Human AI

Project «Excellent»
IRCAI Top 100 2025 · UNESCO

WHITE PAPER

Personality and socio-emotional competency assessment with AI

For schools, universities, professionals and companies.

Contents

Human AI

I Who we are
What we do

II Our differential value:
3rd-generation AI vs traditional tools

III Foundations:

1. OCEAN model
2. Artificial intelligence:
   natural language processing
3. An explainable method
4. An accurate method
5. A consistent method

IV Fields of application.

1. Education
2. Talent and culture
3. Employability and the future of work
4. Entrepreneurship
5. Mental health and wellbeing

GOVERNANCE AND COMPLIANCE

ACADEMIC PUBLICATIONS

BIBLIOGRAPHIC REFERENCES

Human AI

WHO WE ARE

Human AI began as a research, development and co-design project between the education, business and university sectors. Today it is a company that combines science and technology to create innovative solutions that improve human wellbeing and development. **Our team is made up of experts in artificial intelligence, psychology, neuroscience, employment, education and health**, working together to design products and services that respond to the real needs of people and of society.

Our vision is to create a more human world, in which technology is a tool for strengthening people's capabilities and values. That is why we apply ethical and quality principles across all our projects, seeking a balance between social and economic benefit. At **Human AI** we believe that artificial intelligence can be an ally in transforming the world for the better. And in helping those who help.

> **Our vision is to create a more human world, in which technology is a tool for strengthening people's capabilities and values.**

Human AI has been recognised as an «Excellent» project in the IRCAI Top 100 2025 – Global Index of AI Innovations by UNESCO

IRCAI GLOBAL TOP 100 EXCELLENT PROJECT 2025

unesco Centre Under the auspices of UNESCO

IRC AI International Research Centre on Artificial Intelligence under the auspices of UNESCO

Human AI

WHAT WE DO

At **Human AI** we help educational, academic, business, social and professional organisations to **assess socio-emotional competencies objectively using artificial intelligence** and psycholinguistics, working from texts (written or transcribed) in natural language and without resorting to traditional tests. **The platform analyses 35 competencies, generates individual and group reports and, on the basis of those results, makes it possible to design personalised, contextualised activities grounded in scientific evidence,** in order to address specific development needs.

This makes it easier for **professionals to move from assessment to intervention in a structured, comparable and scalable way**, adapting actions to different profiles, groups and contexts.

Our natural language processing (NLP) and machine learning (ML) algorithms analyse personality according to the Big Five / OCEAN model (McCrae & John, 1992), the most widely accepted model in the scientific community. With a text of at least 800 words in natural language [...]

Human AI

WHAT WE DO

This is **a simple, immediate and reliable method,** thanks to advances in psycholinguistics and artificial intelligence, **which is not subject to the self-perception and social desirability biases inherent in self-assessment tests, since it infers traits from language rather than from self-reported answers.**

The service is delivered through a web app that supports work with individual and group data, and through an API for organisations with their own platforms.

Clients (B2B) undertake to comply with the digital ethics code of conduct set out in our terms of use, in line with **our responsible AI policy and our adherence to the Montreal Declaration for the responsible development of AI.** Our legal opinion on Regulation (EU) 2024/1689 and personality assessment is also available (see Section 5).

Human AI

II. Our differential value

AI vs traditional tools

AI vs traditional tools

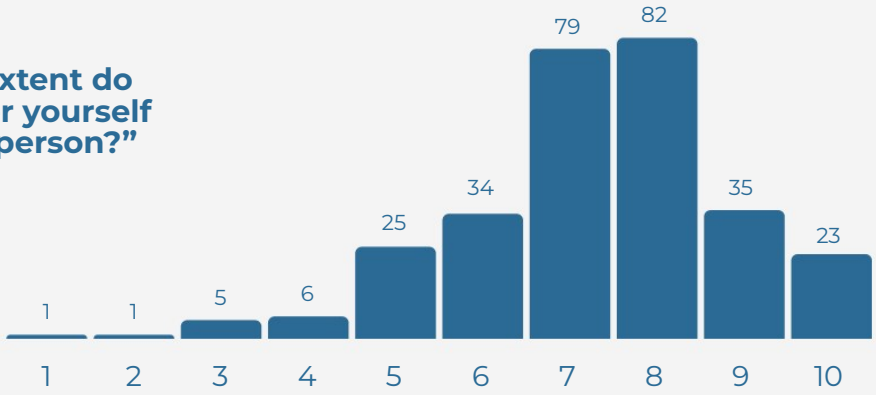
The aim of the AI-based assessment model is to overcome the limitations of psychometric tests for assessing personality and socio-emotional competencies by optimising assessment, processing and reporting time, so that you obtain the analysis in a matter of minutes.

- Application of psycholinguistics to new assessment methodologies that are immediate and easy to use.
- Supports human development professionals (educators, counsellors, psychologists and HR managers) by offering personalised intervention recommendations based on objective, reliable assessments.
- Built on the most current empirical knowledge and validated in the field and through an independent study.
- The procedure is more dynamic and agile for the user: from a text produced by the user, our solution applies natural language processing (NLP) to the individual's language (spoken or written), extracting the linguistic, semantic and contextual features that make it possible to infer their personality traits.
- Delivers assessment results, reports and statistics automatically.
- Mitigates social desirability bias.
- Avoids self-perception bias.

Field validation studies on self-perception bias

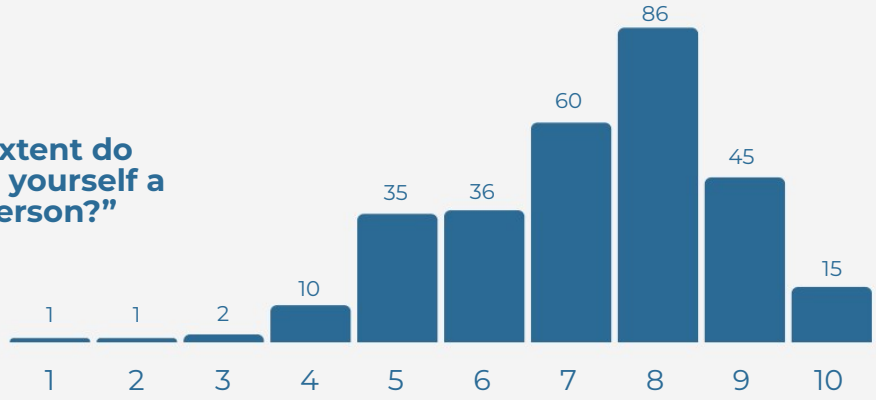
At Human AI we have tested this: if you ask a sample of hundreds of people from different countries to rate how orderly and how modest they are, most will answer in a positively biased way, with a high score.

"To what extent do you consider yourself an orderly person?"



291 people surveyed
Countries: Bolivia, Peru, Colombia, Spain, Ecuador and Argentina

"To what extent do you consider yourself a modest person?"



In the perception that human beings have of themselves and of their own conduct, they systematically tend to produce interpretations that maintain a positive view of the self (Gignac & Zajenkowski, 2020), which frequently leads them to read reality in a biased way and to deceive themselves in their self-perception. This self-perception bias is reflected in personality tests in any self-assessment situation in which social desirability is a conditioning factor (Paulhus, 2002; Ziegler et al., 2012).

