

# INTELLECTUAL HUMILITY – A MORAL CONSTRUCT, AN INTELLECTUAL VIRTUE

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**Abstract:** *The present literature review brings together conceptualizations and study results obtained from extensive work that has been done on the virtue of Intellectual Humility (IH) for the past 9 years. While philosophers don't settle yet to a single point of view on intellectual humility, psychologists take a pragmatic stance on the construct and evaluate possible implications IH can have on personal, social, and professional levels. The term is being extended to organizations, teams and organizational culture and studied in the intricate relationships established in the corporate culture. Studies in leadership also provide an insight of how organizations can benefit from the vision and culture a humble leader promotes.*

**Key words:** *Intellectual humility, intellectual arrogance, intellectual servility, team humility, collective humility.*

## 1. Introduction

In a rapidly changing globalized world humans must effectively adapt to an interconnected society while maintaining their uniqueness and forming true beliefs. The need for collaboration is requested more than ever if we are to grow into a global community where sustainability should be our common concern. But what do humans need in order to achieve this goal? Are we supposed to embrace our differences just without considering our deep and meaningful beliefs? People around the world travel, mingle, relocate and that brings us in a position where our dearest and most meaningful traditions and beliefs could be at stake. This concern wasn't so fraught when travelling to distant areas of the world wasn't as accessible as it is today, when working with people abroad meant dealing with few persons in order to buy or sell goods. Now we produce the goods abroad or we offer services that inquire a close professional relationship with colleagues from totally different cultural backgrounds. The amount of information overwhelms individuals and gets them in the position of feeling small and insignificant. But we only need to find a way of sorting things out and selecting the useful and correct data, constantly searching for the truth; the rest, literally, stands at the touch of our fingertips. Can we search within ourselves the antidote to the extremes

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and can we find the equilibrium for a healthy personal development and a global sustainable growth?

The past two decades academics have conceptualized and theorized an intellectual virtue that is derived from the broader term of humility. It is called Intellectual Humility (IH) and experts in various domains starting with virtue epistemology or theology, and ending with economics or medical care, study its relationship with outcomes relevant to their field of work.

In what follows, the present article will explore IH from various perspectives conducting a literature review in order to clarify what different works added to the concept in the last decade. The reviewed articles were selected using three main criteria: (1) the time of publication was no older than 10 years back because the last decade was very productive and covered and added to what was before articulated on the topic; (2) they were referring in a direct manner to intellectual humility or related constructs like leader humility, team humility, organizational humility, and the direct implications of these constructs; (3) they originate from psychological, philosophical, education related and organizational journals. There was no limitation in what concerned the field of involvement explored by the articles, the known few negative implications that the constructs may exhibit were addressed also. The articles were selected mainly from the traditional Scopus and Springer scholarly databases and, following references, from Google Scholar, and were subject to a qualitative content analysis, focusing on how IH was conceptualized, how it was measured and what aspects and correlations were established between IH and characteristics and behaviours manifested by the samples studied. The scope was to provide a general and comprehensive view of the work done in the psychological and organizational fields. The mention and analysis of the works in the field of philosophy and virtue epistemology have the meaning of understanding and clarifying the approaches and conceptualizations of the term.

## **2. Personality trait vs. intellectual virtue**

In the past two decades scholars have been interested in conceptualizing and finding the core components of IH, alongside with documenting character virtues like: curiosity, open-mindedness, intellectual honesty, intellectual courage and other intellectual character virtues.

Leary (2018) includes IH in the family of psychological constructs alongside with: open or closed-mindedness, need for cognitive closure, belief superiority, attitude correctness, and the search of a religious orientation. The scholarly interest in this new construct comes from the simple reason 'they [intellectual character virtues] are partly constitutive of what it is to be a good person or to flourish as a human being' (Baehr, 2016). It seems it would be useful for individuals and for the society itself for its' citizens to be in possession of such traits.

Studying IH as a personality trait raises the question whether IH has or not genetic underpinnings (Leary, 2018). It has been found IH correlates moderately with the personality trait of openness (Krumrei-Mancuso & Rouse, 2016) 'which has a sizable

heritability' (Leary, 2018, p.12) and that cognitive flexibility and intelligence are predictors of IH (Zmigrod et al., 2019). There are many psychological characteristics that are influenced by genetics but the tendency of individuals of being either high or low in IH does not necessarily mean that the level of IH they manifest cannot change in various situation (Leary, 2018, p. 12).

