltreatment and pathology than expressions of our human nature under positive conditions. The fact that we have both bright and dark sides to our human nature makes it important to understand the contingencies that evoke one over the other, and SDT argues that these contingencies are largely explained by basic psychological need supports versus thwarting.

It thus may be that Aristotle, in discussing the natural virtues of friendliness and goodwill, was onto something. People may be prone toward benevolence, and "designed" therefore to feel happier when being so. This has adaptive consequences for both individuals and the groups in which they reside, even though such advantages are not (and could not be) the proximal reasons why they act so.

A recent experiment by Martela and Ryan (2015) illustrates well this propensity to feel positively following benevolence. They argued that although many past studies have shown that prosocial behavior is associated with enhanced well-being, most all of these prior experimental studies have involved face-to-face contact with the beneficiary. Martela and Ryan wanted to examine whether it is prosocial behavior *itself*, and not only

an increased sense of social relatedness to the recipient that improves well-being. Accordingly they invited participants to play a computer game in which successful performance could lead to anonymous donations to needy people. Yet they only allowed half of the participants to be aware of this anonymous impact. The other half only played the game for high scores. As compared to the control (unaware) condition, the group who knew their success produced prosocial outcomes experienced more positive affect, interest, and meaningfulness, and less negative affect. Beyond these self-reported outcomes, this benevolent group also demonstrated greater post-game vitality, and better performance on a subsequent Stroop task, providing evidence for the positive energetic effects of prosocial behavior. Interestingly, and consistent with SDT, these positive effects of prosocial behavior on well-being were mediated by subjectively assessed beneficence, which in turn produced heightened autonomy, competence, and relatedness need satisfactions. In other studies using cross-sectional and daily diary methods, Martela & Ryan (in press), showed that when people feel that they have a positive impact on others – what they called beneficence –they report an increased sense of subjective wellbeing and vitality.

In sum Aristotle assumed that it is by actualizing the best in our natures that we would have the best of lives, including a higher likelihood of happiness and a fuller sense of satisfaction. One particular virtue or excellence for human beings was according to Aristotle friendliness and goodwill toward others. Evidence from SDT and related perspectives supports both that there are indeed positive well-being and happiness outcomes from striving toward and enacting more caring and benevolent values.

Moreover it may very well be that nature has crafted us to find such satisfactions in such

behaviors, fitting with Aristotle's notion that in living eudaimonically we are living in accord with our natures.

Conclusion

Finding out the constituting elements of intrinsically worthwhile human ends and a good way of living is according to Aristotle of great practical importance: Equipped with this knowledge "would we not, like archers in possession of a target, better hit on what is needed?" (Aristotle 2012, p. 2). In addition to the individual level importance of research on eudaimonia, Aristotle also emphasized its societal importance. He saw that the proper aim of a society and its institutions is to ensure the virtuousness and eudaimonia of its citizens (e.g. Aristotle 2012; Curren, 2010). The more we know about the good way of living, the more we are in a position to build a society that can be supportive and offer opportunities for such a way of living for all of its citizens. Moving toward asking the eudaimonistic question therefore has crucial implications for behavioral sciences as well. It pushes researchers to "critically evaluate and compare lifestyles, organizations, and cultures in terms of their support for the good life and the outcomes that accompany it", as we have argued before (Ryan et al., 2013, p. 69).

In this article we have aimed to empirically examine certain Aristotelian propositions about what living a good life would involve. Based on research on SDT we have aimed to show that a way of living characterized by intrinsic goals, autonomy, mindfulness, and benevolence indeed seems to lead to enhanced wellness for human beings. We invite more researchers to engage in this task of aiming to find the ways of living that are both in accordance with the inherent human nature and supportive of human wellness, growth and thriving.

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