OCEAN compared with other models

Criterion	Structure	Type of result	Psychometric properties
OCEAN / Big Five	**5 continuous dimensions:** Openness to experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism/Emotional stability, which can be broken down into specific facets for each dimension (Costa & McCrae, 1992).	**Continuous dimensional profile.** Each person obtains scores on the five dimensions and, depending on the instrument, on their facets; there is no need to classify people into discrete types (Costa & McCrae, 1992).	**Broad scientific backing.** It shows high temporal consistency across different measures and samples (Gnambs, 2014), extensive evidence of structural and cross-cultural validity (Costa & McCrae, 1992; Mezquita et al., 2019) and solid predictive capacity for relevant outcomes, supported by large-scale meta-analytic evidence (Zell & Lesick, 2022; Mammadov, 2022).
DISC	**4 behavioural dimensions:** Dominance, Influence, Steadiness and Conscientiousness. Different tools are based on this framework, with differences in how they are constructed, interpreted and scored (Scullard & Baum, 2015; Martinussen et al., 2001).	**Behavioural style profile.** Results derive from the combination of the four dimensions and are usually expressed as styles or patterns whose configuration depends on the instrument used (Scullard & Baum, 2015).	**Limited, instrument-dependent evidence.** Some measures show acceptable reliability, but independent studies have identified limitations in the structure and validity of its dimensions and limited evidence against relevant external criteria (Martinussen et al., 2001; König & Marcus, 2013).
MBTI	**4 pairs of preferences:** Extraversion–Introversion, Sensing–Intuition, Thinking–Feeling and Judging–Perceiving, whose combination generates 16 personality types (Myers et al., 2018).	Classification into one of 16 types, represented by a combination of four letters corresponding to the preferences identified in each dimension (Myers et al., 2018).	**Psychometric evidence with limitations in typological interpretation.** The scales can show adequate levels of reliability, but converting continuous scores into dichotomous types raises limitations of stability and interpretation; in addition, the evidence for drawing predictive inferences from the 16 types is limited (Capraro & Capraro, 2002; Pittenger, 2005).

Table 1. OCEAN compared with other models.

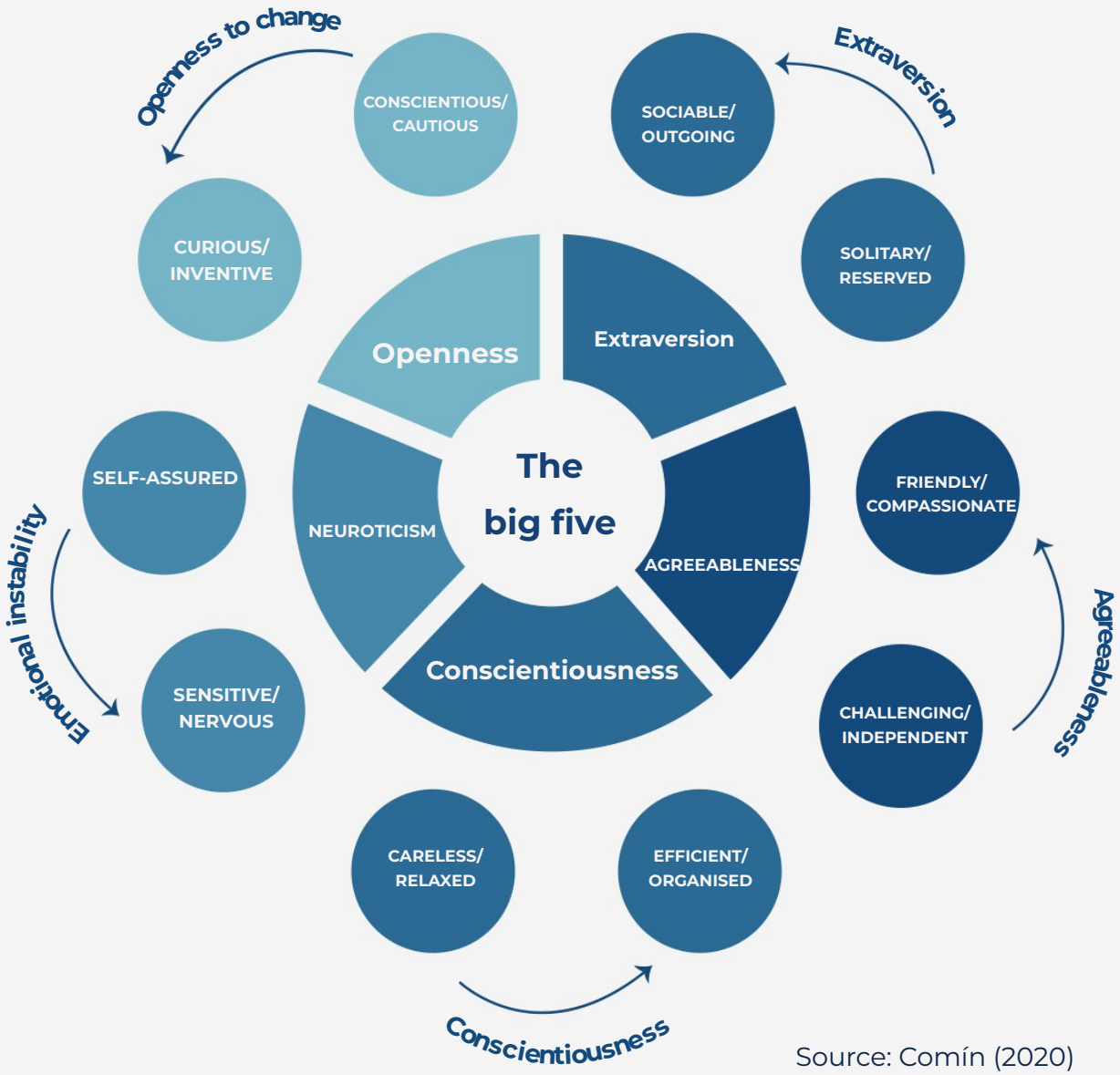
OCEAN compared with other models

Criterion	Structure	Type of result	Psychometric properties
Personality Enneagram	**9 personality types,** defined as differentiated patterns of personality and interpersonal functioning; different approaches add further elements to the basic nine-type system (Hook et al., 2021).	Essentially **typological classification into nine types**, although the operationalisation and the specific results vary between the different instruments used to assess the Enneagram (Hook et al., 2021).	**Limited and heterogeneous evidence.** A systematic review of 104 independent samples found mixed results for reliability and validity and pointed to the need for more rigorous research; the available evidence does not establish predictive capacity comparable to that of consolidated trait models (Hook et al., 2021).
Leadership Circle Profile (LCP)	360° leadership assessment organised into two main domains: Creative Competencies and Reactive Tendencies, subdivided into different leadership dimensions (Leadership Circle, 2024).	Multidimensional leadership profile based on self-assessment and feedback from others, aimed at identifying creative competencies and reactive tendencies relevant to professional development (Leadership Circle, 2024).	**Specific and less accumulated psychometric evidence.** The available independent study supports its use for leadership feedback and development, although it identifies some scales and validity evidence with room for improvement; it does not validate the instrument for selection, promotion or other high-stakes decisions (IPRA, 2008).

The OCEAN model of personality

The name of the OCEAN model refers to the English acronym for the five factors it comprises (Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism).