Virtue epistemology places IH among intellectual virtues, when conceptualizing it by considering its epistemic dimension and noticing it has to do with 'believing in accordance with the evidence without claiming to know more (or less) than what the evidence merits' (Samuelson, et al., 2014). In their conceptualization of IH – the owning limitation account, Whitcomb, Battaly, Baehr and Howard-Snyder (2015) explain it is a virtue as long as the motivation that underlies the character trait it derives from, makes the possessor to be a good person. The limitation owning account of IH states that 'IH is an intellectual virtue just when one is appropriately attentive to, and owns, one's intellectual limitations because one is appropriately motivated to pursue epistemic goods, e.g. truth, knowledge, and understanding' (Whitcomb et al., 2015).

Church (2016) offers a solution to problems unaccounted for the above account by arguing that 'intellectual humility is the virtue of accurately tracking what one could non-culpably take to be the positive epistemic status of one's own beliefs'. His own account of IH, the doxastic account – pertaining to beliefs - comes as a solution to mitigate the worries that the other two previous considered philosophical accounts raise. The owning limitation account, described above, permits the individual to be intellectual humble and intellectual arrogant at the same time or intellectual humble and intellectual servile at the same time (Church, 2016).

While philosophers seem to agree on one subject concerning IH, that it is an intellectual virtue, they do not agree on a commonly accepted definition. There are philosophers that argue a common view it's impossible to reach since 'the ends they are meant to serve are too diverse' (Dunnington, 2017). Dunnington (2017) even states that trying to reach a consensus on what IH is, and making it accessible to the folk, serves a political goal materialized in the 'liberal democratic project of learning to live together despite deep disagreement' and that this might be the very end of the intellectual virtues as they were defined throughout the history.

### **3. Intellectual humility – conceptualization and measurement**

In the field of psychology one of the first struggles generated by research is the measurement of specific variables. Psychologists try to define and measure IH amongst common people as they infer a multitude of advantages that the intellectual humble individual will have and will use for living in a more tolerant and inclusive society. Still, there is a mixed view of what IH represents even from a psychological point of view and evidence to that is the personal conceptualization and measuring of IH of different scientists (e.g., Krumrei-Mancuso & Rouse, 2016; Meagher et al., 2015; Leary et al., 2017; Hoyle et al., 2016; Haggard et al., 2018; Porter & Schumann, 2018). Asking the common folk, trying to find the implicit theories or the common beliefs of what IH means, scientists sought 'to explore the dimensions of intellectual humility more

directly' (Samuelson et. al., 2014). The confusion generated in defining IH and the difficulty of being accepted by everyone is also generated by the inference of the related constructs in the proposed definitions (Leary, 2018). The difficulty of measure derives from the diverse definitions being articulated and thus, by the different measuring instruments elaborated to measure the distinct dimensions identified and explored.

Following the lead of elaborating scales and measure IH, we can distinguish from the literature many different scales that assess the IH levels, starting in 2015 when Meagher, Leman, Bias, Latendresse, and Rowatt (2015) wanted to compare and obtain a view on the validity of assessing the levels of IH by self-ratings compared to other-ratings of IH. Their study gives us important information on other-rating measurements of IH because they found out that 'other-ratings at minimal acquaintance do not appear to be reliable' (Meagher et al., 2015). It seems that evaluating traits by manifested behaviours can't be reliable for people who have a short interaction ('minimal acquaintance') with one another even if the activities are designed to highlight and manifest IH related constructs. The results and conclusions drawn were that 'for self-ratings of IH, the primary issue remains validity' and the explanation for that is either 'people high in IH are also truly competent, better leaders, and funnier' – a less probable and always applicable hypothesis – or 'high IH self-reports are driven in large part by socially desirable responding' (Meagher et al., 2015).

In 2016, Elisabeth Krumrei-Mancuso and Steven Rouse developed and validated the Comprehensive Intellectual Humility Scale (CIHS), a self-report measure of IH. They considered IH to be 'a non-threatening awareness of one's intellectual fallibility' (Krumrei-Mancuso & Rouse, 2016). The definition taken into consideration, as well as the implications derived from it, constituted the basis of elaborating and structuring the questionnaire, resulting in a 22-item, four-factor validated model. What is of importance for this analysis but, more so, for future research in assessing IH is that 'the data displayed sufficient variance and the incremental validity of the scale seem to indicate that individuals were able to provide information about their levels of IH without being inhibited by social desirability tendencies' (Krumrei-Mancuso & Rouse, 2016). Another step forward was made in positive psychology in order to assess a variable that seems to have great potential implications in psychology, philosophy and theology and so many other adjacent fields like sociology, pedagogy, economy, health, politics etc.

