Indonesian Journal of Educational Development (IJED)

Indonesian Journal of Educational Development (IJED)
Volume 5, Issue 1, 2024, pp. 30-41
ISSN 2722-1059 (Online); ISSN 2722-3671 (Print)
DOI: https://doi.org/10.59672/ijed.v5i1.3596

SELF-ACTUALISATION AND COMPUTER SELF-EFFICACY AMONG THE PROFESSIONAL COURSES ACADEMICIANS: A CORRELATIONAL STUDY

Hureen Wasifa Siddiqui[*)1], **G. Mary Sunanda**[2]
[1] Dr. B. R. Ambedkar Open University, Hyderabad, India; hureenwasifasiddiqui@gmail.com
[2] Dr. B. R. Ambedkar Open University, Hyderabad, India; mary_sunanda2001@yahoo.com
[*)]Corresponding author: Hureen Wasifa Siddiqui; E-mail addresses: hureenwasifasiddiqui@gmail.com

ARTICLE INFO

Article history:
Received February 02, 2024
Revised March 11, 2024
Accepted April 12, 2024
Available online May 31 2024

Keywords: academics, computer self-efficacy, Maslow needs hierarchy, professional courses academicians, self-actualisation

Abstract. The spreading use of technology will have repercussions on individuals' Self-understanding and their belief in themselves concerning technology. Psychologists have studied these two major phenomena under the title Self-actualisation and Computer Self-efficacy. Multiple papers have been published on Self-actualisation and Computer Self-efficacy but minimum research has been explored concerning the association between Self-actualisation and Computer Self-efficacy. This paper is a maiden effort to study the association of Self-actualisation and Computer Self-efficacy among academicians of professional courses. An online and offline survey was carried out where the Self-actualisation Scale prepared by Kaufman (2018) and the Computer Self Efficacy Questionnaire curated by Teo & Ling Koh (2010) was administered to the participants. The data was analysed using mean, standard deviation, standard error, and Pearson's Product Moment Correlation. The results supported the preposition of a previous study, which suggested a relationship between technical competency and self-actualisation by placing technical competency under D-needs and Self-actualisation under B-needs of Maslow's hierarchy of needs. Further exploration of the outcome was done concerning academicians followed by educational implications.

INTRODUCTION

What is the mysterious entity that stays with us yet is scarcely discerned? The entity that gives us the sense of being and yet is challenging to embrace entirely. For centuries, various philosophers, and psychologists have toiled to uncover the reality of this mysterious entity "I", which has been technically recorded as self in archives (Baumeister, 1999). For instance, Hume, a Scottish empiricist philosopher, defined the self as a bundle of perceptions (Smythe, 2016). Likewise, Kant, a German philosopher, conceptualised the self as something real, and yet is neither appearance nor thing in itself, but rather has some third status (Melnick, 2008) and Nietzsche, a German philosopher, perceived the self as an illusion and fiction (Gardner, 2009). Similarly, certain eminent psychologists traversed the path of self to elucidate its connotation. For

example, Jung, a Swiss psychologist, internalised the self as the core of personality (Alcaro et al., 2017), Allport, an American psychologist, contented proprium aka self as a person's internalized, unified sense of self, which influences how personality develops (Allport & Rogers, 1955), an American psychologist, interpreted self as one's characteristics, affections, moods, relationships and values (Dutra, 2016). This reflects the prevailing dissonance in the perceptions of the Self between the scholars over the different eras and across the varied fields. The comprehension of the reality of the Self is challenging and so is determining its actuality, which requires an abundance of effort, ponderance, and expertise.