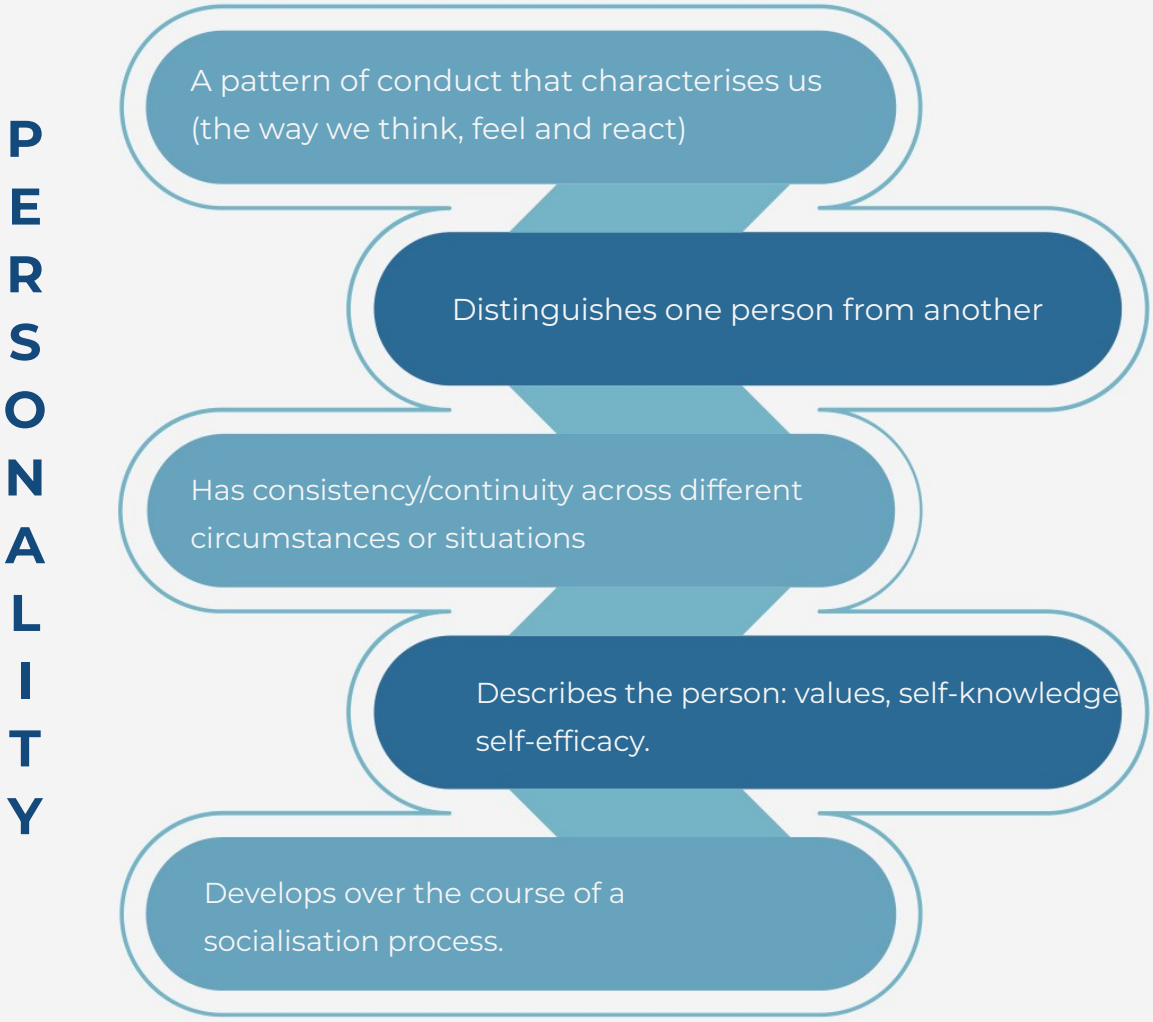
The model emerged from different parallel and independent lines of research which concluded, through factor analysis, that the various personality traits can be grouped statistically into five broad categories (McCrae & Costa, 2003).



Source: Comín (2020)

The relationship between the study of language and the study of personality

Current models within personality trait theory consider the lexical hypothesis plausible: the most salient individual differences and/or those of greatest social relevance will be encoded in language (John & Srivastava, 1999; McCrae & John, 1992). Language analysis would therefore be a reliable source of information for describing the characteristics that can define and construct human personality (Sánchez & Ledesma, 2007; Sanz et al., 1999).



Artificial intelligence

Our AI

Human AI is built on the same technology that underpins large language models.

Our artificial intelligence is based on the same technology that underpins large language models, which are able to process natural language in context —**grammatical structure and semantic relations**— even when the information is separated by several sentences or paragraphs. These are models pre-trained on large datasets that capture complex language patterns. **Our models are fine-tuned with supervised learning on data labelled according to the parameters of the OCEAN model, learning to infer the syntactic and semantic relations associated with each trait.**
The attention technique takes several linguistic aspects into account: the relative frequency of words and their co-occurrence; the distance between words; sentence syntax; and the cohesion between ideas. These aspects vary depending on the personality trait, and the AI uses them to distinguish between texts labelled with one trait or another.

An explainable method

Transparency and the ability to audit inference processes are especially relevant in AI systems used for assessment purposes, since they make it possible to examine the coherence of results and to sustain validation and accountability processes (Khosravi et al., 2022; Sireci et al., 2026).

Unlike AI models that operate as a "black box", our tool makes it possible to reconstruct and audit which features of language lead the model to assign a given personality level to each text. To do so we apply corpus linguistics techniques: we compare the normalised frequencies of all the linguistic elements in two corpora — for example, texts from people with a high level versus a low level of the same trait. In this way we identify the items showing the greatest mismatch between the two. Those items receive a higher score and constitute the linguistic-discursive markers characteristic of each trait. The analysis is carried out at three levels: morphosyntactic tags, lemmas and word combinations (n-grams).

This linguistic validation has been carried out under a "corpus-driven" approach (without starting from prior hypotheses, allowing the patterns to emerge from the data) on a corpus totalling close to 7 million words.

The markers identified are, moreover, interpretable in the light of psychological theory. Some of the markers identified are shown below by way of example:

Dimension	Simplified examples of indicators		N° of words
	HIGH level	LOW level	
Openness	Present tense and subordination; [...]	Past tense; everyday lexis and tastes [...]	1,081,676
Conscientiousness	Future tense; life projects [...]	1st person singular; focus on [...]	1,888,768
Extraversion	Plural and future tense; large [...]	1st person singular; tastes [...]	1,085,227
Agreeableness	1st person balanced; [...]	Proper nouns; social media and [...]	1,328,734
Emotional instability	1st person singular; [...]	1st person plural; the collective [...]	1,630,335

An accurate method

Across different studies conducted with hundreds of people, Human AI is comparing the results of assessments produced with its AI tool against the assessments of external observers.

3214

students from 18 schools and vocational training centres have benefited from competency analyses.

85%

of the 344 teachers rated it as accurate or very accurate.

1265

professionals (HR, psychology and psychiatry) from more than 10 countries have tested the prototypes, increasing their self-knowledge, and considered the report very accurate.

60

careers advisers from public employment services have piloted the prototypes, giving feedback on ease of use.

A consistent method

In AI-based assessment, validity must rest on evidence about the interpretation and the intended uses of results, and must not be limited to the technical performance of the model (Dorsey & Michaels, 2022; Sireci et al., 2026).

Our studies verify the capacity of the models to identify the personality traits of a population according to the patterns of the OCEAN (Big Five) model, reproducing the expected correlations between traits and showing convergence with psychometric instruments (NEO-PI-R, NEO-FFI, IPIP). The model also reproduces the expected trends in how traits evolve with age.