The CIHS was elaborated to obtain a measure of general IH, so scientists Hoyle, Davisson, Diebels, and Leary (2016) narrowed the search to a specific view held by the respondent. They define the construct they intend to measure, specific IH, as follows: 'the recognition that a particular personal view may be fallible, accompanied by an appropriate attentiveness to limitations in the evidentiary basis of that view and to one's own limitations in obtaining and evaluating information relevant to it' (Hoyle et al., 2016). The measure proposed here refines the conceptualisation of IH and states that a person may be intellectually humble in relation with specific views while other beliefs are held with less humility; the degree to which some beliefs are held compared to other beliefs can differ (Hoyle et al., 2016). The Specific Intellectual Humility Scale consists of 9 items that can be adjusted by inserting specific terms when formulating the items; specific terms referring to the belief or topic on which the specific IH is evaluated.

Another Scale for measuring general IH was developed and validated (Leary et. al, 2017) although CIHS already existed and was made public because of the different view on what IH is. Leary and colleagues (2017) argued that the 4 subscales of the CIHS evaluate characteristics that need not to be evaluated in order to attain the information needed to determine the general IH level of the respondent. They argue that this unnecessary data gathered with the CIHS 'sacrifices fidelity of band width' (Ozer & Reise, 1994, cited by Leary et al., 2017) and develop a new six-item self-report IH scale. The definition on which they build their items for assessing relevant data, conceptualizes IH as 'recognizing that a particular personal belief may be fallible, accompanied by an appropriate attentiveness to limitations in the evidentiary basis of that belief and to one's own limitations in obtaining and evaluating relevant information' (Leary et al., 2017).

Arguing that the previous IH measurement scales were designed to 'focus on a binary interpretation of IH and intellectual arrogance (IA), where IH is primarily defined as a lack of IA' (Haggard et al., 2018), the 12 item Limitations-Owning IH scale was developed. This time it was designed to operationalize the owning one's limitation feature of IH by placing it on a spectrum in between intellectual servility (IS) and IA. What this scale intends to address is the three important factors of IH: love for learning, owning intellectual limitations and appropriate discomfort with limitations.

Only one year later another conceptualization of IH, added to the definition the others-oriented dimension of IH and openness to the opposing view as accepting the limits of one's knowledge and appreciating the strengths of the knowledge of others (Porter & Schumann, 2018). The hypothesis in this situation is 'that intellectually humble [individuals] might feel less motivated to defend their correctness and intellectual superiority because they are more comfortable acknowledging their intellectual fallibility' (Porter & Schumann, 2018). The scientists investigated IH and the openness to opposing views, for evaluating the IH level they developed a 9 item self-report scale.

#### **4. Constitutive features of IH**

Scholars in the field of psychology make their own pragmatical intervention in the IH realm and have analysed the impact that the intellectual virtue of humility has on the beliefs, thoughts, actions of the individuals and interactions with others.

The first to have tried to conceptualize IH though where Roberts & Wood (2003, cited by Haggard et. al, 2018) and their view on IH was determined by the opposition to the intellectual vice of arrogance accompanied by a low concern for intellectual status (Roberts & Wood, 2007 cited by Haggard et al., 2018). There are arguments against this conceptualization (Whitcomb et al., 2015; Church, 2016) because the most important and obvious flaw of this account is the fact that the lack of intellectual arrogance (IA), that IH implies, doesn't exclude the possibility that an intellectual humble person could be intellectual servile (IS) at the same time.

Some of the research done on IH starts on the conceptualization of the virtue from the limitation-owning perspective (Whitcomb et al., 2015). The theory behind the limitation-owning account of IH is based on the willingness of the individual to recognize one's intellectual limitations, to feel an appropriate discomfort regarding those limitations

(Krumrei-Mancuso & Rouse, 2016) and, building on that, to be inclined to continuously search for overcoming them through love of learning (Haggard, et al., 2018). But the search for knowledge, other scholars argued, is driven by constantly evaluating relevant information, and openness to other people views (Leary, et al., 2017). There are very useful implications deriving from this conceptualisation, one of which is that developing IH of individuals may in fact provide 'a fruitful basis on which to expand research into interventions that promote inoculation against misinformation and ideological polarization' (Zmigrod et al., 2019). It seems that, on a cognitive level, cultivating the cognitive factors that shape IH may be a way of gaining advantages that derive from 'building more evidence-based, tolerant, and effective discussions about the contested issues that divide and polarize our societies today' (Zmigrod et al., 2019).