Maslow, an American humanistic psychologist, possessing these qualities, stepped ahead and strived to unchain one of the facets of self - "Self-actualisation" (SA). He foremost deliberated on self-actualisation in his well-acclaimed paper The Theory of Human Motivation (Maslow, 1943). In this paper, Maslow robustly put forth his idea on how human needs motivate their behaviour. He well illustrated how individuals, subsequently satisfying their primary needs, thrust the horizon of their sublime potential - Self-actualisation. Maslow perceived Self-actualisation as an impetus that accelerates mankind towards a higher level of being. He proposed a hierarchy of needs to explain his thoughts on motivation and how the needs simultaneously motivate human behaviour (Maslow, 1954). He substantially divided the spectrum of needs into two precincts: the deficiency needs and the growth needs. The lower area of the hierarchy broadly covers Physiological needs, Safety needs, Love & belongingness needs, and Esteem needs, which unfold deficiency needs. The higher range of the hierarchy significantly deals with the Self-actualisation needs that support growth needs.

Maslow elucidated self-actualisation as the desire for self-fulfilment. He further illustrates that a musician must make music, an artist must paint, a poet must write, if he is to be ultimately at peace with himself. What a man can be, he must be. For Maslow, the self-actualisation need is the highest need where a man realises his full potential and strives to live up to it. This can, nevertheless, conveniently take place in an environment that facilitates Self-actualisation. Maslow specifically used the term "Eupsychian" to describe this phenomenon. He suggested Eupsychian is an environment that aids people's self-fulfilment and psychological health (Briskin, 2023). During his later years, Maslow extended his growth hierarchy of needs by further incorporating the cognitive, aesthetic, and transcendence aspects, which thoroughly supplemented his conception of self-actualisation. He also used expressions, such as peak experiences, plateau experiences, and meta-motivation to enhance the cognizance of self-actualisation (Maslow 1961; Naveen, 2010; Krippner, 1972). However, Maslow's inception of Self-actualisation can be discerned in the scripts of the ancient centuries (Daniels, 1982) as well.

For instance, Nicomachean Ethics, a 4th century BCE book on ethics by Aristotle, endeavours to search for an answer to an open question what is the highest of all goods achievable by action? (Aristotle, 1925; Ryff & Singer, 2008). After a great perusal, it assiduously identifies human good turns out to be activity of soul in accordance with virtue, and if there are more than one virtue, in accordance with the best and most complete'. Aristotle advocated a eudaimonic perspective about living a good life and being fully functioning (Asano et al., 2020) that closely resembles the present connotation of Maslow's Self-actualisation (Niemiec, 2014). Similarly, the footprints of

self-actualization can also be traced in the writings of Goldstein, a profound German neurologist-psychiatrist of the twentieth century. He ventilated about self-actualisation in his book The Organism (Goldstein, 1967), which stressed perusing organism in terms of the totality of its behaviour and interaction with its surrounding milieu (Goldstein, 1995). Goldstein supported the Gestalt idea of human psychology hence, deemed Self-actualisation as the tendency to actualize, as much as possible, individual capacities, its 'nature' in the world (Goldstein, 1939; Gopinath, 2020). He further adds this tendency to actualize its nature, to actualize itself, is the basic drive, the only drive by which the life of the organism is determined.

Goldstein recognised self-actualization as an inner force that drives people to achieve their maximum performance (Strombach et al., 2016). In fact, it is observed that the term self-actualisation was coined by Goldstein himself (Ikiugu, 2007). Besides Goldstein, the conception of self-actualisation is also uniquely witnessed in the scripts of the Austrian psychologist Adler. Adler proposed the phrase striving for superiority (Alba, 2017), which strikingly encapsulates the notion of Maslow's self-actualisation. Adler perceived seeking for superiority as a governing dynamic force (Ansbacher & Ansbacher, 1956), which is fundamental to human nature. His understanding of striving gradually developed hence he deployed terms, such as completion, mastery, perfection, and superiority to delineate how humans seek to move from the present situation, as observed and interpreted, to a better one, one that was superior to the present status (Manaster & Corsini, 1982; Watts, 2012). He opines that the endeavour for superiority is "*found in every individual and fills every individual… and is innate in the sense that it is a part of life…*" (Mozdzier, 1996). In these ways, the thoughts of scholars have greatly influenced Maslow's work on self-actualisation (Roweton, 1981; Whitehead, 2017; Ansbacher, 1990).