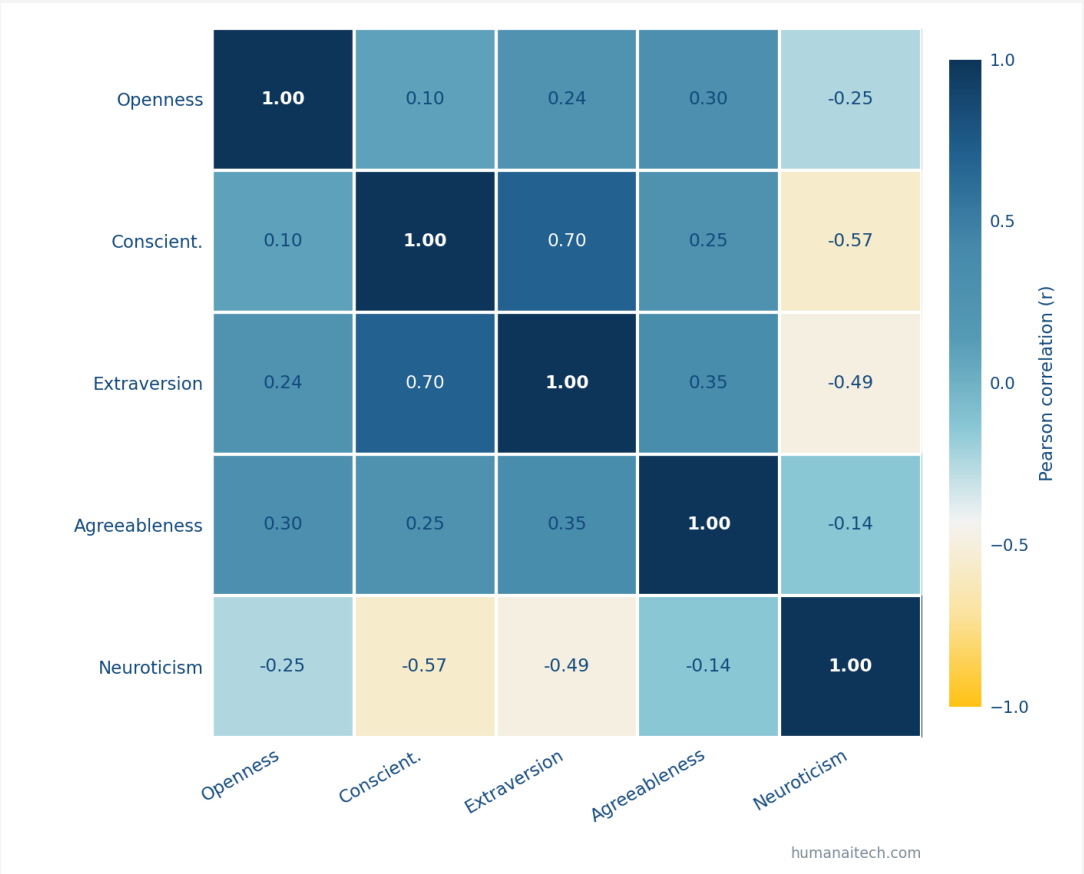
The use of **Human AI** as an assessment instrument has also been incorporated into peer-reviewed scientific research. In an international study published in Frontiers in Education, the tool was used to infer the 35 facets of the OCEAN/Big Five model from natural language narratives, being integrated as a measurement instrument within the study's methodological design (Abad-Villaverde et al., 2026).

The consistency of the model has also been studied in mental health contexts through PersonIA, a line of research developed in collaboration with healthcare centres. In these studies, the scores inferred by Human AI have been compared with standardised psychometric instruments and their stability has been analysed using both free and guided texts.

The results show patterns of convergence between language-based assessment and psychometric measures, as well as consistency across different modalities of text production. In a subsequent sample of people with a mild mental disorder, the model also maintained an interpretable five-factor structure, with a relatively better fit for the bifactor model (CFI = .94) and internal consistency levels between α = .61 and .87 (Martín Carrasco et al., 2024; Abad-Villaverde et al., 2026).

Specifically, minors tend to show lower indices on certain facets than adults, in line with the literature on personality change across the lifespan (Chopik & Kitayama, 2018; Costa et al., 2019; Roberts et al., 2006; Schwaba & Bleidorn, 2018; Soto et al., 2011).

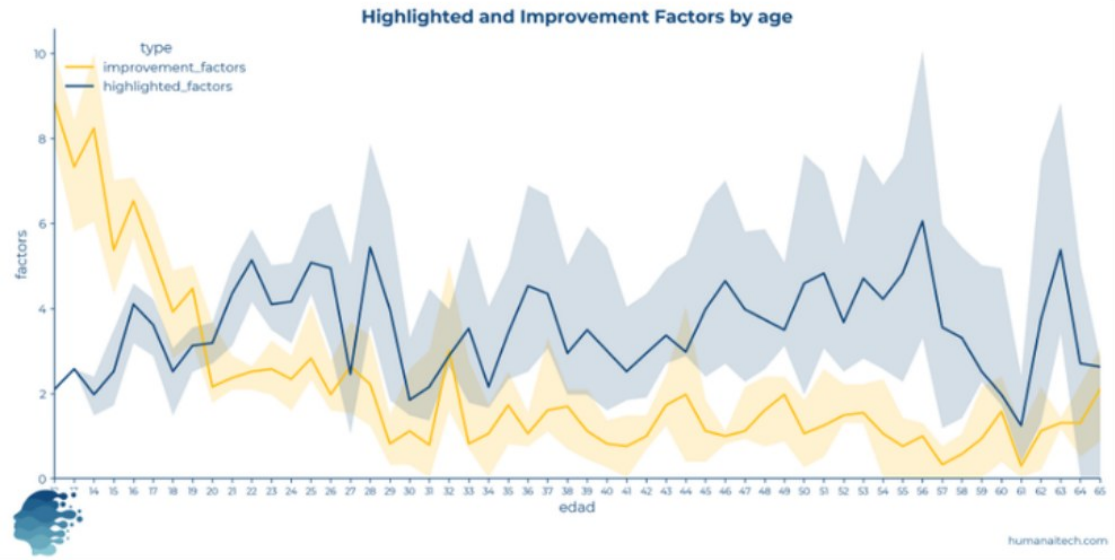
Example of correlations between the 5 dimensions of the OCEAN model assessed with our tool.



Source: Human AI. Study conducted in 2026.

Example of the number of facets with values above the 75th percentile (highlighted_factors, highlighted areas, blue) and below the 25th percentile (improvement_factors, areas for improvement, red) in subjects of different ages within the study sample. Minors can be seen to have a greater number of areas for improvement, while adults have a greater number of highlighted areas. It is interesting to note that the crossover point at which the number of highlighted areas rises above the areas for improvement is, approximately, the age of majority.

