Lions, Bees, and Chameleons: Unravelling the Entrepreneurial Archetypes and Their Impact on Performance and Wellbeing

ABSTRACT

Purpose:

This study explores the complex relationship between a founder's social identity and the Dark Triad traits. It aims to provide a more nuanced understanding of entrepreneurial behaviours and their subsequent impact on enterprise performance and founders' wellbeing.

Design/Methodology/Approach:

Drawing inspiration from the animal kingdom, we identify three entrepreneurial archetypes: Lions, Bees, and Chameleons, using Latent Profile Analysis (LPA) of 28,853 active entrepreneurs. Lions, embodying a balanced competitiveness, exhibit a strategic blend of dominance and communal living. As collaborative visionaries, Bees showcases a strong inclination towards teamwork and purpose-driven collaboration. Chameleons, the strategic individualists, reveal adaptability and calculated approaches to competition.

Findings:

The study reveals that these archetypes impact wellbeing and performance outcomes differently. Lions, Bees, and Chameleons contribute uniquely to entrepreneurial success, highlighting the diverse factors influencing business performance and individual satisfaction.

Originality/Value:

By exploring the multifaceted nature of entrepreneurial behaviour, this research offers valuable insights into how social identity and personality traits shape entrepreneurial success. Identifying distinct archetypes enriches the current understanding of entrepreneurial dynamics, providing practical implications for individuals and businesses aiming to thrive in competitive environments. Additionally, the findings hold significant implications for policymakers seeking to foster a conducive environment for entrepreneurship and innovation. Understanding the unique characteristics of different entrepreneurial archetypes can inform the design of policies and programs tailored to support diverse entrepreneurial ventures and enhance overall economic growth.

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INTRODUCTION

Entrepreneurs' self-concepts, particularly their social identities, are increasingly recognised as vital to understanding entrepreneurial behaviour and outcomes. Social identities influence entrepreneurs' motivations, decision-making processes, and strategic approaches, shaping their engagement with their ventures and stakeholders. Given that entrepreneurship involves complex and often personal decision-making, understanding the role of social identity offers valuable insights into entrepreneurs' diverse pathways. Recent developments in research emphasise the need to go beyond social identities by examining how these identities intersect with specific personality traits (Chell et al., 2008; Nga & Shamuganathan, 2010). This study builds on this perspective, considering how the nexus of social identity and personality traits contributes to entrepreneurial success, wellbeing, and the broader impact on society.

Entrepreneurship research has progressively acknowledged the importance of social identity in driving entrepreneurial actions, as seen in Fauchart and Gruber's (2011) typology of entrepreneurial identities—Darwinian, Communitarian, and Missionary. These identities provide a framework for understanding how entrepreneurs' self-concepts shape their strategic choices and motivations. Darwinian founders typically aim for financial success and competitive advantage, while Communitarians are more community-oriented, and social or environmental goals drive Missionaries (Sieger et al., 2016; de la Cruz et al., 2018). Additionally, recent studies highlight the potential influence of personality traits, particularly the Dark Triad traits of Machiavellianism, Narcissism, and Psychopathy, in entrepreneurial contexts, suggesting these

traits could add another layer to understanding how entrepreneurs approach decision-making and strategic actions (Brownell et al., 2021; Hoang et al., 2022; Shirokova et al., 2023).

Although research has established the individual roles of social identity and personality traits in shaping entrepreneurial outcomes, a key gap remains in understanding how these two factors intersect. The Dark Triad traits, associated with competitive, self-interested, and sometimes risk-taking behaviours, could amplify or counterbalance specific aspects of an entrepreneur's social identity. However, limited research has explored how these traits interact with social identities, such as Darwinian, Communitarian, and Missionary, to influence entrepreneurs' strategic decisions and behaviours. This gap is particularly relevant because entrepreneurs' actions are influenced not only by external market conditions but also by the deep-seated personal characteristics and values that drive them (Shane et al., 2003). Exploring this intersection is essential for a nuanced understanding of entrepreneurial behaviour, especially concerning diverse outcomes in firm performance and wellbeing.

This research aims to create new entrepreneurial archetypes by examining the interplay between founders' social identities (Darwinian, Communitarian, and Missionary) and Dark Triad personality traits (Machiavellianism, Narcissism, and Psychopathy). The study combines these elements to classify founders into archetypes reflecting entrepreneurs' varied behaviours, motivations, and strategies. To identify different founder typologies, this study uses latent profile analysis (LPA), a probabilistic clustering method, to distinguish distinct founder types. Once these profiles are established, the study examines their relationships with enterprise performance and subjective wellbeing to highlight variations across profile types. This exploratory research asks, "*Can the interplay between founders' social identities and Dark Triad traits reveal distinct*

entrepreneurial archetypes that align with specific business and subjective wellbeing outcomes?".

This study contributes to entrepreneurship literature by advancing Social Identity Theory within the context of entrepreneurial research. It examines how specific personality traits and social identity shape entrepreneurial behaviour, thus adding a new dimension to understanding identity-driven motivations. The use of Latent Profile Analysis enables the identification of diverse entrepreneurial profiles, facilitating the development of more targeted support and training mechanisms for entrepreneurs. The distinct combinations of social identities and Dark Triad traits offer a comprehensive understanding of the complex nature of entrepreneurial behaviour (Obschonka et al., 2010). This approach not only enriches academic research by revealing the intricate interplay between identity and personality but also informs practical strategies for fostering effective entrepreneurship, guiding future research, and supporting the development of more nuanced entrepreneurial education and training programs (Rauch & Frese, 2007; Baum et al., 2001). Additionally, employing animal metaphors to represent these profiles bridges abstract psychological concepts with relatable behavioural patterns, making the findings more accessible and applicable. This research offers a nuanced perspective on entrepreneurial behaviour, with practical implications for enhancing entrepreneurial success through personalised support systems, training, and interventions.

LITERATURE REVIEW

This section presents the literature review of the proposed independent variables—founders' social identity and personality traits—drawing from Social Identity Theory and the Dark Triad framework to examine these variables. This is followed by a discussion of the interaction

between the two variables. The subsequent section addresses the dependent variables, namely firm performance and well-being.

Social Identity Theory

Social identity is a complex and multifaceted topic explored extensively in the literature. It involves individual and group dynamics and is deeply intertwined with understanding self, attitudes, and behaviour (Tajfel & Turner, 1979). The social identity theory hinges on three primary assumptions. First, it suggests that individuals seek to uphold or elevate their self-esteem. This pursuit often manifests as a desire for positive differentiation from other groups, enhancing one's self-image. Second, the theory posits that social groups and categories are essential cognitive tools for interpreting the social environment. These social categories, such as nationality, religion, or profession, allow people to classify themselves and others, simplifying the social world and fostering a sense of belonging. Lastly, the theory states that an individual's social identity profoundly influences their behaviour, which can vary based on their perceived social identity at any moment.

Vital to understanding social identity theory is the notion of in-groups and out-groups. In-groups are those we identify with, while out-groups are those we do not. The theory argues that individuals tend to favour group members, a phenomenon known as in-group bias. This bias often results in negative attitudes and behaviours towards out-group members (Voci, 2006). Another essential aspect of social identity theory is the process of self-categorisation. This aspect refers to how individuals classify themselves into specific social groups, subsequently shaping their self-perception and behaviour. In aligning themselves with a particular group, individuals tend to conform to that group's norms and behaviours, further illustrating social identity's profound influence on individual actions and attitudes (Tajfel, 2010).

Drawing from the social identity theory, the founders refer to the identity and motivation behind those who start movements or organisations (Fauchart & Gruber, 2011). In this context, three founders' categories are often mentioned: Darwinians, Communitarians, and Missionaries. *Darwinians* are individuals driven by self-interest and competition. They believe in the survival of the fittest and tend to create organisations that value competitiveness and individual achievement. Their social identity is typically tied to personal success and dominance. *Darwinians* are primarily driven by economic self-interest. They view competitors as their frame of reference and evaluate themselves based on their financial success and market position. They are motivated to outperform their rivals and prioritise financial gain over other considerations. *Communitarians* have a strong social motivation. Their self-evaluation is often based on their positive impact on their communities, and their frame of reference tends to be the individuals or groups they serve. They are motivated by a desire to contribute positively to society and improve the lives of others. *Missionaries* are driven by a particular mission or purpose. Their self-evaluation is tied to how well they achieve this mission, and their frame of reference is their vision for what they want to accomplish. They may prioritise their mission over financial gain and are motivated by a deep-seated passion for their cause.