In addition to self-actualisation, science and technology have also greatly influenced human thoughts and actions. They have been conjoined to mankind since the dawn of human civilization and have rendered paths from the locale of exploring questions about nature to their usefulness (McClellan & Dorn, 2015). One of the tremendous inventions that science and technology have presented to humankind is the computer whose invention is prominently associated with Babbage (Swade, 2000; Suede, 2001) during the nineteenth century. Babbage communicated his thoughts on the computer in his paper "The Application of Machinery to the Computation of Astronomical and Mathematical Tables" (Babbage, 1824). Babbage's endeavour to create a computational machine had already commenced in 1821 when he realised the fallibility of human calculations and desired a reliable machine sighing "*I wish to God these calculations had been executed by steam*" (Swade, 2000).

Nevertheless, the relics of the computer can be captured in ancient Greek civilisation. This fact was noticed approximately 120 years ago when sponge divers discovered a shipwreck off the tiny Island Antikythera, Greece (BBC Reel, 2021). This discovery was popularly termed the Antikythera Mechanism, which is identified as a Greek-geared device that originated around the second century BC. It was specifically used to derive information about celestial bodies (Freeth et al., 2006). This conveys that science and technology have been intertwined with humankind since time immemorial and call for human expertise in using computers for the welfare of humanity but this connection between science and humanity dwindled over time (Levy, 2007). Snow, a British

scientist and novelist wrote an essay The Two Cultures in 1959 where he depicted science and humanities as two worlds that do not meet and had vanished into history. However, he later adds that it's the artists working in studios, labs, and garages out of pop culture's shadow who have been melding science and humanity in the most challenging, fascinating, and profound ways. Today, human beings are vastly acquainted with computers. The use of computers has tremendously increased and the ability to operate them is of great significance. Regardless of this, there are certain human beings who, for numerous reasons, doubt their computer aptitude and are hesitant to interact with computers (Hasan, 2003) resulting in developing computer phobia (Khasawneh, 2018); they are less experienced in using computers and hence, are not much confident in operating them (Loyd, 1984; Wilfong, 2006; Schumacher, 2000). Besides this, computer dexterity also largely varies from person to person.

Computer self-efficacy (CSE) is a tool that assists researchers in conveniently understanding these phenomena. The notion of working on the computer is well encapsulated in the idea of computer self-efficacy. CSE examines the ability of human beings to use computers. Compeau & Higgins, the pioneers of Computer Self-efficacy, defined CSE as an individual's perceptions about his or her ability to use a computer to perform a computing task successfully (Compeau & Higgins, 1995; Hasan, 2003). Marakas et al. further added CSE also affects his or her intentions toward future use of computers (Marakas et al., 1998). Karsten et al. opined CSE is an individual's perception of efficacy in performing specific computer-related tasks within the domain of general computing (Karsten et al., 2012; Loar, 2018). Howard considered CSE as an individual's feelings toward their capabilities in working with a desktop or laptop personal computer (Howard, 2014). Nevertheless, CSE is much broader than merely an ability assessment; it emits various dimensions, such as perceived ability, motivation, and adaptation aspects of men (Marakas et al., 2007). The praxis of CSE has also been spread across multiple domains, for instance, Computer Training and Skills, Technology Acceptance and Behavior Intention, Computer Use and Behavior, Computer Attitude, and Education Context (Marakas et al., 2022).

However, the roots of Computer Self-efficacy are deeply grounded in the Self-efficacy theory of the eminent Social Psychologist Bandura (Compeau & Higgins, 1995). Bandura first presented the idea of Self-efficacy in his Social Cognitive Theory in 1977 (Compeau & Higgins, 1995; Gallagher, 2011), which was in turn the result of his Social Learning Theory (Mobley et al., 2008). He believed Self-efficacy is the conviction that one can successfully execute the behavior required to produce the outcomes (Bandura, 1977; Brady, 2012). The credence of Self-efficacy is how people feel, think, motivate themselves and behave (Bandura, 1994). Self-efficacy signifies individuals and their perceptions about their personal capabilities - the key determinants of successful outcomes (Gallagher, 2012). This construct considerably favours a democratic ideal, which recommends that all individuals are competent and capable of being successful, provided they have the opportunities and self-efficacy necessary to pursue their goals (Gallagher, 2011). In simple words, self-efficacy essentially influences human behaviour (Compeau & Higgins, 1995) and when this connotation is applied to the phenomenon of Computers, it substantially denotes the influence of man's beliefs about his ability to successfully use computers and accomplish tasks on his behaviour.