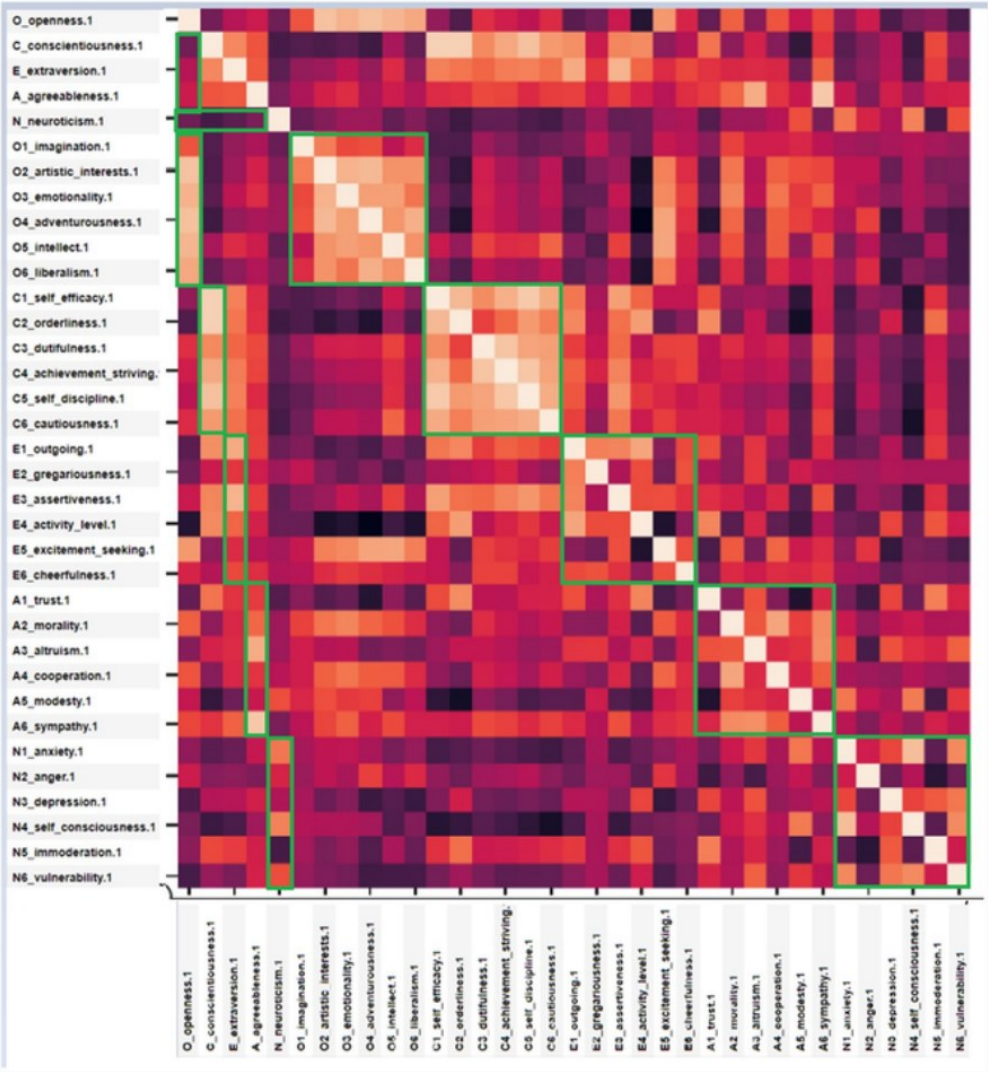
Number of highlighted areas and areas for improvement according to the age of the subjects.



Source: Human AI. Study conducted in 2026.

Example of correlations between the 35 facets of the OCEAN model assessed with our tool

Study conducted in 2022



Source: Human AI

Fields of application IV.

Education, employment and HR, entrepreneurship, mental health and wellbeing

This is **a simple, immediate and reliable method,** thanks to advances in psycholinguistics and artificial intelligence, **which is not subject to the self-perception and social desirability biases inherent in self-assessment tests, since it infers traits from language rather than from self-reported answers.**

There is a growing body of empirical evidence on the importance of personality and socio-emotional competencies (SEC) in areas of life impact: education, achievement, occupational status and job satisfaction, health and wellbeing (Gutman & Schoon, 2013; Heckman & Kautz, 2012; Roberts et al., 2007).

SEC —non-cognitive skills such as perseverance, self-control or a growth mindset— are, moreover, malleable (Chernyshenko et al., 2018), which means they can be assessed and developed.

The fields of application are summarised below, with a selection of cases and publications. Full list in **success stories** and **academic publications**.

EDUCATION

Purpose: to detect early signals that influence academic performance and personal development, and to guide the development of competencies for future employment opportunities. Social and emotional learning brings personal, social and academic performance benefits.

Schools:

- Colegio Jesuitinas (Pamplona),
- Red Educativa Itínere
- Colegio El Molino (inclusion and intellectual disability)
- Cala Educación
- Colegio Santa Rosa de Chosica
- Colegio Irabia-Izaga
- Red Itínere
- Colegio San Agustín, Lima and Chiclayo
- Colegio Marymount.

Vocational education and training:

- CIFP del Mar
- CIFP Turismo
- CIFP Carlos III (Indicators of emotional wellbeing in VET)
- CIFP Carlos III (Prevention and bullying)
- Escuela Europea de Maquinaria – Grupo Roxu.

Universities:

- UPSA (Bolivia)
- Universidad de la Sabana
- UPNA, Universidad de Navarra – Innovation Factory
- Corporación Universitaria Areandina
- Universidad de Piura
- Universidad de Nebrija.

TALENT AND CULTURE

Purpose: to understand how personality influences behaviour at work, to make more objective talent decisions and to design professional development paths. Personality assessment provides more information about future potential than merely measuring specific competencies (Susing & Cavanagh, 2013).

Cases:

- IED
- Mentha
- About Your Talent
- Unibrokers
- Fundación Perspectivas del Trabajo
- CRAIT
- Grupo CRESIO
- Ambacar
- Ilumno

EMPLOYABILITY AND THE FUTURE OF WORK

Purpose: personalised career and employment guidance, improved employability and preventive diagnosis, amplifying —not replacing— the work of the careers adviser.

Cases:

- Fundación Ilundáin
- DEMA Bizkaia
- Servicio Navarro de Empleo (SNE-NL)
- Córdoba Crea Futuro
- Ginia
- Universidad de La Sabana

Publications:

- **Córdoba Crea Futuro: adaptive employability at scale.**
- **Assessment of socio-emotional competencies with artificial intelligence in the Third-Generation University: the case of Universidad de La Sabana**

ENTREPRENEURSHIP

Purpose: to identify and develop the socio-emotional competencies most relevant to the entrepreneurial profile. Through an evidence review and a Delphi method (40 experts), Human AI linked 26 of the 35 SEC to the entrepreneurial personality, classifying them as «critical/relevant», «necessary» and «optional».

Publications:

- **Assessing entrepreneurship competencies with AI (Dykinson) · Female entrepreneurship — Frontiers in Education**

MENTAL HEALTH AND WELLBEING

Purpose: to explore personality assessment as support for more personalised, accessible and human care in mental health.

Human AI does not detect pathologies and is not a medical device, as validated by the Spanish Agency for Medicines and Medical Devices.

Case/study: PersonIA study, together with healthcare and academic institutions.

Governance and compliance

Governance and regulatory compliance are a central part of Human AI's value proposition: science and ethics as infrastructure, not as an add-on.

Recognition: IRCAI Top 100 (UNESCO)
Human AI has been recognised as an «Excellent» project in the IRCAI Top 100 2025 – Global Index of AI Innovations by UNESCO. See publication

Regulation (EU) 2024/1689 (AI Act) and personality assessment

The prohibition in Article 5(1)(f) of the AI Act applies to systems that meet three cumulative requirements: (1) they infer emotions or intentions of natural persons; (2) they do so on the basis of biometric data; and (3) they are deployed in the areas of education or the workplace. If not all of them are present, the system is not subject to the prohibition.

Our legal opinion holds that the system does not fall within the prohibition for two reasons: (i) personality traits do not identify or infer emotions in the sense of the AI Act —which defines them as responses of limited duration to stimuli, such as happiness, sadness or surprise (recital 18)— but rather stable, consistent patterns that do not depend on an immediate stimulus; and (ii) the content of a text in which a person organises and sets out their ideas does not constitute biometric data, even if personality traits are extracted from it. Consequently, on a systematic interpretation of the AI Act, the prohibition in Article 5(1)(f) would not be applicable.

Full document: Legal opinion on Regulation (EU) 2024/1689

Governance and compliance

Data protection (GDPR)
Human AI processes data in accordance with applicable legislation and with professional codes of ethics, anonymising the people assessed. Confidential information is not shared with third parties except where legally required. The servers on which the information is stored are located in the European Union and certified to demanding compliance standards.

All clients sign the digital ethics code of conduct, which draws on guidelines from the American Psychological Association (APA), the recommendation of the Beijing Consensus on AI and Education, the ethical principles of the Spanish Charter of Digital Rights and the Testing Commission of the Consejo Superior de Psicología. Digital ethics code

Information security (ISO 27001)
Human AI holds ISO 27001 certification, the international standard that attests to the management of information security with rigour, ethics and responsibility, and has a published ISMS Policy. ISMS Policy dated 4 April 2025. Scope: the Information Security Management System (ISMS) associated with the development, implementation and support of tools for the assessment and development of personality and socio-emotional competencies, based on a cloud platform and artificial intelligence engines, in accordance with the Statement of Applicability (SoA) dated 17/02/2025.