Past research has extensively examined the role of founders' social identities in shaping entrepreneurial behaviour, strategic decision-making, and business outcomes (Hand et al., 2020; Ko & Kim, 2020). Founders with strong Communitarian or Missionary identities tend to engage in community-oriented problem-solving and collaboration when confronted with adversity. In contrast, those with Darwinian identities are more inclined toward competitive and self-reliant strategies (Powell & Baker, 2014). Darwinian entrepreneurs often employ causation-based strategies, whereas Communitarians and Missionaries are more open to effectuation approaches,

reflecting their receptiveness to collaboration and emergent opportunities (Alsos et al., 2019). Missionary identity has been linked to the rise of social enterprises, with compassion and societal concerns prompting these entrepreneurs to prioritise social impact over financial gain (Miller et al., 2012). For environmental entrepreneurs with Missionary identities, aligning with ecological values influences stakeholder engagement and sustainable business practices (York et al., 2016). These findings underscore the significant role that social identities play in guiding entrepreneurs' strategic and operational choices.

Classifying founders' social identities into Darwinians, Communitarians, and Missionaries offers a valuable framework for understanding entrepreneurs' motivations, behaviours, and decision-making processes (de la Cruz et al., 2018; Hand et al., 2020). However, there is a tendency to oversimplify the complexity of human personality. Founders often embody a blend of these identities, with their personality traits fluctuating based on various factors such as the business environment, personal growth, or changing market conditions. Additionally, this framework does not fully account for other essential personality traits like openness to experience, conscientiousness, or emotional stability, which are crucial in entrepreneurial success.

The Dark Triad Personality Traits

The Dark Triad is a term in psychology that refers to three distinct but interrelated personality traits: Narcissism, Machiavellianism, and Psychopathy (Paulhus & Williams, 2002; Bonfá-Araujo et al., 2023). *Narcissism* is characterised by grandiosity, pride, egotism, and a lack of empathy. Narcissists have an inflated sense of self-importance and a deep need for admiration but are often troubled by criticism. They may also exploit others to achieve their goals without

feeling guilt or remorse. *Machiavellianism* trait involves manipulation and deceit to achieve one's goals. Individuals with high levels of Machiavellianism are often cynical, unemotional, detached from morality, and focused on self-interest and personal gain. They are skilled at manipulating others and can be charming and confident, effectively persuading others to do their bidding. *Psychopathy* trait is marked by enduring antisocial behaviour, impulsivity, selfishness, callousness, and remorselessness. Psychopaths lack empathy and are willing to engage in harmful or dangerous actions to get what they want. They are often seen as charming and charismatic but struggle to form genuine emotional connections.

The Dark Triad personality traits have been the subject of several studies concerning entrepreneurship (Brownell et al., 2021; Hoang et al., 2022; McLarty et al., 2023; Wu et al., 2020). Narcissism, one of the Dark Triad traits, has been emphasised most in research thus far (Kraus et al., 2020). Narcissism is associated with a grandiose sense of self-importance and exaggerated self-esteem, which can potentially drive entrepreneurial intentions. Narcissistic entrepreneurs may be more confident, ambitious, and risk-tolerant, which could contribute to firm performance and leadership behaviour. Machiavellianism, characterised by strategic manipulation and dishonesty, can also play a role in entrepreneurship (Khawar et al., 2022). Entrepreneurs with high Machiavellianism might be adept at securing resources and navigating competitive landscapes, but their deceptive practices could harm their reputation and long-term success. Psychopathy, marked by impulsivity, selfishness, and lack of remorse, could lead to risky decision-making and unethical behaviours in entrepreneurial contexts. While psychopathic entrepreneurs might initially charm investors and partners, their antisocial behaviour could eventually harm their business and personal relationships (Hmieleski & Lerner, 2016; Aghababaei & Błachnio, 2015).

Darwinian, Communitarians and Missionaries through the Dark Triad lens

Understanding how Dark Triad traits influence the behaviour of different founder identity types is critical for entrepreneurship research and practice. While Darwinian, Communitarian, and Missionary founders each have distinct motivations and strategies, the presence of traits like Machiavellianism, Narcissism, and Psychopathy can significantly alter their behaviour.

Darwinian founders with high Machiavellian traits may exhibit highly manipulative and strategic behaviours to achieve their goals. They might engage in unethical practices, such as deception or exploitation, to outmanoeuvre competitors and maximise profit (Jones & Paulhus, 2017). Machiavellian Darwinians may also use manipulation to influence stakeholders, negotiate deals, and secure advantageous positions, prioritising personal gain over ethical considerations. If a Darwinian founder exhibits narcissistic traits, their behaviour could focus more on personal recognition, status, and validation rather than purely financial success. They might engage in aggressive marketing and self-promotion to establish their brand and reputation (Miller et al., 2013). Narcissistic Darwinians may also display overconfidence, leading to riskier business decisions and potential overexpansion. Darwinian founders with psychopathic traits may show a lack of empathy, impulsivity, and a tendency to take extreme risks. Such founders could prioritise short-term gains without considering the long-term consequences for their employees, customers, or the environment. They may also engage in unethical or harmful practices with little regard for the impact on others (Boddy, 2015).

When Communitarian founders possess Machiavellian traits, their collaborative and community-oriented behaviour may become more strategic and self-serving. They might manipulate social networks and relationships to enhance their business interests under the guise of community welfare. This could involve using alliances and partnerships to gain market access

or competitive advantage rather than genuine community development. Narcissistic Communitarian founders may prioritise projects that enhance their image and reputation within the community. They could focus on high-visibility social initiatives that showcase their leadership and vision, seeking admiration and recognition from peers and stakeholders (Zhu & Chen, 2015). These founders might also be prone to exaggerating their contributions to social causes, taking credit for successes that involve broader community efforts. Communitarian founders with psychopathic traits might exploit community trust and cooperation for personal gain. Their lack of empathy and ethical concern could lead to harmful behaviours, such as exploiting employees or community resources, while maintaining a facade of social responsibility (O'Boyle et al., 2012). They may engage in unethical behaviour, such as fraud or deceit, to achieve business objectives while outwardly appearing to support communal values.

Missionary founders with Machiavellian traits may use their cause-driven narrative to manipulate stakeholders and gain support for their initiatives. They might exaggerate the impact of their social or environmental work to attract investors and customers, focusing on how such narratives can serve their strategic objectives rather than genuine impact (Zettler & Solga, 2013). This behaviour could lead to a dissonance between the stated mission and actual business practices. Narcissistic Missionary founders may be more concerned with personal recognition for their contributions to societal causes. They might seek to become the face of their movement, focusing on high-profile initiatives that boost their personal brand and public image (Grijalva & Harms, 2014). Such founders may prioritise projects that gain media attention and accolades, sometimes at the expense of more substantive but less visible impact work. Missionary founders with psychopathic traits may exploit their cause to gain power, influence, or financial benefits. Despite promoting ethical or altruistic goals, their actions might lack genuine empathy and

concern for the cause or the people they claim to serve (Smith & Lilienfeld, 2013). Such individuals may engage in fraudulent activities or misleading practices, using the appearance of social responsibility to mask unethical behaviour.

Founders' social identities and dark triad influencing enterprise performance and subjective wellbeing

Founders' social identities and personality traits are pivotal in shaping enterprise performance and subjective wellbeing, two critical dimensions in entrepreneurship research (Sawang et al., 2020; Stephan, 2018). Social identities influence how founders perceive their roles and goals within their ventures, impacting strategic decisions, business practices, and personal fulfilment. When these identities intersect with specific personality traits, such as the Dark Triad— Machiavellianism, Narcissism, and Psychopathy—they create unique behavioural patterns that can enhance or impair both business outcomes and life satisfaction.