The nuances of Self-actualization and Computer Self-efficacy are well observed in positive psychology, which lays its foundations in Humanistic Psychology (Froh, 2004). Positive psychology, which endeavours to comprehend how human beings prosper in the face of adversity, has been engrossed in studying the human self and its aspects, such as self-esteem, self-awareness, self-presentation, self-verification, self-schemas, self-handicapping, self-concept, self-monitoring (Baumeister, 1987), etc. all through the years. Similarly, it has also kept researchers constantly engaged in understanding two other constructs Self-actualization and Computer self-efficacy over time. This research is an endeavour to explore these two offshoots of positive psychology within the framework of academics as the effective classroom environment is dependent on the academicians' personalities, how well they actualise themselves (Henjum, 1983) and how constructively they use computers to widen their teaching-learning experiences, connecting students to real-world, mentoring them to become independent learners (Teo & Koh, 2010), etc. It seems from the literature review that SA and CSE have been exhaustively researched in different parts of the world but have not been scrutinised together specifically considering the academicians. It is this gap that this piece of work intends to bridge. Therefore, this study ventures to answer the question - Is there a significant relationship between Self-actualization and Computer Self-efficacy among the academicians of Hyderabad? Therefore, the objective of this research is to find out the relationship between Self-actualisation and Computer Self-efficacy among the academicians of Hyderabad consequently, the hypothesis of this research is there is a significant relationship between Self-actualisation and Computer Self-efficacy among the academicians of Hyderabad. The inferences of this research will immensely facilitate the educational community in comprehending the significance of SA and CSE in connection to academicians. The implications of this study will also aid them in enhancing their personality concerning the two constructs.

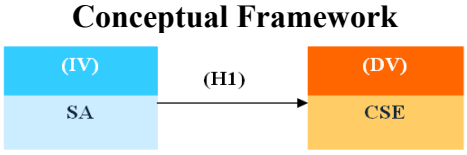

Image 1. Conceptual Framework: Self-actualisation and Computer Self-efficacy

This research postulates a significant association between Self-actualisation and Computer Self-efficacy among the academicians of Hyderabad. In this research work, the independent variable is SA and the dependent variable is CSE. Both concepts have been researched and explained by various Psychologists but the present work endeavours to unveil the construct SA from the perspective of Maslow and CSE from the viewpoint of Compeau & Higgins within the panel of academics. Currently, Kaufman, a humanistic Psychologist, is greatly engrossed in the contemporary understanding of Maslow's Self-actualisation. He has remarkably extended his grasp on SA and has well articulated it through his various writings. He has also prepared a tool based on Maslow's concept of SA. Presently, this tool will be used by the researcher to measure SA. The other construct of the study will be estimated with the help of a Computer Self-efficacy questionnaire by Teo & Ling Koh, which was curated by the authors in view of the changing technology and computer use.

METHOD

Population and Sample

The population of this study are the academicians of Hyderabad teaching in the various colleges of Education, Engineering, Business Administration, Law, and Pharmacy affiliated with different universities. However, the sample consists of 133 academicians teaching in the said colleges of Hyderabad.

Techniques

The present study is a survey research in which two tools have been administered to the participants without any time interval. The respondents answered the Characteristics of Self-actualization Scale and the Computer Self-efficacy questionnaire.

Tool 1

The Characteristics of Self-actualization Scale was prepared by Kaufman in 2018. It comprises ten dimensions, for instance, Continued freshness of appreciation, Acceptance, Authenticity, Equanimity, Purpose, etc (Kaufman, 2018). The scale contains thirty items, three items measuring each dimension. It is a five-point Likert scale ranging from Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. All the items are positively scored and the tool has high reliability and validity.

