



Rational Egoism Virtue-Based Ethical Beliefs and Subjective Happiness: An Empirical Investigation

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Abstract

The fields of positive psychology, cognitive behavioral therapy, mindfulness, and goal-setting have all demonstrated that individuals can modify their beliefs, attitudes, intentions, and behaviors to improve their subjective happiness. But which ethical beliefs affect happiness positively? In comparison to ethical belief systems such as deontology, consequentialism, and altruism, rational egoism appears to be alone in suggesting that an individual's long-term self-interest and subjective happiness is possible, desirable, and moral.

Albeit an important theoretical foundation of the rational egoism philosophy, the relationship between rational egoism and subjective happiness has yet to be investigated empirically. Using (Overall and Gedeon, *Business and Professional Ethics*. 38:43–78, 2018) 24-item rational egoism scale, we test this relationship on a random sample of 534 full-time American workers using partial least squares structural equation modelling (PLS-SEM). Consistent with rational egoism theory, the main contribution to knowledge of this research is finding a statistically significant relationship between rational egoism and subjective happiness. Implications for practice and areas for future study are suggested.

Keywords Capitalism · Dysfunctional beliefs · Ethics · Ethical beliefs · Mental health · Mindfulness · Rational egoism · Theory of reasoned action · Subjective happiness · Virtue ethics · Wellness

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“Happiness (eudaimonia) is what any rational human being seeks to achieve... happiness is ‘the highest of all the goods achievable in action’ (Aristotle, Nicomachean Ethics) (de Colle and Werhane, 2008, p. 752).”

Introduction

Interest in happiness research has been growing, particularly in the fields of psychology, economics, organizational behavior, and public policy. Governments around the world are increasingly seeking to measure the subjective happiness or subjective well-being of their populations in order to assess the success or failure of their policies (e.g., Helliwell et al., 2013; Rahman & Veenhoven, 2018). Governments and economists are also augmenting their metrics of economic prosperity (e.g., GDP, average income, and employment) with other metrics that measure aspects of happiness. To facilitate this, the World Database of Happiness, for example, has grown to over 7,000 studies, mostly based on self-reported assessments of individual subjective happiness levels (Veenhoven, 2014).

The business management literature has also increasingly embraced the notion that employee happiness is a key contributor to workplace productivity, success, performance, and customer satisfaction (Boehm & Lyubomirsky, 2008). Happy employees are thus seen as a strategic source of long-term sustainable competitive performance and profitability (Gavin & Mason, 2004). Dobson (2022) explicitly links employee happiness to a virtue-ethics-based moral business and describes a ‘virtuous circle’ where companies create beneficial values to their employees, community, and society in general while also reaping profitable benefits back to the company.

The fields of positive psychology, cognitive behavioral therapy (CBT), mindfulness, and goal-setting all provide evidence of happiness-enhancing techniques, skills, and attitudes being learned and resulting in improved subjective happiness. These modalities rest on the theoretical foundation of the theory of reasoned action (TRA), which provides a framework for how individuals use reason to form intention and change their behavior based on their beliefs, attitudes, values, and the subjective norms of their environments. Through the lens of TRA, individuals have agency and use cognitive processes to maintain beliefs about the consequences of their actions, set goals, exert free will, and modify their behaviors in order to achieve their goals and improve their lives (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980).

Scholars often conceptualize happiness through the Aristotelian virtue ethics lens (Frawley, 2015). Aristotle (350 BC) believed that the ultimate goal or purpose of human life was the achievement of personal happiness and, to attain this, he outlined the importance of virtue ethics. His teachings on virtue ethics were foundational to the philosophical position of Adam Smith (1759, 1776), the Scottish enlightenment moral philosopher and economist, and others (e.g., Rand, 1964), pertaining to rational egoism. Smith not only advocated for virtue, morality, and justice, but also self-interest. He believed that individuals who behaved virtuously could benefit society overall even if they were focused on advancing their own long-term self-interests, which has been defined in terms of one’s long-term happiness.

Expanding on rational egoism through the lens of virtue ethics, Woiceshyn (2011a) demonstrated that successful business leaders displayed seven rational egoism virtues: rationality, productiveness, justice, independence, honesty, integrity, and pride when making decisions. Using this as a foundation, Overall and Gedeon (2018) compared and contrasted

these seven virtues with several philosophical frameworks, namely: altruism, deontology, and teleology. Through this process, Overall and Gedeon (2018) defined rational egoism as a Type II second-order formative construct where all seven of the virtues are required elements. They subsequently developed and validated a 24-item rational egoism scale for measuring these seven virtues.

Foundational to the rational egoism theoretical framework and rooted in Aristotle's view on virtue ethics, Smith suggested that when individuals seek to advance their long-term self-interests, they unintentionally promote the interests of society (Sen, 1999) more effectively than if they attempted to promote societal interests directly (James & Rassekh, 2000). He suggested that this not only includes the economic prosperity of society (Smith 1776), but he also suggested that it is the foundation for the happiness of everyone (Smith, 1759; Roberts, 2014). Although an important theoretical foundation of the rational egoism philosophy, the relationship between rational egoism and subjective happiness has yet to be investigated empirically. Following the recommendation of Overall and Gedeon (2018) and using their 24-item rational egoism scale, in this research, we examine how rational egoism impacts subjective happiness.

In the first section of this manuscript, we outline our theoretical foundation whereby we operationalize the rational egoism construct (consisting of the aforementioned seven virtues) and provide the theoretical basis on which this might affect subjective happiness. In the second section, we present our methods and show how we test our hypothesis using partial least squares structural equation modelling (PLS-SEM) on a random sample of 534 full-time American workers. Next, we outline our findings and conclude with our discussion.

Theoretical Framework

Rational egoism

Within the act of trading, Adam Smith believed in the importance of a free market. However, Smith was against harming the interests of others to benefit one's own. He specifically outlined the need for virtue ethics to constrain an individual's base instincts (which have the potential to be neither rational, nor in their long-term self-interest) that can lead to immorality, which has the potential to harm trust within a well-functioning market (Smith, 1759). To counter this, Smith advocated virtues that incorporate reciprocity (i.e., mutual gain) (James & Rassekh, 2000; Johnson, 1995a, b), benevolence (Locke, 1988), and empathy in the marketplace.