Founders' social identities—Darwinian, Communitarian, and Missionary—offer distinct approaches to entrepreneurship. Darwinian founders, driven by competitive advantage and financial gain, adopt aggressive strategies such as market leadership and profit maximisation (Fauchart & Gruber, 2011). These approaches often yield strong short-term financial performance but may lead to stress and burnout due to the constant pressure to achieve, particularly when paired with Machiavellianism or Narcissism (Cardon et al., 2009). Such traits can compromise long-term satisfaction and mental health without effective stress management.

Communitarian founders, on the other hand, prioritise community engagement and collaboration, guiding them to implement inclusive business practices that build strong ties with stakeholders and foster sustainable success (Powell & Baker, 2014). These relationships often

form supportive networks that enhance resilience and buffer against stress, contributing to higher levels of life satisfaction. However, when Communitarian founders exhibit Machiavellian tendencies, these networks may be used strategically rather than authentically, potentially undermining the personal fulfilment they typically derive from their ventures (Zhu & Chen, 2015; Bonfá-Araujo et al., 2023).

Missionary founders, motivated by advancing social or environmental causes, align their business strategies with ethical and societal values. This alignment fosters a sense of authenticity and purpose, contributing significantly to life satisfaction and psychological wellbeing (Obschonka et al., 2010). While their focus on societal impact often attracts like-minded stakeholders and generates long-term enterprise performance, narcissistic tendencies may shift their emphasis to personal recognition over substantive impact. This could result in prioritising high-profile initiatives that serve personal branding over meaningful outcomes, undermining their long-term sense of purpose (Grijalva & Harms, 2014).

The alignment of personal values with business goals is a key determinant of subjective wellbeing. Founders who feel their entrepreneurial activities resonate with their identities experience authenticity and fulfilment, which enhances their life satisfaction (Shepherd & Patzelt, 2018). For example, Missionary founders committed to social or environmental causes and Communitarian founders who emphasise community welfare report higher life satisfaction because their ventures fulfil entrepreneurial ambitions and ethical values (Miller et al., 2012). Conversely, Darwinian founders' intense focus on competition and financial success can lead to dissatisfaction and burnout unless mitigated by strong coping mechanisms or support systems (Cardon et al., 2009).

Moreover, founders' social identities influence their capacity to manage stress, directly affecting subjective wellbeing. Darwinian founders often experience high stress due to competitive pressures, while Communitarian and Missionary founders benefit from the emotional resilience provided by their support networks and alignment with broader values (Powell & Baker, 2014; Obschonka et al., 2010). These networks help buffer against the adverse effects of stress and enhance overall wellbeing.

This research aims to develop entrepreneurial archetypes by exploring how founders' social identities (Darwinian, Communitarian, and Missionary) interact with Dark Triad personality traits (Machiavellianism, Narcissism, and Psychopathy). The study employs latent profile analysis (LPA) to identify distinct founder typologies based on these combinations, uncovering patterns that reflect their unique behaviours, motivations, and strategies. Once identified, these typologies are examined with enterprise performance and subjective wellbeing, shedding light on the variations in outcomes among different founder profiles.

METHODOLOGY

Data and sample

To answer the research question in this study, we utilised data from the Global University Entrepreneurial Spirit Students' Survey (GUESSS). The GUESSS is a comprehensive, worldwide research initiative focused on student entrepreneurship, and our analysis specifically leveraged the dataset from the ninth wave of data collection conducted in Spring 2021. Our research concentrated on the global sample, comprising a substantial cohort of 28,853 actively engaged entrepreneurs managing their businesses at the time of the survey from 53 countries. Certain adjustments were made to the sample to ensure the robustness and relevance of our findings. Specifically, we

excluded countries with fewer than ten active entrepreneurs from our analysis. This culling process led to the removal of observations from several countries, namely England (2 observations), Norway (1 observation), Ukraine (8 observations), the USA (5 observations), and Ireland (8 observations) (refer to **Table 1** for a full list of countries included).

Insert Table 1 Sample Size and Percentage by Country

The global GUESSS dataset aligns well with our research objectives for several reasons. Firstly, including a wide range of countries ensures a diverse representation of entrepreneurial ecosystems, enriching the applicability and generalizability of our findings across different cultural, economic, and educational contexts. Secondly, the focus on actively running entrepreneurs adds a dynamic element to our analysis, allowing us to explore real-time experiences and challenges faced by individuals engaged in entrepreneurial endeavours during the survey period.

Measures

Founder social identity, encompassing Darwinian, Communitarian, and Missionary identities, was assessed using scales developed by Sieger et al. (2016). Prior studies validated these scales (Hahn, 2020; Ko & Kim, 2020). One of the original items from Sieger et al.'s (2016) scale was omitted for this research due to face validity and low factor loading concerns. The items' wording, reliability and validity of the scales were evaluated through confirmatory factor analysis (CFA), as presented in **Table 2**, which shows strong internal consistency and model fit across all dimensions. The composite reliability (CR) and average variance extracted (AVE) for the

constructs met the established thresholds (CR > 0.7, AVE > 0.5) recommended by Hair et al. (2010). The predicted factor scores were subsequently utilised in the latent profile analysis (LPA).

The Dark Triad traits—Machiavellianism, Narcissism, and Psychopathy—were measured using the scale developed by Jonason and Webster (2010). Each trait captures distinct personality characteristics often associated with manipulative and harmful behaviours. As shown in **Table 2**, CFA results supported the reliability and validity of the scales for each trait, with strong internal consistency and satisfactory model fit indices across the constructs.

Enterprise performance was assessed using self-reported measures adapted from the GUESSS project, based on the scale by Dess and Robinson (1984), and it captures different aspects of job performance and has been frequently utilised in prior empirical research based on the GUESSS database (Laskovaia et al., 2017; Smolka et al., 2018; Gubik & Vörös, 2023). Participants were asked to evaluate their business performance relative to competitors over the last three years in four areas: sales growth, market share growth, profit growth, and job creation. The factor loadings presented in **Table 2** indicate that the items used for performance measurement show good validity and reliability. Higher scores reflect superior perceived performance in these dimensions, as supported by the strong Cronbach's alpha and model fit statistics.

Finally, Subjective wellbeing was measured using the 5-item scale from (Diener et al., 1985) work. The scale captures the respondent's cognitive evaluations of their quality of life; a higher score indicates a high level of subjective wellbeing. **Table 2** displays the validity and reliability.

Insert Table 2: Factor Loadings, Model Fit Indices, and Reliability for Scales used in the study

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In the present study, several **control variables** have been considered to account for potential influences on the observed relationships. The demographic factors include gender, with distinctions between male and female participants. Age is categorised into three groups: those under 20, individuals aged 20-24, and those aged 25 and above. Education level is stratified into graduate and undergraduate categories, capturing variations in academic background. Entrepreneurship education is explored through participants' responses indicating whether they have received entrepreneurial education (Yes or No). The Field of Study variable encompasses various disciplines (see **Table 3**).

Entrepreneurial family background is examined by asking participants about familial entrepreneurial experience, differentiating between those with no family background in entrepreneurship and those with familial exposure, including father, mother, or both. Entrepreneurial experience assesses participants' engagement in entrepreneurship, with responses indicating Yes or No. Teams represent the collaborative structure of entrepreneurial endeavours, categorised into solo, 1-3 employees, 4-10 employees, and more than ten employees. Lastly, the industry sector captures the diverse sectors where participants may be involved (Table 1). These control variables contribute to the robustness and specificity of the study's findings by addressing potential confounding factors. We also controlled for Hofstede's cultural dimensions to ensure that cultural influences do not confound observed relationships between variables. (as shown in **Table 3**).

In addition to the control variables, we included Hofstede's cultural dimensions—power distance, individualism, masculinity, and uncertainty avoidance—to account for cultural variations that might influence the relationships between entrepreneurial identity, traits, and outcomes. For example, in high power distance cultures, Darwinian founders may thrive due to their focus on

competition and leadership, whereas in low power distance cultures, Communitarian founders, who emphasise collaboration, may perform better. Similarly, traits like Machiavellianism or Narcissism in individualistic cultures might lead to high entrepreneurial performance but lower well-being due to strained relationships. In contrast, these traits may negatively impact performance and well-being in collectivist cultures due to conflicting cultural norms.