Tool 2

The Computer Self-efficacy questionnaire was curated by Teo & Ling Koh in 2010. The tool has three dimensions, which are Basic Computer Skills (BCS), Media Related Skills (MRS), and Web-Based Skills (WBS) (Teo & Ling Koh, 2010). It consists of twelve items where the initial five items gauge BCS, the six to nine items measure MRS, and the final three items estimate WBS. It is a seven dot Likert scale fluctuating from Strongly Agree, Agree, Somewhat Agree, Neither Agree nor Disagree to Somewhat Disagree, Disagree, and Strongly Disagree. The tool has no negative scoring and the psychometric analysis confirmed the fine consistency and validity of the questionnaire. However, certain items of this tool contain a list of software or websites as examples in the brackets, for instance, I am able to use website Editors (e.g. Microsoft FrontPage, and Macromedia Dreamweaver) to create and/or modify web pages, which was slightly modified as I am able to use website Editors (e.g. Macromedia Dreamweaver) to create and/or modify web pages to gel the item well with the example of the current technology. Similarly, the examples of the other items were also faintly modified to make them valid with the current technology.

Data Collection

Before data collection, the researcher met the respective authorities of the colleges and discussed the purpose of this study along with the questionnaires' details. After obtaining permission, the data was collected via online mode, Google Forms, as well as offline mode, hard copies of questionnaires, as per the convenience of the participants. The necessary instructions were given to the participants in advance. The academicians have voluntarily participated in the survey.

RESULTS AND DISCUSSION

The calculated mean, standard deviation, and standard error scores of SA are found to be less, $\bar{x} = 4.130$, $\sigma = 0.370$, and $\sigma M = 0.032$, compared to the estimated mean, standard deviation, and standard error scores of CSE, $\bar{x} = 5.422$, $\sigma = 1.033$, and $\sigma M =$

0.089, which indicate that the academicians scored better on average in CSE as the calculated CSE mean score of academicians is higher than the estimated SA mean score however, it can be said that though the academicians have scored high in CSE, the SA scores are comparatively more consistent than CSE scores as the calculated standard deviation score of SA is observed to be less dispersed from the mean score than the standard deviation score of CSE. This outcome is well authenticated as the obtained standard error score of SA is also observed to be less than the approximated standard error score of CSE, which signifies that the mean scores of SA are less spread out compared to the mean scores of CSE. The details of descriptive statistics can be observed in Figure 2.

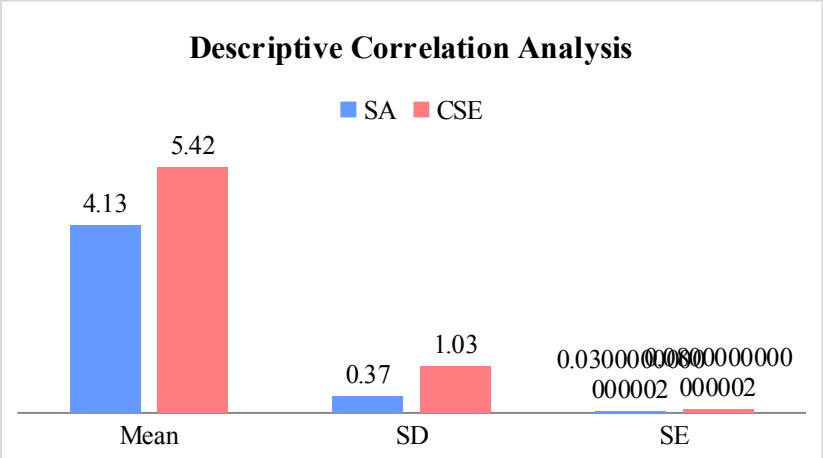

Image 2. Descriptive statistics: Self-actualisation and Computer Self-efficacy

Note. Descriptive statistics include mean, standard deviation, and standard error of Self-actualisation and Computer Self-efficacy of Professional courses academicians.