Another dimension of IH academics manifested interest in, the interpersonal dimension, has generated a great deal of research. Some researchers (Porter & Schumann, 2018) have conducted experiments that show how IH can be developed by fostering a growth mindset of intelligence – the belief that intelligence can be developed in time, belief demonstrated by taking a non-defensive stance against evidence of one's own intellectual flaws (Porter & Schumann, 2018). The same study has also found that a higher level of IH was associated with an openness to the opposing view and also 'IH undergirds a persistent motivation to learn' (Porter & Schumann, 2018). That means that if you are not offended or scared by one's opposing view concerning the subject in discussion, because it might prove that you are less intelligent than your opponent, you might be sincerely more interested in what your interlocutor has to say, in evaluating new information about the subject, and becoming more familiar with it.

The idea that 'intellectual humility is best thought of as a virtuous mean between intellectual arrogance and intellectual servility' (Church, 2016) positions IH in the middle of an axis which starts and ends with IA and IS, this is the most intuitive approach because when you come to think about a virtue you can't have it thrown in the same bucket with a vice, in our case no matter which one: IA or IS. But this can raise another question that is addressed and expelled by the conceptualization that Krumrei-Mancuso and Rouse (2016) brought forward, concerning that 'IH involves being able to embrace one's beliefs with confidence while being open to alternative evidence'. That means that the specific outcome of IH, of being open to others' ideas doesn't mean that the point of view of the person changes as soon as another idea is brought up, but more so, that different ideas are thoroughly evaluated. This feature is highlighted in the study conducted by Leary and colleagues (2017) that shows how different levels of IH can be, along with myriad other variables, a moderator in how people process information. People with higher levels of IH 'were more attentive to the evidentiary basis of their beliefs than were those low in intellectual humility' (Leary et al., 2017). According to Porter and Schumann (2018) intellectually humble people analyse more carefully new information that is brought into light, and more so, they 'judge people less on the basis of their religious opinions' (Leary et al., 2017), confirmed before by the finding that associates IH with greater tolerance to others (Krumrei-Mancuso & Rouse, 2016). Also, religious fundamentalism is associated with less IH (Krumrei-Mancuso, 2018). The main reason why researchers decided to study IH levels and outcomes related to religion and

spirituality is the fact that, in these domains, individuals form strong, meaningful and important personal beliefs. From a simplified way of seeing it, 'IH is a form of humility related to the way people apply knowledge' (Krumrei-Mancuso, 2018).

But one of the most interesting facets of IH remains the intrapersonal feature of gaining and revising knowledge. The interest that individuals show for searching to know more about the opposing views, when confronted with opposing ideas, is a characteristic of people who score high in IH (Porter & Schumann, 2018). Although IH is 'a virtue relevant to gaining new knowledge' (Krumrei-Mancuso et al., 2020) the research conducted for finding links between IH and acquiring knowledge, 'did not establish directionality between variables' and suggested for future research to be taken in examining relation between IH and direct assessments of learning having thinking styles, dispositions, and motivations as mediators (Krumrei-Mancuso et al., 2020). Interest manifested by the educational field on intellectual virtues brings forward arguments for making intellectual character growth an educational aim. It is brought into light that it can 'add a humanizing and intrinsically rewarding dimension to the activities of teaching and learning', increase the morality of individuals' actions by increasing the quality of the beliefs – through thoroughly searching for the truth - that guide one's actions, increase the chances of a flourishing liberal democracy and give a 'prudent value' to the 'soft skills' required of the individual in the current economy (Baehr, 2016). The interest in educating for an intellectually virtuous character in students has generated works from scholars in order to foster and develop intellectual virtues in schools, one interesting idea is the one put forward by Lani Watson (2018) and which suggests that teaching in students the skill of good questioning will develop a bunch of intellectual virtues including, alongside attentiveness, intellectual autonomy, intellectual courage, inquisitiveness, Intellectual Humility. 'Educating for the intellectual skill of good questioning, thereby, provides students with the opportunity to exhibit, practice, and refine the virtue of intellectual humility' (Watson, 2018). The idea that the levels of intellectual humility manifested by people can be influenced by education is sustained by Leary (2018) although he also indicates some other mediating factors that can influence how humble we are: parenting, culture, environment (whether we are under threat or not), ideological moderation. Though it hasn't been proved by research, the effect of becoming an expert in a certain domain could affect the level of one's IH negatively (Leary, 2018). This is one of the few negative related behaviours associated with the virtue of IH.