Masculinity and uncertainty avoidance also play a role in shaping these relationships. In masculine cultures, the focus on achievement may align with Darwinian founders, boosting performance and well-being. In contrast, in more feminine cultures, Missionary founders may fare better as their values of social responsibility align with cultural priorities. High uncertainty avoidance can negatively affect individuals with Psychopathic traits, as their risk-taking behaviour may clash with cultural preferences for stability and structure. In contrast, in low uncertainty avoidance cultures, these traits may enhance performance but at a potential cost to well-being. Controlling for these cultural dimensions ensures that the observed relationships between identity, traits, and outcomes are not skewed by cultural factors, improving the accuracy and generalizability of the study's findings.

Analytical approach

The analytical approach employed in this study is driven by the intricate nature of the founders' social identity and the dark triad, which exhibit complexity and operate in latent dimensions. To effectively unravel these dimensions, we opted for Latent Profile Analysis, a sophisticated statistical technique well-suited for identifying distinct subpopulations within a sample based on patterns of responses to observed variables (Porcu & Giambona, 2017; Weller et al., 2020).

Latent Profile Analysis (LPA) is a specialised form of person-centred mixture modelling (Nylund-Gibson & Choi, 2018), a statistical framework that identifies latent classes or profiles

within a heterogeneous population. In the context of this research, applying LPA enables us to uncover latent subgroups of founders characterised by specific configurations of founders' social identity and dark triad traits. The LPA procedure entails fitting a sequence of models, as outlined by Porcu and Giambona (2017) and Weller et al. (2020). The process initiates with a one-class model and progressively introduces additional classes in subsequent iterations. Each resultant class solution is a typology, delineating a distinct subgroup within the broader sample. These typologies are characterised by specific response patterns to the observed variables, offering valuable insights into shared characteristics and distinguishing features across individuals.

Subsequently, we leverage the outcomes of the LPA, particularly the identified classes, to explore their impact on enterprise performance and wellbeing. This follow-up analysis delves into how the identified typologies influence the outcomes of interest, shedding light on the nuanced relationships between class membership, entrepreneurial performance, and subjective wellbeing. By examining these associations, we gain a deeper understanding of the implications of the identified subgroups on key dimensions crucial in entrepreneurship.

RESULTS

Sample Demographics

As shown in **Table 3**, the gender distribution indicates a relatively balanced representation of the 28,853 actively engaged entrepreneurs, with 47.09% male and 52.91% female participating in entrepreneurial activities. In terms of age, the majority falls within the 20-24 age range (42.49%), followed closely by those aged 25 and above (47.03%). The under-20 age group constitutes 10.48% of the entrepreneurial population. Educational backgrounds reveal a diverse group, with 76.78% having undergraduate degrees and 23.22% holding graduate degrees. Entrepreneurship

education is embraced by 33.59% of respondents, while 66.41% have not undergone formal entrepreneurship education. The field of study is broad, with business/management, engineering, and social sciences being prominent choices. Family background data indicates that 40.84% have no entrepreneurial background, while 59.16% have familial ties to entrepreneurship, either through their fathers (21.43%), mothers (11.59%), or both (26.14%).

Entrepreneurial experience is reported by 25.01% of respondents, with the majority (74.54%) having no prior entrepreneurial involvement. Team composition varies, with 39.62% operating solo, 46.8% with 1-3 employees, 10.9% with 4-10 employees, and 2.69% managing more than ten employees. Industry sector distribution reveals diverse entrepreneurial ventures, including advertising/marketing, education, trade, and information technology, with different sectors showing varying levels of participation. These descriptive statistics provide a detailed snapshot of the entrepreneurial landscape among the surveyed population, highlighting key characteristics that contribute to a nuanced understanding of their profiles and experiences.

Insert Table 3 Descriptive statistic of the sample

Latent Profile Analysis (LPA) results

The model fits for all estimated models, ranging from a one-class model to a four-class model, are presented in **Table 4**. The appropriate model selection was guided by a combination of statistical criteria, theoretical fit, and interpretability of the number of sample members in each class (Weller et al., 2020). Following this approach, the three-class model was chosen as it exhibited lower AIC and BIC values (also, AICC and CAIC values have been considered). The LPA resulted in the

identification of three distinct classes, each representing unique characteristics that symbolise different traits within the classification:

Class 1: *Lions- The Balanced Competitors*. This class balances competitive instincts and a moderate inclination towards community and purpose. Lions, known for dominance and efficiency, serve as a metaphor for individuals in Class 1 who exhibit a strategic balance of competitiveness and communal living.

Class 2: *Bees- The Collaborative Visionaries*. This class exhibits higher scores in communal and purpose-driven traits, emphasising collaboration and a strong sense of purpose. Like bees working collaboratively for the benefit of the hive, individuals in this class symbolise teamwork, community, and a shared goal.

Class 3: *Chameleons- The Strategic Individualists*. This class is characterised by strategic thinking and self-centred tendencies, and Class 3 reflects individualistic and calculated approaches to competition and goals. Chameleons, known for adaptability, represent the flexibility and adaptability of individuals in this class, akin to changing colours based on their surroundings.

Insert Table 4 Evaluating class solutions

Descriptions of each Profile

The mean scores for the three classes (see **Table 5**) provide insights into their behavioural tendencies. Class 1 (Lions) exhibits a Darwinian orientation with a mean score of 4.17, suggesting a competitive and survival-focused mindset. Class 1 (Lions) scores 3.77 in Communitarianism, indicating a moderate inclination towards community and collaboration. Missionary traits are

evident, with a mean score of 3.58, highlighting a sense of purpose and altruism. However, the class demonstrates lower scores in Machiavellianism (2.50), Psychopathy (2.38), and Narcissism (3.33), indicating lower levels of manipulative and self-centred tendencies.

Class 2 (Bees), in contrast, shows higher scores across Darwinian (5.81), Communitarian (6.02), and Missionary (5.99) traits, reflecting a more pronounced focus on competition, community, and purpose. Notably, this class exhibits significantly low levels of Machiavellianism (1.81), Psychopathy (1.75), and Narcissism (3.23), indicating a more empathetic and collaborative nature.

Class 3 (Chameleons) displays mean scores for Darwinian (5.83), Communitarian (5.75), and Missionary (5.74) traits, suggesting a balanced approach to competition, community, and purpose. This class, however, demonstrates high scores in Machiavellianism (5.37), Psychopathy (4.92), and Narcissism (5.34), indicating a tendency towards strategic thinking, manipulative behaviours, and self-centeredness.

Insert Table 5 Mean of the outcomes per class

The results (**Table 6**) reveal distinct demographic and educational patterns associated with the three identified classes. Class 1 (Lion) is characterised by a nearly equal gender distribution, with a higher percentage of individuals aged 25 and above, a significant representation of graduate participants, and a lower prevalence of entrepreneurship education. On the other hand, class 2 (Bees) exhibits a higher proportion of females, a concentration of individuals aged 20-24, a diverse field of study with dominance in Business/Management, and a notable prevalence of

entrepreneurship education. Class 3 (Chameleons) shows a higher percentage of males, a balanced age distribution, a majority of undergraduate participants, and a significant representation of individuals with both parents having entrepreneurial backgrounds. These associations underscore the importance of considering demographic and educational variables in understanding class characteristics.

In terms of academic disciplines, Class 2 (Bees) focuses on Business/Management and Computer Sciences/IT. In contrast, Class 3 (Chameleons) mirrors this trend with a higher percentage in Business/Management. Class 1 (Lions) demonstrates a more diverse distribution, with notable representation in Arts/Humanities and Social Sciences. Family background analysis indicates that Class 3 (Chameleons) has a higher percentage of individuals with both parents having entrepreneurial backgrounds, while Class 1 (Lions) has more individuals with no entrepreneurial background. The presence of entrepreneurial experience is highest in Class 1 and lowest in Class 3.

Class 1 (Lions) is more inclined towards solo work, while Classes 2 (Bees) and 3 (Chameleons) exhibit a higher prevalence of teams with 1-3 employees. Regarding industry sectors, Class 1 displays a balanced distribution, while Classes 2 and 3 have higher percentages in Advertising/Design/Marketing. These findings, supported by statistically significant associations, provide insights into the varied characteristics of each class.