Table 1 shows the result of calculated Pearson's Product Moment Correlation Coefficient of Self-actualisation and Computer Self-efficacy, which is weakly positive and statistically significant ($r = 0.351$, $p < 0.01$) for $n = 133$. Hence, the hypothesis there is a significant association between Self-actualisation and Computer Self-efficacy was supported. This indicates that an increase in Self-actualisation would lead to an increase in Computer Self-efficacy among academicians.

Table 1. Inferential statistics: Significant Correlation between Self-actualisation and Computer Self-efficacy

	SA	CSE
SA	-	
CSE	.351**	-

Note. **Correlation is significant at 0.01 level (2-tailed)

The outcome is in alignment with the proposition of Ferguson et al. (2020) who, by considering Maslow's spectrum of needs, have placed technical proficiency under the Physiological needs and mastery of the content under the Self-actualisation need. This

reflects that the achievement of technological competency in professional courses academicians will lead to their attainment of mastery of the content. Although Ferguson et al. have hypothesised and tested this concerning statistics students, it has also proved to be statistically significant in relation to professional courses academicians. Apart from this, our findings also support the vision of the National Education Policy 2020, which focuses on transforming the education system and preparing students for the competitive world. NEP (2020) focuses on providing quality education, integrating technology & improving higher education, strengthening the necessary skills of teachers, promoting online education, digital infrastructure, online teaching-learning platforms, creating eContents, etc., which can be conveniently achieved with Self-actualised professional courses academicians who are also high in their Computer Self-efficacy.

CONCLUSION

The inescapable spread of innovation in the education field has obliged teachers to integrate computers into teaching-learning processes. This happens to become more evident in times of unavoidable challenges, such as COVID-19 where teachers, who usually seem to be quite reluctant to adopt technology compared to the students, had to work with computers. The success of education, to a large extent, depends upon the productive thriving of professional course teachers as the growth of professional course teachers influences the development of students which will in turn lead to a prosperous society. This is additionally important because professional courses imbibe practical skills in students and prepare them for the "world of work". However, the growth and development of professional course teachers do not entirely call for technical enhancement but also for personality enrichment as personality enrichment brings quality learning experiences, which is greatly related to Self-actualisation i.e. the understanding of teachers of themselves. One of the aspects of teachers' Self-understanding includes their belief in themselves to perform a particular task. The objective of this work was to fill this aperture so it explored the professional courses' academicians' understanding of themselves in association with their belief in using a computer to complete a task. The study found to be significant among the Business Administration, Education, Engineering, Law, and Pharmacy courses academics, leading to certain implications, for instance the professional courses academicians can be provided with a secure and comfortable environment which fosters positive behaviours, for instance, their well-being, acquisition of knowledge and mastery of content, better understanding of their own self, creative thinking, openness to new ideas, etc., which are the traits of a self-actualizing person. The professional courses institutions can make the Self-actualisation of their academicians one of their goals as the Self-actualised academicians respect their students and make them feel acceptable, which is among the significant elements of inclusive education so it can be said that the more the professional courses institutions take initiatives for Self-actualisation of their faculty the more they head towards the educational inclusivity that promotes the different strengths students are carrying with them. As it is explained "The implication is not that every person must strive for an objective goal such as a career, but rather that all persons should develop according to their own potential-potential that might be directed toward creativity, spiritual enlightenment, the pursuit of knowledge, or the desire to contribute to society" (Goldstein, 1939).

Besides this, the professional courses institutions can also strive to implement ICT in education by providing computer training to their faculty along with good digital infrastructure, for instance, computers/laptops, projectors, interactive whiteboards, specialised software, internet connectivity, networking, and audio/visual aids as proposed by the National Education Policy 2020. This will broaden the teaching-learning opportunities for teachers as well as students additionally, it will not only bring great success today but also in coming times. Another implication can be the integration and application of computers can be encouraged from the joining of the academicians and the faculty members who seem less confident in using computers can be motivated and paired with the academicians who are well versed in computer use. This will accelerate the productive utilisation of the available technology. Furthermore, the academicians' can also be provided with educational technology-related seminars and programs that will keep them updated and assist them in trying out new platforms. They can also be connected with computer professionals for technical assistance that will aid in boosting their efficacy. Finally, professional course institutions can foster more autonomy and respect among academicians, which will broaden their horizons and assist them to comprehend who they are further improving both their institutional performance and the quality of their work-life balance.