The most philosophically-grounded and well-defined articulation of rational egoism arising from the enlightenment ethics stream of Aristotelian-based philosophers is provided by Ayn Rand (1961, 1964) who identified seven rational egoism virtues: rationality, productiveness, justice, independence, honesty, integrity, and pride (Peikoff, 1991). Rational egoism is an alternative virtue-based ethical framework where one's character and behaviors are based on adhering to fundamental principles within an integrated set of seven virtues (e.g., Annas, 2006). Locke and Woiceshyn (1995) clarified the rational egoism construct in the business leadership context and differentiated it from cynical egoism (whereby it is considered appropriate to sacrifice the interests of others for oneself), secular altruism, and other ethical frameworks. Building on this and Overall and Gedeon (2018) work, we define the rational egoism construct as a virtue-based set of ethical beliefs within the TRA

model to explore how humans use reason to form intention and act based on their beliefs, attitudes, values, and the subjective norms of their environment.

In her work, Woiceshyn (2009, 2011a) demonstrated that the CEOs of Canadian energy companies who displayed the rational egoism virtues not only showed greater instances of successful decision-making, they were also considered to be top-performers by their industry peers. Building on this, Younkens (2012) suggested that rational egoists are successful in business. In their research, Overall and Gedeon (2018) found a positive relationship between rational egoism and transformational leadership, which has been shown to be a significant contributor to organizational success (Cho et al., 2011). Thus, there appears to be a strong positive relationship between rational egoism and extrinsic business success.

Virtue-based ethical systems may be contrasted with the other major ethical systems such as deontological (or duty-based) ethics and consequentialist ethical systems (Annas, 2006). Duty-based ethics states that the pursuance of one's personal happiness is considered contrary to doing what is moral. A person must do their duty (e.g., as a categorical imperative) regardless of the consequences to themselves or even in spite of their own happiness (Kant, 1933). Similarly, the ethics of altruism holds that other people's happiness should take priority over one's own subjective happiness (e.g., Comte, 1858; MacLagan, 1954; Campbell, 2006). Utilitarianism would require that one somehow calculate, balance, or weigh one's own happiness against that of the greater good in judging the morality of any intention or behavior (Mill, 2010). Among the various ethical frameworks, rational egoism stands out as saying that a person should do what leads to their own personal long-term happiness (e.g., Younkens, 2010, 2011).

Rationality

Rand (1964) and others (e.g., Locke and Becker, 1998) stated that rationality is the foundational virtue of rational egoism – the highest virtue – on which all other virtues are based. The virtue of rationality involves relying on one's logical reasoning, being thoughtful, and making decisions based on careful, critical, and analytical thinking where all relevant facts are deeply considered (Woiceshyn, 2009). Rationality involves acknowledging the reality of the context and not, by contrast, evading the truth or basing decisions on faith, authority, duty, emotion, or whim (Rand, 1964).

According to Aristotelian and rational egoist scholars, considering that reason is our primary means of survival and thus required for all decision-making (e.g., Peikoff 1991), rationality is generally considered foundational to happiness. Chekola (2007), differentiating between hedonic and eudaimonic forms of happiness, indicated that the hedonic elements of happiness do not necessarily require rationality whereas Aristotle's eudaimonic happiness requires rationality. Novarese, et al., (2009) points out that while rational decision-making is not necessarily guaranteed to lead to positive happiness-creating outcomes, it should at least be attempted within the limits of bounded rationality and satisficing (Simon, 1955; Overall, 2020a).

The Nobel Laureate Herbert Simon (1955) suggested that the human mind is bound by cognitive, knowledge, and computational limitations. These constraints may prevent humans from always making perfectly rational choices. It is suggested that the socioeconomic environment is far too complex for the computational challenges of the mind (Banaji and Greenwald, 2013; March, 1994). To overcome these limitations, individuals attempt to simplify their decisions by structuring them to fit within the confines of their computational resources and available information (Overall & Rosalind, 2022). As a result of this

simplification, individuals often opt to satisfice rather than make perfectly rational choices (March, 1994). Satisficing refers to how humans, when they are reviewing alternative solutions, select the first option that meets their preconceived adequacy criterion rather than continuing to exert effort in seeking a more optimal choice.

Being tired, overworked, and cognitively busy can further reduce one's ability to behave rationally (Kahneman, 2011). When individuals are required to make decisions under time constraints, they become rushed and their cognitive resources that are needed to make rational choices are constrained (Bazerman & Tenbrunsel, 2011). When decision-makers experience emotional distress, they can fail to think through the available options clearly. In turn, they might select more high-risk options, even if they will likely lead to poor outcomes. One's ability to make rational decisions is further affected by cognitive biases (i.e., errors in judgment that inhibit one's ability to make rational decisions), including overconfidence, optimism, illusion of control, planning fallacy, and escalation of commitment (Kahneman, 2011).

Although these cognitive challenges are innate to humans, it has been suggested that increasing one's level of awareness (of self and others) and self-analysis can improve one's decision-making abilities (Banaji and Greenwald, 2013; Overall & Rosalind, 2022). Mindfulness practices, such as meditation, have been shown to improve one's ability to develop self-awareness and, in this vein, others have suggested that the path to enlightenment can further enhance one's ability to make better choices. In particular, Lawrence Kohlberg who developed the cognitive moral development theory argued that people progress through various stages when improving their decision-making. When individuals become enlightened, their ability to make rational decisions improves (Overall & Rosalind, 2022; Young, 2002). This was echoed by Maslow, the father of Maslow's hierarchy of needs (Alexander et al., 1991; Overall & Rosalind, 2022). From this, if a decision-maker is aware of their cognitive limitations and attempts to overcome these by using mindfulness practices, their ability to behave rationally improves.

Integrity

The virtue of integrity involves doing what one says they will do. Integrity is about not compromising one's values for anything. Fundamentally, integrity involves having and holding firm to one's strong moral principles and not relinquishing these to conform to the wishes of others. It involves practicing what one preaches (Locke and Woiceshyn, 1995). An important aspect of integrity involves responsibility and accountability whereby one acknowledges when they have made a mistake or when they are wrong. Part of this process is making the necessary arrangements to rectify the situation (Locke, 2000).