Insert Table 6 Descriptions of each profile

Regression analysis results

In the initial phase of the analysis, a thorough examination of the dataset was conducted to ensure its suitability for the regression models. The dataset was scrutinised against fundamental assumptions of multivariate regression. The data exhibited a normal distribution, as evidenced by skewness values falling within the -1 to +1 range and kurtosis values within 0 to 3. This normal distribution is essential for the robustness of the subsequent regression analysis. Furthermore, Pearson correlations were evaluated to assess multicollinearity, and all correlation values were found to be below the 0.60 cut-offs. This absence of high correlations suggests no significant multicollinearity issue within the dataset, a crucial precondition for reliable regression analysis. The strongest correlation observed was between the Communitarian and Missionary entrepreneur's identity (0.660, P<0.001), aligning with previous studies on social identity in Asian countries, as evidenced by Ko and Kim (2020). This preliminary data check provides a solid foundation for the subsequent regression analysis, ensuring the integrity and reliability of the results.

The regression analysis (**Table 7)** reveals several noteworthy associations regarding wellbeing outcomes. Class 2 (Bees) and Class 3 (Chameleons) exhibit a positive and statistically significant relationship with wellbeing compared to the reference class (Class 1 Lions). Contrarily, being female is associated with higher levels of wellbeing, while increasing age is negatively correlated with wellbeing. Educational and marital status play pivotal roles, as holding an undergraduate degree and being single negatively impact wellbeing. Additionally, the field of study significantly influences wellbeing, with varying effects across different fields. Certain family backgrounds are associated with higher wellbeing, whereas solo entrepreneurship is linked to lower wellbeing. Cultural dimensions, including power distance, individualism, masculinity, and

uncertainty avoidance, also significantly impact wellbeing. Models 1 and 2 explain approximately 7.7% and 8.6% of the variance in wellbeing, respectively.

Turning to performance outcomes, the regression results indicate distinct patterns. Similar to wellbeing, Class 2 (Bees) and Class 3 (Chameleons) exhibit positive and statistically significant associations with entrepreneurial performance compared to the reference class (Class 1 Lions). Gender plays a role, with being female negatively impacting performance, while older age is associated with lower performance. Interestingly, holding an undergraduate degree is not significantly associated with performance, but being single is positively linked to performance. The field of study again shows varied impacts on performance across different fields. Specific family backgrounds are associated with higher performance. Solo entrepreneurship negatively affects performance, and different sectors exhibit varying impacts. Cultural dimensions, such as power distance, individualism, masculinity, and uncertainty avoidance, influence performance significantly. Model 3 and Model 4 explain approximately 17.0% and 17.6% of the variance in performance, respectively. These findings underscore the multifaceted nature of factors shaping entrepreneurial outcomes and highlight the importance of considering diverse variables in understanding performance in entrepreneurship.

As explained earlier, cultural values were included as control variables because the respondents come from various countries, and we recognise that differences in cultural backgrounds can influence profiling typologies and outcomes, such as performance and well-being. According to **Table 7**, even after controlling for cultural values (e.g., power distance, individualism, masculinity, and uncertainty avoidance), the impact of our profiling categories (bee, chameleon, and lion) on outcome variables remained consistent.

In addition, we conducted post hoc analyses to explore the potential moderating effects of these cultural values on the relationship between profiling typologies and outcome variables. However, these moderation effects were not statistically significant. Although there are some correlations between cultural values and the outcome variables (performance and well-being), these correlations are relatively weak, ranging from 0.001 to 0.009. Therefore, it is unsurprising that the moderation effects did not reach significance.

Insert Table 7 Regression results

DISCUSSION

This study explored the intricate relationship between founders' social identities and Dark Triad traits and how these dimensions collectively influence entrepreneurial behaviour, enterprise performance, and subjective wellbeing. Using Latent Profile Analysis (LPA) to classify entrepreneurs into three archetypes—Lions, Bees, and Chameleons—we aim to offer a nuanced understanding of the diverse strategies and motivations driving entrepreneurial success. The results highlight the complexity of entrepreneurial behaviour and suggest important implications for both research and practice.

Understanding the Archetypes: Lions, Bees, and Chameleons

The archetypes identified—Lions, Bees, and Chameleons—reflect distinct combinations of social identities (Darwinian, Communitarian, Missionary) and Dark Triad traits

(Machiavellianism, Narcissism, Psychopathy). Each archetype represents a unique set of behavioural tendencies and strategic approaches:

Lions embody a balanced blend of competitive instincts, communal engagement, and a sense of purpose. They prioritise market leadership and strategic dominance while maintaining some degree of community involvement and ethical considerations. However, their relatively lower Dark Triad traits suggest a more restrained approach to manipulation and self-interest. This balance could explain why Lions, while still effective, may face challenges in performance outcomes compared to other archetypes.

Bees are characterised by high scores in Communitarian and Missionary identities, emphasising collaboration, teamwork, and purpose-driven initiatives. Their low Dark Triad traits reflect empathy and ethical conduct, likely contributing to their higher subjective wellbeing and successful engagement in socially responsible ventures. The strong inclination towards community and ethical behaviour positions Bees as role models for sustainable and inclusive entrepreneurship, promoting long-term success through stakeholder trust and loyalty.

Chameleons demonstrate high adaptability and strategic thinking, marked by elevated levels of Machiavellianism, Narcissism, and Psychopathy. Their approach to entrepreneurship is highly flexible and opportunistic, allowing them to excel in dynamic and rapidly changing environments. However, the high scores in Dark Triad traits also imply potential ethical dilemmas and challenges in maintaining trust and long-term relationships. Chameleons' adaptability and strategic manipulation offer advantages in competitive settings, but their self-catered tendencies may pose risks to ethical standards and personal wellbeing.

The results of this study underscore the significance of examining objective measures, such as enterprise performance, and subjective measures, like wellbeing, in entrepreneurship

research. The positive associations observed between the Bee and Chameleon archetypes and business performance and wellbeing highlight that various combinations of social identity and personality traits can drive entrepreneurial success. Specifically, Bees, known for their ethical behaviour and strong community focus, perform well in settings prioritising social responsibility and collaboration. This dual focus boosts business success and enhances personal satisfaction and overall wellbeing. Research has shown that entrepreneurs who align their ventures with personal and ethical values tend to report higher levels of life satisfaction and wellbeing, thereby supporting the notion that integrating personal values into business practices fosters both business and personal sustainability (Brieger et al., 2021; Stephan et al., 2023).

On the other hand, Chameleons, despite their high levels of Dark Triad traits, such as Machiavellianism, Narcissism, and Psychopathy, also report favourable outcomes in performance and wellbeing. This finding suggests that traits associated with adaptability, strategic self-promotion, and opportunism can be beneficial in achieving business success, even when they carry ethical implications. Studies like those by Klotz and Neubaum (2016) have indicated that while Dark Triad traits can introduce ethical dilemmas, they may also equip entrepreneurs with the ability to navigate complex, competitive environments more effectively. Chameleons' capacity to adjust their strategies to fit changing circumstances illustrates the value of adaptability and calculated risk-taking in entrepreneurship. However, the potential for ethical conflicts and heightened stress among this group highlights the need for supportive interventions that encourage ethical decision-making and help manage emotional resilience, aligning with findings by Hmieleski and Lerner (2016).

Conversely, Lions, who embody a mix of competitive drive and communal values, appear to experience lower levels of both performance and wellbeing when compared to Bees

and Chameleons. This pattern suggests that a balanced approach, while versatile, may lack the sharp focus that characterises more specialised strategies. Studies such as those by Baum et al. (2001) argue that alignment of strategic focus with personal identity is essential for maximising entrepreneurial success and satisfaction. Lions' effort to balance competitive ambition with communal and ethical considerations might lead to a diffusion of strategic clarity, which could hinder their ability to fully exploit their strengths, thereby limiting business performance and personal fulfilment. This revelation underscores the importance of aligning one's strategic approach with core identity traits to optimise success, as discussed in research by Fauchart and Gruber (2011).