ACKNOWLEDGEMENTS

We are grateful to the authorities for allowing us to conduct our survey in their institutions and to the participants for their kind understanding, time, and response.

BIBLIOGRAPHY

Alba, B. (2017). *Striving for superiority. In: Zeigler-Hill, V., Shackelford, T. (eds)*. *Encyclopedia of personality and individual differences*. Springer, Cham. https://doi.org/10.1007/978-3-319-28099-8_1428-1

Allport, G. W. (1955). *Becoming: Basic considerations for a psychology of personality*. Yale University Press.

Ansbacher, H. L., & Ansbacher, R. R. (1956). *The individual psychology of Alfred Adler*.

Ansbacher, H. L. (1990). Alfred Adler's influence on the three leading cofounders of humanistic psychology. *Journal of Humanistic Psychology, 30*(4), 45-53.

Aristotle. (1925). *The Nicomachean Ethics (W. Ross, Trans.)*. Batoche Books Kitchener 1999. (Original Work Published 4th Century BCE). https://socialsciences.mcmaster.ca/econ/ugcm/3ll3/aristotle/Ethics.pdf

Asano, R., Igarashi, T., & Tsukamoto, S. (2020). *The hedonic and eudaimonic motives for activities: Measurement invariance and psychometric properties in an adult Japanese sample.* Frontiers in Psychology, 11, 524894. https://doi.org/10.3389/fpsyg.2020.01220

Alcaro A, Carta, S., and Panksepp, J. (2017). *The affective core of the self: A neuro-archetypical perspective on the foundations of human (and animal) subjectivity*. Front. Psychol. 8:1424. doi: 10.3389/fpsyg.2017.01424

Babbage, C. (1824). *On the application of machinery to the computation of astronomical and mathematical tables*. Taylor.

Bandura, A. (1994). *Self-efficacy. In V. S. Ramachaudran (Ed.), Encyclopedia of human behavior*. New York: Academic Press. (Reprinted in H. Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998).

Bandura A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191–215.

Baumeister, R. F. (Ed.). (1999). *The self in social psychology*. Psychology Press.

Baumeister, R. F. (1987). How the self became a problem: A psychological review of historical research. *Journal of Personality and Social Psychology, 52*(1), 163–176. https://doi.org/10.1037/0022-3514.52.1.163

[BBC Reel]. (2021). *Antikythera mechanism: The ancient 'computer' that simply shouldn't exist [Video]*. YouTube. https://www.youtube.com/watch?v=qqlJ50zDgeA

Brady, T. J. (2011). Measures of self-efficacy: Arthritis self-efficacy scale (ASES), arthritis self-efficacy scale-8 item (ASES-8), children's arthritis self-efficacy scale (CASE), chronic disease self-efficacy scale (CDSES), parent's arthritis self-efficacy scale (PASE), and rheumatoid arthritis self-efficacy scale (RASE). *Arthritis Care & Research, 63*(11), 473-485.

Briskin, A. (2023). Eupsychian management: Spirit of the good in humanity and society. *Journal of Humanistic Psychology, 63*(4), 495–501. https://doi.org/10.1177/00221678211002757

Compeau, D. R., & Higgins, C. A. (1995). *Computer self-efficacy: Development of a measure and initial test on JSTOR*. MIS Quarterly. https://doi.org/249688

Daniels, M. (1982). The development of the concept of self-actualization in the writings of Abraham Maslow. *Current Psychological Reviews, 2*(1), 61-75.

Dutra, E. M. D. S. (2016). Rogers and Heidegger: Is a gathering for a new view of the self possible? *Estudos de Psicologia (Campinas), 33*(4), 413-423.