Within the rational egoist ethical system, integrity means being true to values that will help one achieve one's own long-term happiness, even if they are difficult in the short-term. Other ethical systems would challenge whether integrity would or should lead to one's own subjective happiness at all. For example, altruism maintains that the subjective happiness of others should be one's primary objective and that one's own subjective happiness should come last (Maclagan, 1954; Campbell, 2006). Integrity to a deontologist would mean adherence to duty regardless of whether that produces good consequences or happiness for anyone (Yönden & Der, 2016). Some religious-based ethical systems promote personal happiness if and as ordained by God whereas others assert that life is about suffering and that happiness is reserved for the afterlife.

Justice

Justice, within a rational egoism context, is firmly rooted in reciprocity – mutual gain and benefit. Consistent with Adam Smith's position on reciprocity and empathy, justice is centred on treating others fairly through an equitable exchange of values (Woiceshyn, 2009). In terms of compensation, justice involves paying others fairly for their relevant contribution. Within a business leadership context, it involves meritocracy whereby individuals are judged on their abilities and character, objectively, without favoritism or cronyism (Locke, 2000). Reciprocity applies not only to economic trade, but also in one's personal dealings with how one treats others (Smith, 1759). Through reciprocal justice, individuals refrain from sacrificing themselves to others (e.g., due to duty or altruism) or others to themselves (e.g., by cheating or swindling them due to cynical egoism) (Locke & Woiceshyn, 1995).

Within the rational egoism ethical system, the reciprocity aspects of justice should contribute to personal subjective happiness, for example, by indicating that an individual should avoid people that harm them or do not reciprocate their good actions. Not all ethical systems would concur, however, that justice involves reciprocity. Deontological and altruist ethics state that justice means a duty to benefit others, regardless of the costs to oneself. The Christian-based ethical system also holds justice as a virtue which, while it includes a reciprocal element of rectifying justice (e.g., 'an eye for an eye'), primarily conceives of justice as a non-reciprocal social obligation to others (e.g., 'love your neighbor as yourself' and 'turn the other cheek'). According to these contrasting ethical systems, 'you are your brother's keeper' and others are entitled to one's care or service without requiring payment or even expressing gratitude (Comte, 1858).

Productiveness

Productiveness not only involves producing material value to sustain oneself, it also involves purpose and intentionality. To Peikoff (1991), productiveness serves as the integrating standard of one's life. Locke and Woiceshyn (1995) suggest that productiveness, within an organizational context, involves working hard, producing, striving for continuous improvement, and lifelong learning (Woiceshyn, 2011a). It is apparent that the virtue of productiveness should lead to material wealth, but beyond the poverty level it has been shown that additional money does not necessarily lead to more happiness and that the individual should derive enjoyment or meaning from the work itself (Cassar and Meier, 2018; Layard, 2011).

With productiveness being an important facet of rational egoism, there is the belief that productive employees are happier (Lumley et al., 2011) and more satisfied (Peterson, 2019). Productiveness, on its own and isolated from the other rational egoism virtues, however, may not unilaterally lead to happiness. If individuals focus too much attention on work and ignore the other areas of their life, such as their mind–body connection and maintaining a healthy work-life balance, they could become less happy. It is possible, but not always the case that highly productive individuals work longer hours (Cassar and Meier, 2018) and take on additional responsibilities (Erro-Garcés and Ramírez-Ávila, 2020), which has been shown to increase psychological pressures on the employee (Overall, 2016; 2020b). However, it should be pointed out that working longer hours does not necessarily equate to heightened levels of productivity. It might actually have the reverse effect on productivity. It might also lead to burnout.

The pressure of working longer hours has been shown not only to have a negative effect on ethical decision-making (Overall, 2018), but it has also been shown to adversely affect one's work-life balance and mind-body connection (Overall, 2016), which may influence negatively one's subjective happiness. Overall (2016) demonstrates that this pressure can also increase workplace stress (Colligan and Higgins, 2005). These negative individual consequences of working longer hours also have high overall social cost implications. For example, prior to the COVID-19 pandemic, workplace stress led to a loss of nearly 800 million work days per year in the United States and Europe (Mark and Smith, 2008; O'Driscoll and Cooper, 2002). Workplace stress costs \$125 billion across the United States, Europe, and Britain, combined (Johnson et al., 2005; Mark and Smith, 2008; O'Driscoll and Cooper, 2002). It is important to emphasize that individuals who manage their mind-body connection and maintain a healthy work-life balance are often more productive compared to their counterparts who do not (Overall & Rosalind, 2022).

Honesty

In '*Why businessmen should be honest: the argument from rational egoism*', Locke and Woiceshyn (1995) demonstrate that the ethical systems of Christianity and secular altruism represent honesty as an arbitrary dogma divorced from man's nature as a rational being and unconcerned with daily life on earth. If a person rejects these arbitrary rules, the alternative 'strawman' ethical system is purported to be cynical egoism where an individual would lie to satisfy their own short-term hedonistic pleasures. Locke and Woiceshyn (1995) demonstrate how rational egoism embraces a reality-based virtue of honesty and show that the virtue of honesty involves being truly honest with oneself, in the first instance, and by extension, others. This involves avoiding rationalizations and cognitive biases, which can lead to self-deception and, subsequently, the deception of others. However, honesty does not just involve being truthful, it also involves living in reality and rejecting the fanciful (Peikoff, 1991).

According to rational egoism, honesty is necessary to living in accordance with reality in order to achieve one's long-term happiness. Rand (1957, p. 945) suggests that "... honesty is not a social duty, not a sacrifice for the sake of others, but the most profoundly self-ish virtue man can practice: his refusal to sacrifice the reality of his own existence to the deluded consciousness of others". By contrast, cynical egoism rejects the virtue of honesty (as it rejects all virtues) whereas other ethical systems such as deontology, secular altruism, and virtue-based Judeo-Christianity embrace honesty, but not necessarily as a direct path toward one's happiness.