Another possible negative implication of IH is that of giving the impression that the intellectual humble person is spineless, weak, undetermined, overly conciliatory (Leary, 2018, p.16). This is especially important when it is expected of a person to take an immediate decision, for example a leader in a shortage, or any crisis that his team would expect him to overcome and prevail through good decision making. It can happen in teams with low power distance value, where leader humility was negatively related to team psychological safety (Hu et al., 2018). This may be a consequence of the culture in which the work relations take place, because 'leader humility is a non-traditional leadership approach with benefits that could be mitigated by a culture high in power distance, masculinity, or uncertainty avoidance' (Rego et al., 2019). Although the study

shows that the positive effects of leader humility on followers are relatively the same across 3 different cultures, we still need to wonder whether we can 'establish the generalizability of leader humility influence across cultures' (Rego et al., 2019). This impression of weakness of a leader comes from the fact that humble leaders 'admit mistakes, shine the spotlight on others' strengths, and seek to be taught by others, they give away power, producing a complementary "empowered" followership' (Rego et al., 2019). Although humility might be an unthinkable personally trait related to CEO effectiveness it is 'associated with top management teams characteristics, strategic orientation and firm performance' (Ou, Waldman, & Peterson, 2018).

'Humility in leadership is a topic that becomes more relevant as markets continue to globalize and firms grow more complex and diverse' (Owens & Hekman, 2012). Owens and Heckman (2012) highlight 3 behaviours that co-occur in a humble leader: acknowledging mistakes and limitations, spotlighting follower strengths and modelling teachability. Those humble behaviours of leaders determine followers to emulate their humble behaviours and 'are an important mechanism for influencing team performance' (Owens & Hekman, 2016) and also team creativity, mediated by the team information sharing variable in teams with a low power distance value (Hu et al., 2018). The effect of the humble leader is positive also due to the type of teams they foster and lead, and the type of effects they generate, it seems that 'humble leaders foster learning oriented teams and engaged employees as well as job satisfaction and employee retention' (Owens, Johnson, & Mitchell, 2013). At the same time humble CEOs 'establish ambidextrous and profitable firms' (Ou, Waldman, & Peterson, 2018). Leaders are responsible for building and promoting the culture in the organizations they lead, and it has been theorised and documented that a humble organizational culture is a 'key to extraordinary success in the market place' (Maldonado, Vera, & Ramos, 2018). It seems that we can talk about team humility, arguably the same thing as collective humility (Owens & Hekman, 2016), as a characteristic of the teams influenced by humble leaders (Ye et al., 2020), that fosters a work environment that promotes exchange, sharing (Hu et al., 2018) and trust - by being opened and admitting one's own limitations. The good news researchers bring is that humility in general (Porter & Schumann, 2018), humility of the leader (Owens & Hekman, 2016) in particular and, as a result, the collective humility or team humility (Ye et al., 2020), through humble organizational culture (Maldonado, Vera, & Ramos, 2018), can and should be developed by practicing them – the different forms of humility (Owens & Hekman, 2016) and by participating in systematic training programs on humility (Ou, Waldman, & Peterson, 2018).

#### **4. Conclusions**

There still is an effervescence in what IH is, in the different fields of research, for the many scholars that struggled to cast light on the construct. There might be also negative outcomes that, at this point, we can't foresee. But the many conceptualizations of IH, the abundance of definitions and the struggle for developing a most efficient scale of measure are signs that scholars are interested in finding the many ways IH can influence the future and thriving of humanity. The fact that IH is influenced by, but also

contributes, to the personal differences between individuals is a sign that we can work on how humble we are. The interest shown in pedagogy for cultivating intellectual character virtues in schools in order to grow adults in possession of these admirable personal traits is in its' beginnings and gives us hope for a better future. Thus, more research on how intellectual character virtues can be fostered and grown in an educational context with regard to the cultural, environmental and ethnic background of the students, would shed some more light on our understanding of how IH can be fostered and promoted in schools. *Are we teaching for intellectual character growth already, since there is a level of IH, high or low, manifested by all of us?* is another question to be addressed. What makes IH so desirable is that it seems to settle for many of the worries raised by the evolving and rapidly changing world. The world is changing and adapting to change may be the solution we all need to agree on with humility. The answers to many of the questions are yet to be discovered and there are still many areas where agreeing seems to be far from happening but at least there seems to be a convergent view that describes 'intellectual humility as an important trait for success' (Haggard et al., 2018).

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