Responsible AI
Our method is explainable, independently validated **and designed as support under human supervision, not as a substitute for the professional or for traditional instruments.** These principles of traceability, validation and supervision are those required by Regulation 2024/1689, and form part of our adherence to the Montreal Declaration. Abad-Villaverde, B., & Funcia, J. (2026). Desde la innovación a la gobernanza: Human AI como herramienta para la gestión ética del desarrollo humano. In M. C. Díaz de Terán Velasco (Ed.), Inteligencia artificial y derecho. Desafíos interdisciplinarios y herramientas prácticas para el futuro digital (pp. 79–105). Tirant Lo Blanch.

BIBLIOGRAPHIC REFERENCES

Human AI scientific and academic output

Journal articles

Abad-Villaverde, B., Tuñas Martín, J. M., Beunza, M., Díaz de Terán, M. C., Mejia-Villa, A., & Malavé, F. (2026). Personality traits in female entrepreneurship: AI-based assessment vs. self-perception biases and tailored educational intervention. Frontiers in Education, 11, Article 1734541.
https://doi.org/10.3389/feduc.2026.1734541

Abad-Villaverde, B., Tuñas Martín, J. M., Grass Boada, D. H., Martínez, M., Luis, E. O., & Beunza Mijimolle, M. de la O. (2025). Personality assessment with AI: Scientific validation of a model based on natural language processing [Preprint]. SSRN.
https://doi.org/10.2139/ssrn.5418407

Arbués, E., Abad-Villaverde, B., Costa-París, A., Balaguer, Á., Conesa-Lareo, M.-D., & Beltramo, C. (2025). Socio-emotional competencies for sustainable development: An exploratory review. Education Sciences, 15(7), Article 831.
https://doi.org/10.3390/educsci15070831

BIBLIOGRAPHIC REFERENCES

Human AI scientific and academic output

Book chapters

Abad-Villaverde, B., & Funcia, J. (2026). Desde la innovación a la gobernanza: Human AI como herramienta para la gestión ética del desarrollo humano. In M. C. Díaz de Terán Velasco (Ed.), Inteligencia artificial y derecho: Desafíos interdisciplinarios y herramientas prácticas para el futuro digital (pp. 79–105). Tirant lo Blanch.

Abad-Villaverde, B., Sánchez Sánchez, C., García Nieto, J. M., & Hernández Pérez, F. J. (2025). Competencias socioemocionales e inteligencia artificial para incrementar empleabilidad y bienestar en la formación profesional. In R. Roig-Vila & F. M. Sirignano (Eds.), Miradas contemporáneas sobre la educación: Investigaciones, experiencias y reflexiones (pp. 3–15). Octaedro. https://doi.org/10.36006/09763-1

Abad-Villaverde, B., Estanga Goñi, Á., & Orbaiceta, R. (2024). Innovación educativa para el desarrollo socioemocional: El caso del colegio Jesuitinas Pamplona. In M. González Boluda, Y. M. Ramírez Cruz, & C. Lorenzo Álvarez (Eds.), Educación y conocimiento como ejes del pensamiento crítico: Experiencias innovadoras y significativas (pp. 3–14). Octaedro. https://doi.org/10.36006/16438-1

Abad-Villaverde, B., Benito Simón-Ricart, I., & Goñi Alegre, B. (2024). Inteligencia artificial aplicada a la evaluación de competencias socioemocionales vinculadas al emprendimiento. In F. Castelló-Sirvent, M. Peris-Ortiz, & V. Roger-Monzó (Coords.), Estrategias y transiciones socio-técnicas para la era de la inteligencia artificial (pp. 214–236). Dykinson.

BIBLIOGRAPHIC REFERENCES

Human AI scientific and academic output

Abad-Villaverde, B., Estrada Lozano, I., Sánchez Piquero, J., & Suárez Malagón, R. (2024). Desarrollo de competencias socioemocionales en la formación profesional: Implementación de un modelo estandarizado de evaluación aplicando inteligencia artificial. In S. González Yubero (Coord.), Buenas prácticas universitarias para la mejora del compromiso educativo y social (pp. 1078–1093). Dykinson.

Conference proceedings

2026

Abad Villaverde, B., Sánchez Sánchez, C., & García Nieto, J. M. (2026). Desarrollo socioemocional para la detección preventiva del acoso escolar en Formación Profesional: Un modelo aplicado basado en IA. In R. Roig-Vila, J. M. Antolí Martínez, V. Onrubia-Martínez, & C. Cutillas (Eds.), Actas / Proceedings / Actes: 5th International Congress: Education and Knowledge (p. 627). Ediciones Octaedro. https://doi.org/10.36006/90052-1

Abad Villaverde, B., Sánchez Sánchez, C., & García Nieto, J. M. (2026). Caracterización socioemocional del alumnado de Formación Profesional asistida por IA: Bases para la construcción de indicadores de bienestar emocional. In R. Roig-Vila, J. M. Antolí Martínez, V. Onrubia-Martínez, & C. Cutillas (Eds.), Actas / Proceedings / Actes: 5th International Congress: Education and Knowledge (p. 472). Ediciones Octaedro. https://doi.org/10.36006/90052-1

BIBLIOGRAPHIC REFERENCES

Conference proceedings

2026

Abad Villaverde, B., & Pallaro, R. A. (2026). Evaluación socioemocional basada en IA para la empleabilidad adaptativa: Un modelo aplicado en ecosistemas híbridos de formación a gran escala. In R. Roig-Vila, J. M. Antolí Martínez, V. Onrubia-Martínez, & C. Cutillas (Eds.), Actas / Proceedings / Actes: 5th International Congress: Education and Knowledge (p. 474). Ediciones Octaedro. https://doi.org/10.36006/90052-1

Abad Villaverde, B., Álvarez Klar, D., & García, M. G. (2026). De la incertidumbre al propósito: Innovación educativa y bienestar emocional en clave institucional. In G. Merma-Molina (Coord.), M. Urrea-Solano, D. Gavilán-Martín, J.-F. Álvarez-Herrero, & T. Di Spiridione (Eds.), Libro de Actas del III Congreso Internacional sobre Innovación, Didáctica y Educación para la Sostenibilidad (CIIDES-2026) (p. 245). Universidad de Alicante.

Abad Villaverde, B., & Mejía-Villa, A. (2026). Evaluación de competencias socioemocionales con inteligencia artificial en la Universidad de Tercera Generación: El caso de la Universidad de La Sabana. In G. Merma-Molina (Coord.), M. Urrea-Solano, D. Gavilán-Martín, J.-F. Álvarez-Herrero, & T. Di Spiridione (Eds.), Libro de Actas del III Congreso Internacional sobre Innovación, Didáctica y Educación para la Sostenibilidad (CIIDES-2026) (p. 223). Universidad de Alicante.