Independence

Within the context of rational egoism, the antithesis of the virtue of independence is unhealthy codependences and relying on others not only to think for oneself, but also to make one's decisions (Peikoff 1991). This involves being dependent on other people, rules, duty, God, religious leaders, or state authority (Locke, 2006). Importantly, using the virtue of independence, rational egoists heed the suggestions, advice, and direction of others. They work with others, cooperate, and appreciate the nuances of the views of others (Evensky, 2005); however, they think for themselves, consider their own judgment, and make their own decisions while considering all the relevant facts (Woiceshyn, 2009, 2011a). Although independence tends to lead to more rational decisions being made, if

individuals possess limited awareness (of self and others) or are marred by unhealthy codependences, their desire to be independent could be elusive. To overcome codependences and the boundaries to one's rationality, individuals need to be committed to the hard work of self-discovery.

Pride

The virtue of pride involves continuous improvement of one's character. Woiceshyn (2011a), when observing empirically the behaviors of successful CEOs, noted that CEOs should be proud of their employees, products, and themselves. She classified behaviors such as boastfulness, arrogance, or narcissism as exemplifying cynical egoism and not the virtue of pride according to rational egoist behaviors. Rand (1961, pp. 130–1) defines pride as follows:

Pride is the recognition of the fact that you are your own highest value and, like all of man's values, it has to be earned—that of any achievements open to you, the one that makes all others possible is the creation of your own character—that your character, your actions, your desires, your emotions are the products of the premises held by your mind—that as man must produce the physical values he needs to sustain his life, so he must acquire the values of character that make his life worth sustaining—that as man is a being of self-made wealth, so he is a being of self-made soul—that to live requires a sense of self-value...

By contrast, under traditional Christianity, pride is considered as the original and most serious of the 'seven deadly sins' and the source of all other sin. Also known as hubris, it results in corrupt selfishness that is based on whims, urges, and material desires (what rational egoists would term cynical egoism).

Subjective happiness

As mentioned earlier, the happiness literature generally accepts that happiness is comprised of two components, hedonic (the presence of positive emotional feelings or 'affect' and absence of negative emotions) and eudaimonic (life satisfaction and well-being), which tend to be highly correlated (Deci and Ryan, 2008). Lyubomirsky (2001) defines subjective happiness as a psychological state incorporating elements of well-being, joy, and contentment (Lyubomirsky and Lepper, 1999; Mantelou and Karakasidou, 2019). Subjective happiness has been shown to lead to improved physical (Tennant et al., 2007) and mental health (e.g., Skagen and Collins, 2016) through a reduction of stress (Chamberlain and Zika, 1990). Positive mental health has often been attributed to happiness (Tennant et al., 2007) and, as a result of this, subjective happiness has been used as a proxy for positive mental health (e.g., Bray and Gunnell, 2006).

In terms of the relationship between subjective happiness and wealth, Layard (2011), an acclaimed economist, draws from fields as diverse as neuroscience, genetics, philosophy, psychology, and sociology to claim that more money (beyond what is needed for basic survival) does not necessarily equate to an increase in happiness. Layard (2011) provides seven foundational elements of happiness, which include: enough money to avoid poverty; enjoyable work; good family relationships; community engagement and friendships; good health; personal freedom; and a clear personal value system. According to mental health, Layard (2011, p. ix) further provides "... a new evidence-based vision of how we can live

better” based on “... the new psychology of happiness” to counteract the downside of what he saw as the ‘rat race’ of rampant consumerism associated with excessive capitalism.

As mentioned, positive psychology, CBT, mindfulness and goal-setting theory provide evidence of individuals improving their levels of happiness by changing their beliefs, attitudes, values, and subjective norms in their environment. Seligman (2012), the founder of positive psychology, asserts that authentic happiness, not mere hedonic pleasure, can be attained by setting and achieving goals and that individuals are capable of consciously controlling and altering the beliefs, values, and emotions that drive their behaviors that can result in happiness. If one’s current beliefs and values lead to unhappiness, then one can act to change or replace those beliefs with more positive ones that do lead to happiness (Beck, 2011).

In the field of CBT, three main categories of dysfunctional beliefs about the world and oneself have been identified: helplessness, unlovability, and worthlessness (Beck, 2005, 2011). A variety of alternative CBT methods and therapies have been shown to help identify dysfunctional beliefs and replace them with positive ones that can lead to improved behaviors and emotional responses. Mindfulness, for example, has arisen as a happiness technique that promotes and enhances self-regulation of attention and emotional responses in order to better diagnose and change beliefs, attitudes, and habits (Bajaj et al., 2019), which may lead to improved emotional states (i.e., subjective happiness). For these tools to work, however, the individual must want to be happy and believe it to be possible, moral, or even desirable. Different ethical belief systems will lead to different views on the morality of individual personal subjective happiness.

Lyubomirsky and Lepper (1999) contend that even though individuals have experienced challenges, tragedies, and trauma at various times in their lives, they can still perceive themselves as generally happy or not despite these ups and downs. They operationalize their subjective happiness construct as a state of happiness or, on the contrary, unhappiness. Their measure of subjective happiness, namely the subjective happiness scale is a global, subjective assessment of whether an individual considers themselves as happy or not.

Rational egoism and subjective happiness

A rational egoist does not simply use CBT and positive self-talk to eliminate dysfunctional beliefs of helplessness, unloveability, and worthlessness – they do the hard work to pursue the virtues and behaviors required to be worthy of love, praise, and happiness. Layard (2007) stressed the importance of personal values as the foundational element of morality and character that leads to various aspects of happiness. Rational egoism philosophers (e.g., Younkens, 2010, 2011) theorize that because rational egoists are continuously striving for their long-term happiness and act in ways to achieve this, they possess heightened levels of subjective happiness (Becker, 2004; Murrugarra and Wallace, 2015). In his theoretical positioning, Younkens (2010, 2011) further postulated that those who display the rational egoistic virtues are more likely to be happy. In his research, Levit (2014) demonstrates that throughout history, happiness has been intrinsically connected to rational egoism. Locke (2002) describes the seven identified virtues of rational egoism as the suggested value system that will most likely result in happiness. From this, we postulate a positive relationship between rational egoism and subjective happiness.