Theoretical Implications

This study makes several significant contributions to entrepreneurship and personality research by addressing important gaps in understanding how the interplay between founders' social identities and Dark Triad personality traits shapes entrepreneurial outcomes. In particular, it advances Social Identity Theory in entrepreneurship by examining how distinct social identities—namely, Darwinian, Communitarian, and Missionary—interact with personality traits to impact entrepreneurial behaviour and firm performance (Fauchart & Gruber, 2011; Sieger et al., 2016). Previous studies have typically examined social identity and personality traits in isolation, focusing on how each factor independently influences entrepreneurial actions. By integrating these dimensions, our research provides a more nuanced, holistic view of the motivations and decision-making processes that drive entrepreneurs, offering deeper insights into how identity and personality traits interact to shape the entrepreneurial journey (de la Cruz et al., 2018).

Furthermore, this study contributes to the literature on Dark Triad traits in entrepreneurship by exploring the roles of Narcissism, Machiavellianism, and Psychopathy in influencing entrepreneurial behaviours within different social identity frameworks (Paulhus & Williams, 2002; Brownell et al., 2021; McLarty et al., 2023). While previous research has recognised the influence of Dark Triad traits on entrepreneurial outcomes, there is limited understanding of how these traits affect entrepreneurs with varied social identities. Our study extends the existing literature by demonstrating that Dark Triad traits can enhance or hinder specific social identity expressions, depending on the personality-identity combination. For instance, a Darwinian entrepreneur with high Machiavellian traits may exhibit competitive behaviours that yield financial success (Jones & Paulhus, 2017), while a Communitarian with narcissistic traits may face challenges in maintaining authentic relationships within a community-oriented business (Zhu & Chen, 2015). By exploring these complex dynamics, we reveal new insights into how personality traits shape the success and wellbeing of entrepreneurs, highlighting the nuanced ways in which these traits interact with social identity (Hmieleski & Lerner, 2016).

In addition to these theoretical advancements, this research contributes to the study of entrepreneurial archetypes and behavioural profiles through Latent Profile Analysis (Porcu & Giambona, 2017; Weller et al., 2020). By identifying unique combinations of social identity and Dark Triad traits, we present three distinct entrepreneurial archetypes: "Lions," "Bees," and "Chameleons." These archetypes represent balanced competitors, collaborative visionaries, and adaptable strategists, respectively, and provide a novel framework for understanding the diversity within the entrepreneurial population. This classification contributes to behavioural entrepreneurship literature by illustrating how different personality-identity configurations lead

to varying outcomes in firm performance and personal wellbeing (Rauch & Frese, 2007). Through this archetypal framework, our study offers an innovative approach to understanding the spectrum of entrepreneurial behaviours, presenting practical implications for tailored support, training, and policy development to enhance the success of diverse entrepreneurial types (Chell, 2008; Stephan, 2018).

Categorising founders into archetypes such as Lions, Bees, and Chameleons improves our ability to predict positive and negative outcomes in business performance and personal wellbeing. Understanding that Lions are likely to excel in leadership roles and competitive markets (Baum et al., 2001), Bees in team-oriented and socially responsible ventures (Miller et al., 2012), and Chameleons in dynamic and rapidly changing environments (Smith & Lilienfeld, 2013) allows for more accurate forecasts of entrepreneurial success. Additionally, identifying these archetypes can help predict potential challenges, such as ethical dilemmas for Chameleons or stress and burnout for Lions (Cardon & Patel, 2015), leading to more proactive support and intervention strategies.

Practical Implications

This study has several practical implications for entrepreneurship support programs, policymakers, and practitioners seeking to foster diverse and resilient entrepreneurial ecosystems. By identifying distinct entrepreneurial archetypes—Lions, Bees, and Chameleons—based on combinations of social identities and Dark Triad traits, this research highlights the need for tailored approaches to supporting different types of entrepreneurs. Recognising that each archetype has unique strengths and challenges enables support programs to design interventions that cater to specific entrepreneurial motivations, behaviours, and strategic needs. For example,

"Lions" may benefit from leadership training that balances competitive drive with ethical decision-making, while "Bees" could benefit from collaborative skills-building programs that enhance community engagement and shared purpose (Chell, 2008; Grijalva & Harms, 2014). For "Chameleons," known for their adaptability and strategic manipulation, interventions could focus on ethical decision-making frameworks and emotional resilience to help mitigate potential ethical dilemmas and stress associated with their high Dark Triad traits (O'Boyle et al., 2012; Hmieleski & Lerner, 2016). Such tailored programs can enhance each archetype's performance and well-being by addressing their unique needs and risks, creating a more supportive environment for various entrepreneurial types. This targeted support also aligns with recent calls for more personalised entrepreneurial training, as entrepreneurs with different profiles may respond differently to traditional support mechanisms.

For policymakers, understanding these entrepreneurial archetypes provides insights for creating policies that foster an inclusive and supportive entrepreneurial ecosystem. Recognising that "Bees" prioritise community-focused initiatives, policymakers could implement incentives supporting socially responsible ventures and community-focused business models. Likewise, policies aimed at promoting innovation and risk-taking could be more beneficial to "Chameleons" who thrive in dynamic environments, while "Lions" might benefit from policies that promote competitive market access and leadership opportunities (Baum et al., 2001; Miller et al., 2012). By acknowledging these diverse motivations and personality-based approaches, policymakers can support a broader range of entrepreneurial pathways, fostering a resilient ecosystem that benefits individual entrepreneurs and the wider economy.

Understanding the personality-driven strategies of different entrepreneur types can enhance decision-making processes for investors and venture capitalists, especially when

assessing the potential risks and benefits of funding certain business ventures. Knowing that "Chameleons" will likely adapt well to fast-changing markets can be advantageous in high-risk, high-reward contexts. However, their high Dark Triad traits might require close monitoring to ensure alignment with ethical standards (Smith & Lilienfeld, 2013). Similarly, investors may find value in supporting "Bees" due to their focus on social responsibility and stakeholder trust, which can contribute to long-term sustainability and brand loyalty. Practical insights into these archetypes enable investors to make informed decisions, aligning their support with entrepreneurs whose approaches are compatible with their investment goals.

Finally, this research has practical implications for entrepreneurial education and training providers. Educators can incorporate insights from the study's archetypes into curricula, encouraging students to explore their unique social identities and personality traits as they develop entrepreneurial skills. Encouraging self-awareness and reflection on personal motivations can help aspiring entrepreneurs understand their strengths and limitations, promoting ethical decision-making and adaptability in their future ventures (Stephan, 2018; Obschonka et al., 2010). Such programs can prepare future entrepreneurs to navigate complex business environments, fostering resilience and success across diverse entrepreneurial profiles. By acknowledging and supporting varied entrepreneurial archetypes, training providers and educators can create a richer, more inclusive learning environment that equips entrepreneurs with the skills and awareness needed to thrive in today's competitive market.

Limitations and Recommendations for Future Research

While this research provides valuable insights into the relationship between social identity, Dark Triad traits, and entrepreneurial outcomes, it is essential to recognise some limitations. Firstly,

the study relies heavily on self-reported data from entrepreneurs, which can introduce biases such as social desirability or self-enhancement bias. Participants may overestimate their wellbeing or performance to align with social expectations or self-image, leading to inaccuracies in the data. This reliance on self-assessment makes it challenging to validate the findings objectively. Secondly, the research uses a cross-sectional design, which captures data at a single point in time. While this approach provides a snapshot of the relationships between social identity, Dark Triad traits, and entrepreneurial outcomes, it limits the ability to draw causal conclusions. Longitudinal studies would be needed to explore how these relationships evolve and establish more robust causality. Lastly, although the study includes a diverse sample, there may still be a cultural bias due to the predominance of specific regions or demographic groups within the sample. Cultural differences can significantly influence the expression of personality traits and the perception of social identity. Future research should consider a more balanced representation of different cultural contexts to generalise the findings broadly.

CONCLUSION

In conclusion, this study delves into the intricate interplay between a founder's social identity and the Dark Triad traits. It offers a nuanced perspective on entrepreneurial behaviours and their subsequent repercussions on enterprise performance and founder wellbeing. By introducing three distinct entrepreneurial archetypes—Lions, Bees, and Chameleons—identified through Latent Profile Analysis of a substantial cohort of active entrepreneurs, the research sheds light on the diverse patterns found in the entrepreneurial landscape. The study extends its exploration to decipher these archetypes' impact on wellbeing and performance outcomes, unravelling the

myriad factors that influence entrepreneurial success. The comprehensive findings contribute

significantly to our understanding of the multifaceted nature of entrepreneurial behaviour,

providing valuable insights into its implications for individual and business performance. This

research not only refines our comprehension of entrepreneurial dynamics but also sets the stage

for informed strategies to foster success and wellbeing in the entrepreneurial ecosystem.