2025

Abad Villaverde, B., & García Fernández, F. (2025). Innovación en educación centrada en el alumnado: La experiencia del Colegio Irabia-Izaga aplicando inteligencia artificial para la evaluación de competencias socioemocionales. In R. Roig-Vila, J. M. Antolí Martínez, C. Lorenzo Álvarez, V. Onrubia-Martínez, & A. Sánchez Ronco (Eds.), Actas / Proceedings / Actes: 4th International Congress: Education and Knowledge (pp. 581–582). Ediciones Octaedro. https://doi.org/10.36006/90044-1

BIBLIOGRAPHIC REFERENCES

Conference proceedings

Abad Villaverde, B., Sánchez Sánchez, C., García Nieto, J. M., & Hernández Pérez, F. J. (2025). Transformar la FP desde lo humano: La inteligencia artificial al servicio del desarrollo socioemocional. In R. Roig-Vila, J. M. Antolí Martínez, C. Lorenzo Álvarez, V. Onrubia-Martínez, & A. Sánchez Ronco (Eds.), Actas / Proceedings / Actes: 4th International Congress: Education and Knowledge(pp. 583–584). Ediciones Octaedro. https://doi.org/10.36006/90044-1

Abad Villaverde, B., & Álvarez Klar, D. (2025). Más allá del aula: Human AI como catalizador del desarrollo socioemocional y la toma de decisiones. En R. Roig-Vila, J. M. Antolí Martínez, C. Lorenzo Álvarez, V. Onrubia-Martínez, & A. Sánchez Ronco (Eds.), Actas / Proceedings / Actes: 4th International Congress: Education and Knowledge (pp. 585–586). Ediciones Octaedro. https://doi.org/10.36006/90044-1

2024

Abad Villaverde, B., Estanga Goñi, Á., Orbaiceta, R., & Onrubia Martínez, V. (2024). Modelos educativos innovadores: El caso del Colegio Jesuitinas Pamplona para el desarrollo socioemocional. In J. M. Antolí Martínez, S. Mengual-Andrés, A. López-Padrón, C. Lorenzo Álvarez, & V. Onrubia-Martínez (Eds.), Actas / Proceedings / Actes: 3rd International Congress: Education and Knowledge(pp. 605–606). Ediciones Octaedro. https://doi.org/10.36006/90037-1

Abad-Villaverde, B., Estrada Lozano, I., Sánchez Piquero, J., & Suárez Malagón, R. (2024). Evaluación y orientación de competencias socioemocionales aplicando inteligencia artificial: Un enfoque innovador para el desarrollo de la empleabilidad en la formación profesional. In M. J. Cardoso Moreno (Coord.), Nuevas perspectivas y retos en la sociedad actual. Acercando el concepto GRIT a la sociedad: Libro de resúmenes del I Congreso Internacional para el Desarrollo de Competencias Socioemocionales. Egregius Editorial.

BIBLIOGRAPHIC REFERENCES

Conference proceedings

Abad Villaverde, B., Benito Simón-Ricart, I., & Goñi Alegre, B. (2024). Inteligencia artificial aplicada a la evaluación de competencias socioemocionales vinculadas al emprendimiento. In M. Peris-Ortiz & F. Castelló-Sirvent (Coords.), Impacto de la inteligencia artificial en las empresas de la economía del conocimiento: Libro de actas del I Congreso Internacional en Inteligencia Artificial, Innovación, Economía y Empresa (pp. 53–54). Editorial Egregius.

Abad-Villaverde, B., Tuñas, J., & Díaz de Terán, M. C. (2024). Evaluación de sesgos de autopercepción asociados al emprendimiento. In G. Merma-Molina (Coord.), D. Gavilán-Martín, M. Urrea-Solano, S. Baena-Morales, & J.-F. Álvarez-Herrero (Eds.), Libro de Actas del I Congreso Internacional sobre Innovación, Didáctica y Educación para la Sostenibilidad (CIIDES-2024)(p. 144). Universidad de Alicante.

2023

Abad Villaverde, B., Beunza Mijimolle, M., Martínez Villar, M., & Luis García, E. O. (2023). Inteligencia artificial aplicada a la evaluación y orientación de competencias socioemocionales: Un enfoque innovador para el desarrollo académico, profesional y vital de estudiantes. In J. M. Antolí Martínez, J. V. Garcia Sebastià, V. Martines, & C. Martínez-Martínez (Eds.), Libro de Actas / Proceedings / Llibre d'actes: 2nd International Congress: Humanities and Knowledge (pp. 217–218). Ediciones Octaedro. https://doi.org/10.36006/90027-1

BIBLIOGRAPHIC REFERENCES

Scientific posters.

Abad-Villaverde, B., Tuñas, J. M., Martín Carrasco, M., Muñoz, P., Domínguez, A., Lanas, R., Lecumberri, A., González-Pinto, A., & Farré, F. (2026, September). Latent structure and socio-emotional assessment based on artificial intelligence in prevention contexts [Poster]. 17th EUSPR Conference and Members' Meeting, Dublin, Ireland.

Martín Carrasco, M., Muñoz, P., Domínguez Pachón, A. I., Goñi Sarries, A., Luna Lario, P., Martín, R., Lecumberri Martínez, A., Martínez Villar, M., Luis García, E. O., Grass Boada, H., Tuñas, J. A., & Abad Villaverde, B. (2024, October). Validación de un modelo de inteligencia artificial para evaluar la personalidad en personas con trastorno mental común a partir de texto personal redactado en lenguaje natural [Poster]. XXVII Congreso Nacional de Psiquiatría, Donostia-San Sebastián, Spain.

Other conferences and presentations.

Abad-Villaverde, B. (2025, 24 January). Casos de éxito: HumanAI, una solución innovadora para evaluar competencias socioemocionales [Conference presentation]. I Jornada de la IA en las Organizaciones: Desafíos y Riesgos, Colegio Oficial de Psicología del Principado de Asturias, Spain.

Bibliographic references

- Allen, M. S., Greenlees, I., & Jones, M. (2011). Personality in sport: A comprehensive review. International Review of Sport and Exercise Psychology, 4(1), 184-208.
- Barrick, M. R., & Mount, M. K. (1993). Autonomy as a moderator of the relationships between the Big Five personality dimensions and job performance. Journal of Applied Psychology, 78(1), 111–118. https://doi.org/10.1037/0021-9010.78.1.111
- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. Personnel Psychology, 44(1), 1-26.
- Bono, J. E., & Judge, T. A. (2004). Personality and transformational and transactional leadership: A meta-analysis. Journal of Applied Psychology, 89(5), 901–910. https://doi.org/10.1037/0021-9010.89.5.901
- Chernyshenko, O., M. Kankaraš, & F. Drasgow (2018), "Social and emotional skills for student success and well-being: Conceptual framework for the OECD study on social and emotional skills", OECD Education Working Papers, No. 173, OECD Publishing, París, https://doi.org/10.1787/db1d8e59-en.
- Chopik, W. J., & Kitayama, S. (2017). Personality change across the life span: Insights from a cross-cultural, longitudinal study. Journal of Personality, 85(3), 526-540. https://doi.org/10.1111/jopy.12332
- Comín Martínez, M. (2020). OCEAN - The BIG FIVE model. Retrieved from: https://www.linkedin.com/pulse/ocean-big-five-model-mar-com%C3%ADn-mart%C3%ADnez/
- Costa, P. T., Jr., & McCrae, R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO Personality Inventory. Journal of Personality and Social Psychology, 54(5), 853-863. doi:10.1037/0022-3514.54.5.853
- Costa, P. T., McCrae, R. R., & Löckenhoff, C. E. (2019). Personality across the life span. Annual Review of Psychology, 70, 423-448. https://doi.org/10.1146/annurev-psych-010418-103244
- Deal, R. A., Halverson, J., Baker, C. F.,, ... & Barchard, K. A. (2012). Measurement of the domain-and facet-level traits of the Five-Factor Model. In The Oxford Handbook of the Five Factor Model (pp. 47-79). Oxford University Press.

Bibliographic references

- Dilli, S., Westerhuis, G., & Rezaei, S. (2020). Entrepreneurial boldness and excessive risk-taking: The role of antecedents of boldness in risk-taking behavior. Journal of Business Venturing, 35(2), 105919.

- Duckworth, A. L., & Yeager, D. S. (2015). Measurement matters: Assessing personal qualities other than cognitive ability for educational purposes. Educational Researcher, 44(4), 237-251.