H1: Rational egoism is positively related to subjective happiness.

Methodology

Sample

Prior to conducting this research, we received full research ethics board (REB) approval. Following Overall and Gedeon (2018), our data was collected with the aid of a leading data collection organization in the United States with a specialization in survey distribution. At the time of data collection, this organization had a database of approximately 6 million members from the United States. As part of their participation in social science experiments like this, members of this organization receive incentives such as gift cards, the chance to win prizes, and donations to charities of their choice. As part of the REB protocol, we composed a participant information letter explaining the purpose of the study, guaranteeing confidentiality, clarifying how the data would be used, and detailing the length of time it would take participants to complete the study, which was approximately 10 min. This letter was sent to the organization and distributed to prospective participants on our behalf.

A total of 749 participants that identified themselves as full-time employees living in the United States were contacted by the organization. Of the 749 initial respondents, 730 individuals agreed to participate in our study. This provided us with an initial response rate of nearly 97%.¹ From this initial response, we disqualified 82 participants as they failed our screening questions (requiring confirmation that they were employed full-time and living in the United States). After removing incomplete questionnaires, our final sample size was 534. This yields a final response rate of approximately 71%.

According to the demographic factors of our sample (see Table 1), females comprised a slight majority of our sample being 56%. Approximately 67% of our participants were married. Nearly 70% of our participants held a university degree while approximately 55% were middle-managers and above. Participants had an average annual income of approximately \$72,000 USD. As can be seen, we believe that this sample population represents a broad sampling of individuals across a spectrum of ethical beliefs, socio-economic status, and happiness levels.

Procedure

In this research, to measure rational egoism, we used the 24-item rational egoism scale developed from the extant literature and validated by Overall and Gedeon (2018). To operationalize subjective happiness, we used three items from the subjective happiness scale (Lyubomirsky and Lepper, 1999). Our measurement instrument is included in Appendix 26.

Data Analysis

Following the conceptualization of Overall and Gedeon (2018), we tested rational egoism as a Type II second order formative construct. Given that the covariance-based SEM

¹ The organization suggested that this high initial response rate is not abnormal, but rather due to incentives that participants receive to participate in social science experiments. The length of the questionnaire being only 10 min further contributed to the higher response rate.

Table 1 Sample Description

Variables	Minimum	Maximum	Percentage
Average age: 38 years	19	65	
Average income: \$72,037.48	\$1,500	\$790,000	
Gender: Male			44%
Gender: Female			56%
Marital status:			
Single			23%
Separated			0.01%
Divorced			8%
Widowed			1%
Married			67.30%
Education:			
Advanced degree (Masters or doctorate)			20%
Bachelor's degree			36.90%
Associate degree			13.10%
Some college, no degree			15%
Trade, tech school			3.70%
High school			10.90%
Less than high school			0.00%
Job title:			
CEO/Owner			6%
Senior manager			17.60%
Middle manager			30.90%
Supervisor			19.10%
Entry-level			26.40%

(CB-SEM) approach cannot accommodate formative latent variables (Diamantopoulos & Winklhofer, 2001), we used a variance-based SEM. Like Overall and Gedeon (2018) and others (e.g., Overall et al., 2017), we used PLS-SEM. Distinct from CB-SEMs, variance-based SEMs, like PLS, are better suited to test models that contain formative constructs (Gefen et al., 2011). Further, PLS-SEMs are more effective at testing models that have higher-order latent variables, like our rational egoism construct (Gefen et al., 2011). To this end, we tested our model using the Smart PLS 2.0 path modelling software (Ringle et al., 2005) and relied on the default option for SmartPLS, which is the path weighting scheme (e.g., Hair et al., 2017).

Results

We measured convergent and discriminant validity using the Fornell and Larcker (1981) approach. In the first step advanced by Fornell and Larcker (1981), we investigated the convergent validity of our model by ensuring that the average variance extracted (AVE) for each latent construct was above the threshold of 0.50. We ensured that our model met the minimum requirements of internal consistency, namely that the composite reliability results for each construct was above 0.70 (Henseler et al., 2009). According to Table 2, we achieved convergent validity and internal consistency. To

Table 2 AVE, composite reliability, R^2 , and latent variable correlations^a

Variable	AVE	C.R	R^2	1	2	3	4	5	6	7	8
Subjective happiness	0.83	0.94	0.05	0.91							
Honesty	0.53	0.77		0.20	0.73						
Independence	0.51	0.76		0.07	0.39	0.72					
Integrity	0.57	0.80		0.11	0.52	0.44	0.75				
Justice	0.53	0.77		0.13	0.51	0.41	0.53	0.73			
Pride	0.55	0.83		0.41	0.43	0.37	0.45	0.41	0.74		
Productiveness	0.57	0.80		0.14	0.55	0.38	0.59	0.56	0.43	0.76	
Rationality	0.54	0.86		-0.09	0.25	0.21	0.33	0.33	0.22	0.27	0.74