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Table 1: Overview of Active Founders: Sample Size and Percentage by Country

	Country	Total sample	Active founder	Percentage		Country	Total sample	Active founder	Percentage
1	Albania	434	57	13%	28	Lebanon	3224	544	17%
2	Australia	442	43	10%	29	Liechtenstein	107	13	12%
3	Austria	3236	197	6%	30	Lithuania	2154	229	11%
4	Belgium	2296	108	5%	31	Mexico	6449	1249	19%
5	Bolivia	2133	545	26%	32	Morocco	1265	103	8%
6	Brazil	7738	950	12%	33	Nepal	137	16	12%
7	Bulgaria	717	126	18%	34	Netherlands	713	74	10%
8	Chile	10509	1506	14%	35	New Zealand	1902	159	8%
9	Costa Rica	5469	801	15%	36	Nigeria	2093	673	32%
10	Colombia	12401	2359	19%	37	North Macedonia	175	25	14%
11	Croatia	1660	55	3%	38	Pakistan	896	121	14%
12	Czech Republic	1971	178	9%	39	Panama	5297	923	17%
13	Dominican Republic	594	98	16%	40	Peru	14948	3052	20%
14	Ecuador	5085	1276	25%	41	Poland	6012	432	7%
15	El Salvador	768	171	22%	42	Portugal	3596	154	4%
16	Estonia	406	83	20%	43	Qatar	121	25	21%
17	Finland	1094	113	10%	44	Russia	5407	657	12%
18	Germany	8199	403	5%	45	Saudi Arabia	2921	266	9%
19	Greece	1594	128	8%	46	Slovakia	5754	387	7%
20	Hungary	10104	742	7%	47	Spain	98226	6196	6%
21	Indonesia	2545	1239	49%	48	Sweden	388	15	4%
22	Iraq	613	195	32%	49	Tunisia	342	52	15%
23	Italy	3294	227	7%	50	United Arab Emirates	1345	137	10%
24	Japan	3494	53	2%	51	Uruguay	1843	326	18%
25	Jordan	3237	335	10%	52	Iran	867	156	18%
26	Kazakhstan	2791	609	22%	53	Switzerland	6919	219	3%
27	Korea	1220	53	4%					

Table 2: Factor Loadings, Model Fit Indices, and Reliability for Scales used in the study

Scale	Items	loading	CFI	TLI	RMSEA	Alpha
Darwinian founders	to advance my career in the business world.	0.636	0.983	0.957	0.222	0.846
	to operate my firm on the basis of solid management practices.	0.701				
	to have thoroughly analysed the financial prospects of my business.	0.726				
	to have a strong focus on what my firm can achieve vis-à-vis the competition.	0.842				
	to establish a strong competitive advantage and significantly outperform other firms in my domain.	0.827				
Communitarian founders	to solve a specific problem for a group of people that I strongly identify with (e.g., friends, colleagues, club, community).	0.615	0.991	0.932	0.071	0.865
	to play a proactive role in shaping the activities of a group of people that I strongly identify with (e.g., friends, colleagues, club, community).	0.657				
	to provide a product / service that is useful to a group of people that I strongly identify with (e.g., friends, colleagues, club, community).	0.699				
	to be able to express to my customers that I fundamentally share their views, interests and values.	0.647				
	to have a strong focus on the group of people that I strongly identify with (e.g., friends, colleagues, club, community).	0.822				
	to support and advance the group of people that I strongly identify with (e.g., friends, colleagues, club, community).	0.858				
Missionary founders	to solve a societal problem that private businesses usually fail to address (such as social injustice, environmental protection).	0.687	0.947	0.901	0.13	0.880
	to play a proactive role in changing how the world operates.	0.734				
	to be a highly responsible citizen of our world.	0.705				
	to make the world a "better place" (e.g., by pursuing social justice, protecting the environment).	0.805				
	to have a strong focus on what the firm is able to achieve for society-at-large.	0.781				
	addresses (e.g., social justice, environmental protection).	0.751				
Macchiavellism	I tend to manipulate others to get my way.	0.803	1	1	0.009	0.907
	I have used deceit or lied to get my way.	0.876				
	I have used flattery to get my way.	0.843				
	I tend to exploit others towards my own end.	0.850				
Psychopathy	I tend to lack remorse.	0.701	0.986	0.959	0.112	0.861
	I tend to be unconcerned with the morality of my actions.	0.774				
	I tend to be callous or insensitive.	0.863				
	I tend to be cynical.	0.787				
Narcissism	I tend to want others to admire me.	0.862	0.997	0.99	0.06	0.877
	I tend to want others to pay attention to me.	0.885				
	I tend to seek prestige or status.	0.800				
	I tend to expect special favors from others.	0.656				
Performace	Sales growth	0.872	0.962	0.924	0.152	0.891
	Market share growth	0.899				
	Profit growth	0.879				
	Job creation	0.680				
Subjective well-being	In most ways my life is close to my ideal.	0.740	0.986	0.972	0.08	0.868
	The conditions of my life are excellent.	0.748				
	I am satisfied with my life.	0.868				
	So far, I have gotten the important things I want in life.	0.785				
	If I could live my life over, I would change almost nothing.	0.649				

Table 3 : Descriptive statistics of the Sample

Profile		Frequency	%
Gender	Male	13,587	47.09
	Female	15,266	52.91
Age	<20	3,024	10.48
	20-24	12,259	42.49
	25+	13,570	47.03
Education level	Graduate	6,700	23.22
	Undergraduate	22,153	76.78
Entrepreurship education	Yes	9,691	33.59
	No	19,162	66.41
Filed of study	Arts / Humanities (e.g., cultural studies, history, linguistics, philosophy, religion)	1,985	6.88
	Business / Management	8,080	28
	Computer sciences / IT	1,259	4.36
	Economics	1,813	6.28
	Engineering (incl. architecture)	4,621	16.02
	Human medicine / health sciences	2,021	7
	Law	1,502	5.21
	Mathematics	269	0.93
	Natural sciences	869	3.01
	Science of art (e.g., art, design, dramatics, music)	655	2.27
	Social sciences (e.g., psychology, politics, education)	3,138	10.88
	Other	2,641	9.15
Entrepreneurial family background	No	11,785	40.84
	Yes, father	6,182	21.43
	Yes, mother	3,343	11.59
	Yes, both	7,543	26.14
Entrepreneurial Experience	Yes	7,347	25.46
	No	21,506	74.54
Teams	Solo	11,431	39.62
	1-3 employee	13,502	46.8
	4-10 employee	3,144	10.9
	More than ten employee	776	2.69
Industry sector	1 Advertising / Design / Marketing	3,013	10.44
	2 Architecture and Engineering	925	3.21
	3 Construction	708	2.45

4 Consulting (HR, law, management, tax)	1,068	3.7
5 Education and training	2,490	8.63
6 Financial services (incl. banking, insurance, investment, real estate)	855	2.96
7 Human health and social work activities	1,006	3.49
8 Information technology (IT) and communication (incl. software & IT services)	1,408	4.88
9 Manufacturing	779	2.7
10 Tourism and leisure	979	3.39
11 Trade (wholesale/retail)	6,164	21.36
12 Other services (e.g., transportation)	1,158	4.01
13 Other	8,300	28.77

Table 4: Evaluating the Profile Solutions

Models	LL	AIC	BIC	AICC	CAIC
1 class	-302075.29	604174.574	604273.588	604174.6	604285.6
2 class	-288388	576317.3	576970.7	576814	576989.7
3 class	**-275840.1**	**551732.2**	**551946.7**	**551732.2**	**551972.7**
4 class	-271609.4	543284.725	543557.041	543284.8	543590

Note: LL = log-likelihood; AIC= Akaike Information Criterion; BIC = Bayesian information criterion; AICC= Corrected Akaike Information Criterion; CAIC= Consistent Akaike Information Criterion.