- García, M. A., & Martinez, R. J. (2018). Exploring Antecedent Influence on Personality Traits: A Cross-Cultural Approach. International Journal of Psychology, 53(2), 120-135. doi:10.1080/00207594.2017.1345030

- Gignac, G. E., & Zajenkowski, M. (2020). The self-deceptive enhancement bias: What it is and what it is not. Personality and Individual Differences, 154, 109688. https://doi.org/10.1016/j.paid.2019.109688

- González, J. C. A. (2016). Personalidad y estilos de toma de decisiones en la práctica deportiva. Revista Iberoamericana de Psicología del Ejercicio y el Deporte, 11(2), 201-214.

- Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological characteristics and their development in Olympic champions. Journal of Applied Sport Psychology, 14(3), 172-204.

- Gutman, L. M., & Schoon, I. (2013). The impact of non-cognitive skills on outcomes for young people. A literature review.

- Hartmann, W., & Gehlert, T. (1994). The validity of the DISC Personality Profile System. Journal of Business and Psychology, 8(4), 417-428.

- Heckman, J. J., & Kautz, T. (2012). Hard evidence on soft skills. Labour economics, 19(4), 451-464.

- Hogan, J., & Holland, B. (2003). Using theory to evaluate personality and job-performance relations: A socioanalytic perspective. Journal of Applied Psychology, 88(1), 100–112. https://doi.org/10.1037/0021-9010.88.1.100

- Jayaratne, M. & Jayatilleke, B (2020). Predicting Personality UsingJayaratne, M. & Jayatilleke, B (2020). Predicting Personality Using Answers to Open-Ended Interview Questions. IEEE Access (8). DOI: 10.1109/ACCESS.2020.3004002

Bibliographic references

- John, O. & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), Handbook of personality: Theory and research (pp. 102-138). New York: Guilford.

- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. Journal of Applied Psychology, 87(4), 765–780. https://doi.org/10.1037/0021-9010.87.4.765

- Kautz, T., Heckman, J. J., Diris, R., Ter Weel, B., & Borghans, L. (2014). Fostering and measuring skills: Improving cognitive and non-cognitive skills to promote lifetime success.

- Kyllonen, P. (2012). Measurement of 21st century skills within the common core state standards. In Invitational Research Symposium on Technology Enhanced Assessments (7-8). Retrieved from: https://www.ets.org/Media/Research/pdf/session5-kyllonen-paper-tea2012.pdf.

- Li, Y., Huang, J., & Tsui, A. S. (2009). Entrepreneurial Orientation and Firm Performance: The Mediating Role of Social Capital. Management and Organization Review, 5(2), 191-213.

- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. Journal of Applied Psychology, 87(4), 765–780. https://doi.org/10.1037/0021-9010.87.4.765

- Liu, X., & White, S. (2001). Entrepreneurial Orientation and Network Ties: Innovative Performance of SMEs in an Emerging-Economy Manufacturing Cluster. Strategic Management Journal, 22(12), 1247-1263.

- McCrae, R. R., & Costa, P. T., Jr. (2003). Personality in adulthood: A Five-Factor Theory perspective (2nd ed.). The Guilford Press.

- McCrae, R. R., & John, O. P. (1992). An Introduction to the the Five Factor Model and his applications. Journal of Personality, 60, 162-215.

Bibliographic references

- Miao, C., & Wang, X. (2019). Big Five Personality Traits and Entrepreneurial Motivation: Moderating Effects of Entrepreneurial Self-Efficacy. Frontiers in Psychology, 10, 1998.

- Murnane, R. J., & Levy, F. (1996). Teaching the New Basic Skills. Principles for Educating Children To Thrive in a Changing Economy. Free Press, 1230 Avenue of the Americas, New York, NY 10020.

- Strobel, M., Tumasjan, A., Spörrle, M., & Welpe, I. M. (2019). Entrepreneurial passion and personality: The case of academic entrepreneurship. Journal of Vocational Behavior, 112, 1-15. https://doi.org/10.1016/j.jvb.2019.01.001

- OECD (2023). Available at: UPDATED Social and Emotional Skills - Well-being, connectedness and success.pdf (website).pdf (oecd.org)

- Olokundun, M. A., Moses, C. L., Iyiola, O. O., Peter, F., Ogbari, M. E., Ibidunni, A. S., & Salau, O. P. (2018). The Big Five Personality Traits, Entrepreneurial Intentions and Self-Efficacy: Empirical Evidence from Nigeria. Journal of Entrepreneurship in Emerging Economies, 10(1), 116-138.

- Ozer, D. J., & Benet-Martínez, V. (2006). Personality and the prediction of consequential outcomes. Annual Review of Psychology, 57, 401-421. doi:10.1146/annurev.psych.57.102904.190127.

- Susing, I., & Cavanagh, M. J. (2013). At the intersection of performance: Personality and adult development in coaching. International Coaching Psychology Review, 8(2), 58-69.

- Tackett, J. L., Slobodskaya, H. R., Mar, R. A., Deal, J., Halverson, C. F., Baker, S. R., & Barchard, K. A. (2012). Measurement of the domain- and facet-level traits of the Five-Factor Model. In T. A. Widiger (Ed.), The Oxford handbook of the Five Factor Model (pp. 47-79). Oxford University Press.

- Trull, T. J., Widiger, T. A., & Burr, R. (2001). A structured interview for the assessment of the Five-Factor Model of personality: Facet-level relations to the Axis II personality disorders. Journal of Personality, 69(2), 175-198. doi:10.1111/1467-6494.00138

- Vealey, R. S. (2007). Confidence and sport performance. In G. Tenenbaum & R. C. Eklund (Eds.), Handbook of sport psychology (3rd ed., pp. 527-550). John Wiley & Sons.

Bibliographic references

- Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. Psychological Bulletin, 132(1), 1–25. https://doi.org/10.1037/0033-2909.132.1.1

- Rodríguez-Bravo, A. E., De-Juanas, Á., & García-Castilla, F. J. (2020). Effect of physical-sports leisure activities on young people's psychological wellbeing. Frontiers in Psychology, 11, 543951.

- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55(1), 68-78.

- Sanz, J.; Silva, F. & Avia, M. (1999). La evaluación de la personalidad desde el modelo de los "Cinco Grandes": El Inventario de Cinco-Factores NEO (NEO-FFI) de Costa y McCrae. En F. Silva (Ed.), Avances en Evaluación Psicológica (pp. 171-234). Valencia: Promolibro.

- Schmidt, F. L., Hunter, J. E., & Outerbridge, A. N. (1986). Impact of job experience and ability on job knowledge, work sample performance, and supervisory ratings of job performance. Journal of Applied Psychology, 71(3), 432-439.

- Schwaba, T., & Bleidorn, W. (2017). Individual differences in personality change across the adult life span. Journal of Personality, 85(3), 515-525. https://doi.org/10.1111/jopy.12327

- Smith, A. B., & Johnson, C. D. (2015). The role of antecedent factors in personality assessment: A longitudinal study. Journal of Personality Research, 42(3), 267-283. doi:10.1080/09500340.2014.987654

- Soto, C. J., John, O. P., Gosling, S. D., & Potter, J. (2011). Age differences in personality traits from 10 to 65: Big Five domains and facets in a large cross-sectional sample. Journal of personality and social psychology, 100(2), 330–348. https://doi.org/10.1037/a0021717

Bibliographic references

- Wu, S., Wu, L., Li, H., & Li, Z. (2019). A study on the entrepreneurial personality traits as predictors of entrepreneurial intention. Frontiers in Psychology, 10, 2709.

- Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. Journal of Management, 36(2), 381-404.

- Ziegler, M., MacCann, C., & Roberts, R. D. (2012). New perspectives on faking in personality assessment. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195387476.001.0001