^a n = 534; C.R. = composite reliability; AVE = average variance extracted

Table 3 Factor loadings of independent and dependent variable

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
Subjective happiness, 1	0.93	0.22	0.08	0.12	0.12	0.39	0.15	-0.07
Subjective happiness, 2	0.91	0.17	0.04	0.09	0.12	0.37	0.10	-0.07
Subjective happiness, 3	0.89	0.16	0.07	0.08	0.11	0.36	0.11	-0.13
Honesty, 1	0.14	0.77	0.28	0.43	0.40	0.40	0.46	0.17
Honesty, 2	0.15	0.71	0.27	0.35	0.40	0.26	0.37	0.17
Honesty, 3	0.15	0.71	0.30	0.35	0.32	0.27	0.38	0.22
Independence, 1	0.07	0.29	0.77	0.35	0.28	0.32	0.29	0.15
Independence, 2	0.13	0.26	0.70	0.30	0.30	0.27	0.26	0.16
Independence, 3	-0.06	0.28	0.67	0.30	0.31	0.20	0.26	0.14
Integrity, 1	0.06	0.39	0.33	0.77	0.42	0.33	0.46	0.26
Integrity, 2	0.05	0.40	0.32	0.74	0.41	0.30	0.38	0.23
Integrity, 3	0.13	0.38	0.34	0.75	0.37	0.37	0.49	0.26
Justice, 1	0.09	0.42	0.36	0.43	0.78	0.32	0.44	0.26
Justice, 2	0.11	0.32	0.23	0.34	0.65	0.29	0.33	0.19
Justice, 3	0.09	0.38	0.30	0.38	0.75	0.29	0.44	0.26
Pride, 1	0.32	0.25	0.24	0.26	0.27	0.75	0.26	0.12
Pride, 2	0.40	0.23	0.24	0.31	0.22	0.71	0.26	0.13
Pride, 3	0.20	0.34	0.30	0.36	0.39	0.74	0.34	0.23
Pride, 4	0.31	0.41	0.32	0.38	0.32	0.76	0.40	0.15
Productiveness, 1	0.12	0.44	0.25	0.47	0.45	0.33	0.77	0.17
Productiveness, 2	0.08	0.42	0.31	0.47	0.36	0.29	0.78	0.22
Productiveness, 3	0.10	0.39	0.31	0.39	0.45	0.37	0.72	0.22
Rationality, 1	-0.01	0.21	0.14	0.26	0.24	0.19	0.24	0.74
Rationality, 2	-0.08	0.14	0.15	0.19	0.22	0.17	0.17	0.74
Rationality, 3	-0.04	0.20	0.18	0.23	0.21	0.16	0.17	0.74
Rationality, 4	-0.14	0.21	0.14	0.31	0.28	0.11	0.25	0.72

Table 4 Results for hypothesis^a

Hypothesis	Path Coefficient
H1: Rational egoism—> subjective happiness	0.22***

^a $n = 534$; *** $p < 0.001$;

test for discriminant validity, we conducted a factor analysis to ensure that each manifest variable (i.e., indicator or questionnaire item) loaded satisfactorily onto its designated construct and that these loadings were greater than any cross-loading for each manifest variable on any other construct. According to Table 3, each manifest variable loads highest onto its putative latent construct with values greater than the threshold of 0.70 (Hair et al., 1998). Although the independence manifest variable #3 and the justice manifest variable #2 had scores of 0.67 and 0.65, respectively, they were exceptions. The outer weightings of these manifest variables were above 0.40, which Henseler et al. (2009) deemed acceptable for manifest variables that are considered to be adequate representations of the constructs that they are measuring. We believe this to be the case for these measures of independence and justice. Accordingly, both manifest variables were retained.

To assess discriminant validity further, we ensured that the square root of the AVE for each latent variable was greater than the correlation of the variable with any of the remaining variables. From Table 2, discriminant validity was achieved in this study. From this, we can safely conclude that the questionnaire measurements used to test the latent constructs, namely rational egoism and subjective happiness are reliable and valid (Overall et al., 2018).

Considering that we used a single instrument to collect cross-sectional data, common method bias could affect our results. To minimize the effect of common method bias on this study, we randomized the questions and responses. To test if common method bias had adversely affected our questionnaire data, we relied on Harman's one-factor test. According to our results, not one single factor explained the majority of the variance in this study ($r = 0.24$). We further tested for common method bias by examining the correlation matrix (see Table 2) for any highly-correlated latent variables. We determined that none of these were above the threshold (i.e., $r > 0.90$) (Bagozzi et al., 1991). From this assessment, we can determine that common method bias is not considered a likely alternative explanation for the findings of this study.

Testing hypothesis

In Hypothesis 1, we suggested that rational egoism would be positively related to subjective happiness. According to Table 4, this hypothesis was supported ($\beta = 0.22$, $p < 0.001$). The coefficient of determination (R^2) of subjective happiness is 5%, which suggests that rational egoism contributes 5% of the total variance of subjective happiness (see Fig. 1). Although a positive and significant relationship exists between rational egoism and subjective happiness, rational egoism does not appear to be the most important antecedent of subjective happiness. Other variables not accounted for in our model may also influence subjective happiness.