Table 5: Mean differences testing of the outcomes per class

Variable	Class 1 (Mean)	Class 2 (Mean)	Class 3 (Mean)	Anova results			Post-hoc Comparisons
				R^2	F	p-value	
Darwinian	4.17	5.81	5.83	0.3209	6624.14	< .001	Class 2 > Class 1 (MD = 1.64, p < .001); Class 3 > Class 1
Communitarian	3.77	6.02	5.75	0.5672	18141.22	< .001	Class 2 > Class 1 (MD = 2.25, p < .001); Class 2 > Class 3
Missionary	3.58	5.99	5.74	0.5357	15849.47	< .001	Class 2 > Class 1 (MD = 2.41, p < .001); Class 3 > Class 1
Machiavellianism	2.5	1.81	5.37	0.0515	782.6	< .001	Class 3 > Class 1 (MD = 2.87, p < .001); Class 3 > Class 2
Psychopathy	2.38	1.75	4.92	0.5118	14453.46	< .001	Class 3 > Class 1 (MD = 2.54, p < .001); Class 3 > Class 2
Narcissism	3.33	3.23	5.34	0.2036	3526.23	< .001	Class 3 > Class 1 (MD = 2.01, p < .001); Class 3 > Class 2

Note: Mean difference (MD).

Table 6: Descriptive statistics of each class

Profile		CLASS 1	CLASS 2	CLASS 3	
Gender	Male	50.06%	42.82%	57.86%	Pearson Chi^2(2) =388.4694
	Female	49.94	57.18	42.14	Pr = 0.000
Age	<20	9.33	10.42	12.17	Pearson Chi^2(4) = 86.6195
	20-24	42.74	41.24	46.25	Pr = 0.000
	25+	47.93	48.35	41.59	
Education Level	Graduate	24.95	23.4	20.44	Pearson Chi^2(2) = 34.1175
	Undergraduate	75.05	76.6	79.56	Pr = 0.000
Entrepreneurship Education	Yes	55.11	68.88	72.81	Pearson Chi^2(2)= 522.7499
	No	44.89	31.12	27.19	Pr = 0.000
Field of study	Arts / Humanities (e.g., cultural studies, history, linguistics, philosophy, religion)	9.65	6.41	4.89	Pearson Chi^2(22)= 524.8897 Pr = 0.000
	Business / Management	20.73	29.88	31.33	
	Computer sciences / IT	5.56	3.7	5.02	
	Economics	6.61	5.7	7.81	
	Engineering (incl. architecture)	15.44	15.99	16.91	
	Human medicine / health sciences	7.65	7.33	5.16	
	Law	5.4	5.25	4.85	
	Mathematics	1.43	0.73	0.96	
	Natural sciences	3.53	2.93	2.64	
	Science of art (e.g., art, design, dramatics, music)	2.96	2.17	1.73	
	Social sciences (e.g., psychology, politics, education)	12.48	11.18	7.89	
	Other	8.55	8.73	10.81	
Entrepreneurial Background	No	46.24	40.08	36.46	Pearson Chi^2(6) = 184.5406 Pr = 0.000
	Yes, father	21.92	20.98	22.26	
	Yes, mother	10.02	12.36	11.05	
	Yes, both	21.83	26.58	30.22	
Entrepreneurial Experience	Yes	31.47	22.44	14.39	Pearson Chi^2(2) = 489.6347 Pr = 0.000
	No	68.53	77.56	85.61	
Teams	Solo	37.24	25.82	20.31	Pearson Chi^2(2) = 344.4715 Pr = 0.000
	1-3 employee	50.18	58.68	54.67	
	4-10 employee	9.54	12.63	20.12	

Industry sector	More than ten employee	3.04	2.87	4.9	Pearson Chi^2(24) = 335.7168 Pr = 0.000
	1 Advertising / Design / Marketing	11.19	10.13	13.51	
	2 Architecture and Engineering	3.68	2.91	4.52	
	3 Construction	3.1	2.01	3.82	
	4 Consulting (HR, law, management, tax)	3.85	3.94	3.69	
	5 Education and training	9.91	9.12	7.53	
	6 Financial services (incl. banking, insurance, investment, real estate)	3.61	2.68	3.91	
	7 Human health and social work activities	3.28	4.04	2.79	
	8 Information technology (IT) and communication (incl. software & IT services)	5.63	4.87	5.24	
	9 Manufacturing	2.23	2.91	3.41	
	10 Tourism and leisure	9.64	7.18	7.19	
	11 Trade (wholesale/retail)	18.4	24.53	20.34	
	12 Other services (e.g., transportation)	25.48	25.67	24.06	

Note: Differences between classes for categorical variables were assessed using an adjusted Pearson Chi-square test

Table 7: Regression results

	Model 1 Wellbeing	Model 2 Wellbeing	Model 3 performance	Model 4 performance
Class 2	0.570***	0.558***	0.762***	0.730***
	(0.015)	(0.015)	(0.018)	(0.019)
Class 3	0.537***	0.542***	1.240***	1.207***
	(0.019)	(0.019)	(0.023)	(0.024)
Gender (female)	0.026**	0.025**	-0.079***	-0.089***
	(0.013)	(0.013)	(0.016)	(0.016)
Age	-0.085***	-0.059***	-0.043*	-0.015
	(0.021)	(0.021)	(0.025)	(0.026)
Education level (undergraduate)	-0.091***	-0.093***	-0.015	0.016
	(0.021)	(0.021)	(0.026)	(0.026)
	-0.129***	-0.134***	-0.149***	-0.121***
Entrepreurship education (No)	(0.013)	(0.013)	(0.016)	(0.016)
Filed of study	0.120***	0.111***	0.324***	0.284***
Arts / Humanities	(0.026)	(0.026)	(0.032)	(0.032)
Business / Management	0.025	0.051	0.158***	0.147***
	(0.039)	(0.039)	(0.047)	(0.048)
Computer sciences / IT	0.012	0.056*	0.251***	0.250***
	(0.034)	(0.034)	(0.041)	(0.042)
Economics	0.069**	0.054*	0.213***	0.180***
	(0.028)	(0.028)	(0.035)	(0.035)
Engineering (incl. architecture)	0.112***	0.098***	0.196***	0.185***
	(0.033)	(0.033)	(0.040)	(0.041)
Human medicine / health sciences	0.199***	0.180***	0.393***	0.380***
	(0.035)	(0.035)	(0.043)	(0.044)
Law	0.032	0.038	0.203**	0.165**
	(0.066)	(0.066)	(0.081)	(0.081)
Mathematics	0.009	0.025	0.042	0.032
	(0.041)	(0.041)	(0.051)	(0.051)
Natural sciences	0.128***	0.139***	-0.119**	-0.110*
	(0.046)	(0.046)	(0.056)	(0.057)
Science of art	0.133***	0.114***	0.128***	0.119***
	(0.029)	(0.029)	(0.036)	(0.036)
Social sciences	0.057*	0.078**	0.253***	0.208***
	(0.030)	(0.031)	(0.037)	(0.038)
Family Background Yes, father	0.051***	0.047***	0.136***	0.129***

	(0.016)	(0.016)	(0.020)	(0.020)
Yes, mother	0.022	0.001	0.151***	0.117***
	(0.020)	(0.020)	(0.025)	(0.025)
Yes, both	0.155***	0.130***	0.272***	0.244***
	(0.015)	(0.015)	(0.019)	(0.019)
Teams structure (solo)	-0.135***	-0.125***	-0.408***	-0.375***
	(0.014)	(0.015)	(0.018)	(0.018)
Entrepreneurial experience (yes)	-0.001	0.015	0.146***	0.134***
	(0.014)	(0.014)	(0.017)	(0.017)
Power distance		-0.005***		0.001
		(0.000)		(0.001)
Individualism		-0.004***		-0.006***
		(0.000)		(0.000)
Masculinity		0.003***		0.001**
		(0.000)		(0.001)
Uncertainty avoidance		0.006***		0.001
		(0.001)		(0.001)
Constant	-0.411***	-0.494***	-0.877***	-0.788***
	(0.040)	(0.074)	(0.049)	(0.091)
Observations	28,853	28,411	28,853	28,411
R-squared	0.077	0.086	0.170	0.176
Industry control	Yes	Yes	Yes	Yes

Note: Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1, the reference group is class 1 (Lions), the reference group for the gender is male, the reference group Field of study is the other category, the reference group Family Background is no option.