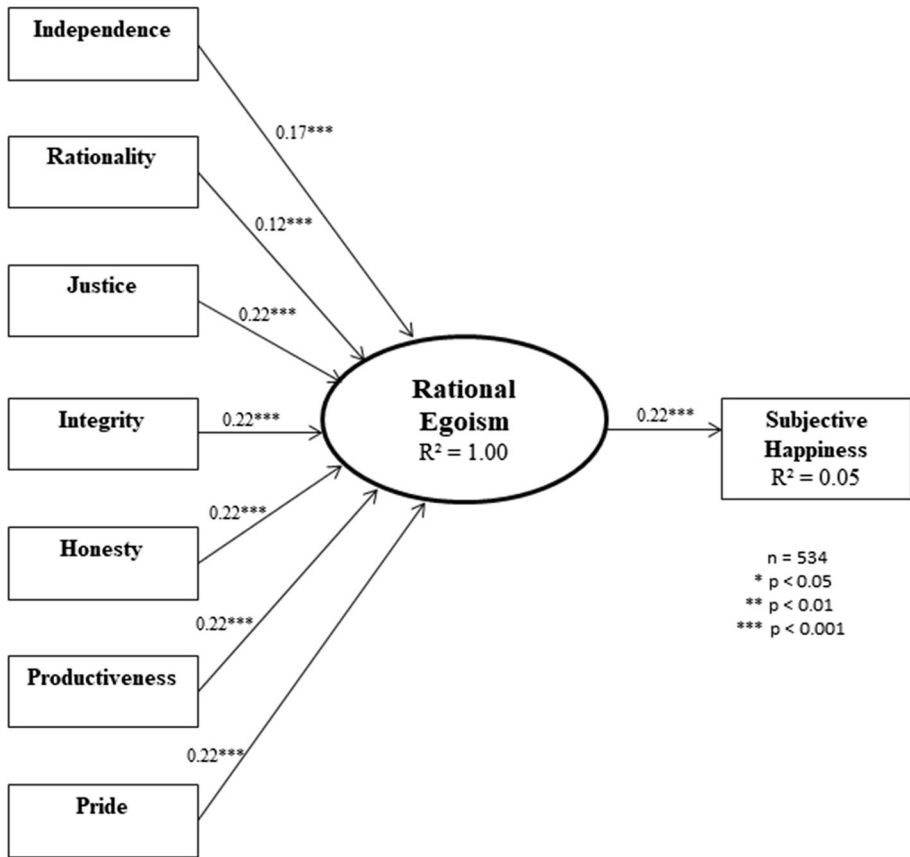


Fig. 1 Full Structural Model

Discussion

In this research, we follow the recommendation of Overall and Gedeon (2018) and investigate empirically the relationship between rational egoism and subjective happiness. Consistent with rational egoism theory, the main contribution to knowledge of this research is finding a statistically significant relationship between rational egoism and subjective happiness. It should come as no surprise that establishing a causal relationship between reason and emotion or ethical beliefs and happiness is complicated. The ability to measure and distinguish a specific set of ethical beliefs that form the seven virtues of rational egoism (i.e., the rational egoism construct) and find a statistically significant relationship with subjective happiness, while controlling for factors such as age, gender, income, marital status, and job title is encouraging. Although we find support for our hypothesis, we also find evidence that rational egoist beliefs do not appear to be the most important direct predictor of subjective happiness.

To this end, other variables not accounted for in our conceptual framework might be more important in predicting subjective happiness. According to the Harvard study on adult development (2022), it was determined that the quality of one's personal relationships

was the greatest predictor of not only happiness, but also one's quality of life through a healthy mind–body connection. The general findings of the study suggest that happiness is dependent on good quality relationships with family, friends, and one's greater community. Consistent with this, George and Sice (2014) demonstrated that individual well-being, which includes happiness, is dependent on positive relationships within one's community.

The TRA mechanisms by which rational egoist beliefs might lead to enhanced attitudes, intention, behavior, and emotional responses related to happiness may be worth further exploration. Rational egoism may promote happiness-producing positive attitudes such as optimism (vs. hopelessness), internal locus of control (vs. external locus of control), self-esteem (vs. worthlessness), self-efficacy (vs. helplessness), and desirability of personal self-interested happiness (vs. duty or happiness of others). Rational egoism may enhance positive intention around happiness such as goal-setting and positive behaviors such as celebrating success (an application of pride), practicing gratitude (an application of reciprocal justice), and mindfulness (an application of rationality).

Rational egoism philosophers suggest that rational egoists are, through their decision-making, in a continuous process of pursuing their long-term happiness whereas their short-term subjective happiness on any given day may fluctuate depending on circumstances. It is possible, therefore, that rational egoists are still on the journey of achieving long-term happiness and might not have fully attained it when they participated in this research. It is also possible that they might simply have been having a bad day. In order to compensate for short-term temporal fluctuations, the experience sampling method (Larson & Csikszentmihalyi, 2014) could be used in isolation or in combination with longitudinal analyses to better assess the long-term effects.

An alternative explanation for the marginality in the relationship between rational egoism and subjective happiness may be found in the mental health literature related to work-life balance and over-working oneself, as mentioned earlier. Prior to the COVID-19 pandemic, the costs of mental health to the global economy were calculated at \$2.5 trillion annually (The Lancet Global Health, 2020). In Canada, the costs of mental health to the Canadian economy were calculated at \$20 billion annually with \$6 billion directly affecting organizations through productivity losses (Overall, 2020b). Since the emergence of the pandemic, the Centre for Addiction and Mental Health (CAMH) (2020) has reported increases in mental health issues among the population involving anxiety, depression, and addiction. Much of these issues are directly related to workplace stressors (Overall, 2016). Therefore, it might be possible that the rational egoists studied in this research are potentially over-worked and, as a result, may be experiencing less happiness-promoting lifestyles.

Due to the cognitive limitations mentioned earlier, humans (including rational egoists) might be unaware of over-working themselves and failing to maintain a healthy work-life balance. This might be a function of our cognitive limitations, our society, and, in particular, within the entrepreneurial communities where over-working is normalized and revered (Overall, 2020b). To this end, over-working might have a diminishing relationship with subjective happiness; thus, countering any previous positive relationship between rational egoism and subjective happiness. To overcome this, individuals need to develop awareness (of self and others) and do the important work of self-discovery. Although an argument could be made that the rationality virtue (indirectly) accounts for maintaining a healthy lifestyle (as it would be irrational to not), the rational egoism virtues do not account (directly) for self-awareness, mindfulness, or healthy work-life balance. Future researchers may wish to control for mindfulness activities, self-awareness, and work-life balance

as potential important mediators or moderators in the relationship between rational egoism and subjective happiness.

Implications for Practice

Previous scholars have established a positive link between rational egoism virtue ethics and successful business leadership (e.g., Woiceshyn, 2011a, 2011b; Locke, 2000). Other scholars have established a positive link between employee happiness and business success (e.g., Boehm & Lyubomirsky, 2008; Gavin & Mason, 2004). Our study provides evidence to support a direct link between rational egoism and happiness thus bolstering the ability for business leaders to establish a ‘virtuous cycle’ where companies ‘do well by doing good’ benefiting not only their employees’ happiness, but also their own profitability.

One mechanism through which leaders integrate virtue-based rational egoism ethics throughout their organizations and hierarchies is through their company vision, mission, and values statements (Locke, 2000). As described in the case study by Parnell and Dent (2009), this is precisely what John Allison did as CEO of Branch Banking & Trust Corporation (BB&T). This strategy not only made BB&T one of the fastest growing and most profitable financial holding companies in the US (with \$165 billion in assets and more than 1,800 financial centers), it also made them one of the most admired and sought-after employers. In her book *‘How to be profitable and moral: A rational egoist approach to business’*, Woiceshyn (2011b) describes a variety of approaches that business leaders have used to increase profits and employee job satisfaction through rational egoism.

We would like to suggest a few additional implications for practice to help improve employee happiness further. From among the alternative choices of ethical belief systems, rational egoism stands out as affirming the desirability and morality of improving one’s own personal self-interested happiness. Positive attitudes and intentions toward happiness that arise from rational egoism such as: internal locus of control, optimism, self-esteem, self-efficacy, and goal-setting all seem to be in harmony with the objectives of most therapists. Therapists (internal and external to an organization) and human resources personnel that implement mindfulness and CBT techniques help individuals detect and change dysfunctional beliefs into more positive and happiness-promoting ones. These new beliefs must, however, be in harmony with the individual’s other beliefs such as ethical, religious, worldview, and self-identity. Metaphysical belief in fate, predestination, or determinism, for example, may lead to happiness-reducing dysfunctional beliefs of helplessness. Similarly, belief that humans are inherently evil will tend to lead to happiness-reducing dysfunctional beliefs of worthlessness (Ventegodt et al., 2003).

Although rational egoists strive to achieve their long-term self-interests, in the form of their long-term happiness, because of their proclivity toward productivity, they may fall into patterns of over-working themselves. This may lead to an unhealthy work-life balance, which may contribute to burnout, depression, and illness (Hemsworth et al., 2020). To counter this, rational egoists may wish to maintain a healthy mind–body connection by integrating mindfulness practices, such as meditation, into their routine. This has been shown to be helpful in not only reducing the symptoms of negative mental health, but it has also been shown to aid in optimizing performance by maintaining healthy balance (Overall, 2020b). Given the importance of

maintaining a healthy mind–body connection, managers may wish to actively promote the use of mindfulness practices among their labor force. This could be achieved by providing employees mindfulness space within their organizations and encouraging them to use this. For example, several large multinational organizations, such as: Xerox, Pizza Hut, and Taco Bell are offering their employees mindfulness development incentives (Overall & Rosalind, 2022). Google and Deloitte offer onsite meditation and yoga sessions for employees. PwC has implemented several wellness initiatives to incentivize employees to balance their mind–body connection (LaVito, 2018). Organizations may also wish to promote mindfulness activities outside of the workplace through their employee assistance programs. Beyond mindfulness incentivization, Senge (2006) offers an important organizational framework for ongoing adult development. This involves a learning culture that provides training, communication, and feedback based on shared values, integrity, and organizational commitment.

Given the positive impact of the quality of one’s relationships on subjective happiness, management would be wise to focus resources on aiding employees with maintaining their relationships. This could be achieved through promoting a healthy work-life balance among the labor force through various employee assistance program initiatives, such as: flexible work scheduling, four-day work weeks, extended vacation opportunities, and telecommuting. Management may also wish to introduce experiential activities within the organizational hierarchies that can help build a sense of community within the organization. The personal relations of employees may also be invited to attend such gatherings. The impact of these organizational initiatives on the development of subjective happiness among employees might be a fruitful area of future study.

Limitations and Future Areas of Research

Although valuable, this research is not without limitations. First, the data collected for this research was from full-time workers based in the United States. This sample, albeit from a culturally-diverse population, may not adequately represent all cultural, geographic, and ethnic contexts. To address this limitation, researchers may wish to analyze the relationship between rational egoism and subjective happiness in other national or cross-cultural contexts. Second, we collected cross-sectional data for this research and because of this, researchers should be cautious when attributing causality to this data. To overcome this limitation, researchers may wish to test the relationship between rational egoism and subjective happiness using a mixed method approach that includes, as mentioned, longitudinal data. In reference to the mixed methods suggestion, researchers may wish to conduct in-depth qualitative studies to understand the nuances involving rational egoism, subjective happiness, work-life balance, business leadership, and mental health.

Although we checked for common method bias and this does not appear to be an alternative explanation of our findings, we used cross-sectional data. To minimize the threat of common method bias further, as mentioned, future researchers may wish to conduct longitudinal analyses when testing the relationship between rational egoism and subjective happiness. Future researchers may also wish to introduce a marker variable, which is a construct that is theoretically unrelated to any of the other variables being tested in a study. With this marker variable, researchers can use the marker variable technique to check for common method bias further (Yetton et al., 2011).

Appendix A

Measures

Rational Egoism Scale.

Rationality

The following questions are rated on a 7-point Likert-type scale (7 = strongly disagree; 1 = strongly agree):

1. I am not very good with logical analysis.
2. I am not a very analytical thinker.
3. Reasoning things out carefully is not one of my strong points.
4. I often have problems thinking things through carefully.
5. I rarely analyze the facts before deciding.

Integrity

The following questions are rated on a 7-point Likert-type scale (1 = strongly disagree; 7 = strongly agree):

1. Regardless of social pressure, it is important to always practice what you preach.
2. No matter what, you have to stay loyal to your values.
3. I act with integrity or, in other words, strong moral principles.

Honesty

The following questions are rated on a 7-point Likert-type scale (1 = strongly disagree; 7 = strongly agree):

1. Lying is wrong.
2. Honesty is the best policy.
3. I always keep my word.

Justice

The following questions are rated on a 7-point Likert-type scale (1 = strongly disagree; 7 = strongly agree):

1. It is best to treat people how you would want to be treated.
2. One must always pay others for the goods and services that one acquires.
3. It is important to say 'thank you' when someone helps you.

Productiveness

The following questions are rated on a 7-point Likert-type scale (1 = strongly disagree; 7 = strongly agree):

1. Hard work is noble.
2. Hard work builds character.
3. Work is an important task that deserves diligence.

Independence

The following questions are rated on a 7-point Likert-type scale (1 = strongly disagree; 7 = strongly agree):

1. Although I listen to the advice of others, at the end of the day, I always make decisions on my own.
2. I do my own thinking instead of following others.
3. I prefer to think for myself.

Pride

Below are a number of words and phrases that describe different feelings and emotions. Read each item and then indicate the extent to which you generally feel this way (i.e., how you feel on the average) using the scale shown below:

(1 = strongly disagree; 7 = strongly agree):

1. I generally feel like I am achieving.
2. I generally feel fulfilled.
3. I am generally productive.
4. I am working to perfect my moral character.

Subjective happiness

Instructions to participants: For each of the following statements and/or questions, please tick the point on the scale that you feel is most appropriate in describing you.

1. In general, I consider myself:
(1 = not a very happy person; 7 = a very happy person).
2. Compared to most of my peers, I consider myself:
(1 = less happy; 7 = more happy).
3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?
(1 = not at all; 7 = a great deal).

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