Freeth, T., Bitsakis, Y., Moussas, X., Seiradakis, J. H., Tselikas, A., Mangou, H., ... & Edmunds, M. G. (2006). Decoding the ancient greek astronomical calculator known as the Antikythera Mechanism. *Nature, 444*(11), 587-591. https://doi.org/10.1038/nature05357

Ferguson, S. L., Walpole, M., & Fall, M. S. (2020). Achieving statistics self-actualization: Faculty survey on teaching applied social statistics. *Statistics Education Research Journal, 19*(2), 57-75.

Froh, J. J. (2004). The history of positive psychology: Truth be told. *NYS psychologist, 16*(3), 18-20.

Gallagher, M. (2012). Self-efficacy. Encyclopedia of human behavior (second edition), 314-320. https://doi.org/10.1016/B978-0-12-375000-6.00312-8

Gardner, S. (2009). *Nietzsche, the self, and the disunity of philosophical reason*. Nietzsche on Freedom and Autonomy.

Goldstein, K. (1995). *The organism: A holistic approach to biology derived from pathological data in man*. Zone Books.

Gopinath, R. (2020). Self-actualization and job involvement of academic leaders in Tamil Nadu Universities: A relationship study. *NOVYI MIR Research Journal, 5*(7), 58-69.

Hasan, B. (2003). The influence of specific computer experiences on computer self-efficacy beliefs. *Computers in Human Behavior, 19*(4), 443-450. https://doi.org/10.1016/S0747-5632(02)00079-1

Howard, M. C. (2014). Creation of a computer self-efficacy measure: analysis of internal consistency, psychometric properties, and validity. *Cyberpsychology, behavior, and social networking, 17*(10), 677-681.

Karsten, R., Mitra, A., & Schmidt, D. (2012). Computer self-efficacy: A meta-analysis. *Journal of Organizational and End User Computing (JOEUC), 24*(4), 54-80.

Kaufman, S. B. (2018). Self-actualizing people in the 21st century: Integration with contemporary theory and research on personality and well-being. *Journal of Humanistic Psychology, 63*(1), 51–83. https://doi.org/10.1177/0022167818809187

Levy, S. (2007). *The best of technology writing 2007*. University of Michigan Press.

Loyd, B. H., & Gressard, C. (1984). The effects of sex, age, and computer experience on computer attitudes. *AEDS Journal, 18*(2), 67-77.

Ministry of Human Resource Development. (2020). *National Education Policy 2020*. https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf

Manaster, G. J., & Corsini, R. J. (1982). *Individual psychology: Theory and practice*. Itasca, IL: Peacock.

Marakas, G. M., Yi, M. Y., & Johnson, R. D. (1998). The multilevel and multifaceted character of computer self-efficacy: Toward clarification of the construct and an integrative framework for research. *Information systems research, 9*(2), 126-163.

Marakas, G., Johnson, R., & Clay, P. F. (2007). The evolving nature of the computer self-efficacy construct: An empirical investigation of measurement construction, validity, reliability and stability over time. *Journal of the Association for Information Systems, 8*(1), 217-230.

Marakas, G. M., Aguirre-Urreta, M., Shoja, A., Kim, E., & Wang, S. (2022). The computer self-efficacy construct: A history of application in information systems research. *Foundations and Trends in Information Systems, 6*(2), 94-170. http://dx.doi.org/10.1561/2900000023

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370–396. https://doi.org/10.1037/h0054346

Maslow, A. H. (1954). *Motivation and personality*. Harper & Row Publishers.

Maslow, A. H. (1961). Peak experiences as acute identity experiences. *The American Journal of Psychoanalysis, 21*(3), 254-262.

Maslow, A. H. (1970). *Religions, values, and peak experiences*. New York: Penguin. (Original work published 1966).

McClellan III, J. E., & Dorn, H. (2015). *Science and technology in world history: An introduction*. JHU Press.

Melnick, A. (2008). *Kant's theory of the self*. Routledge.

Mozdzierz, G. J. (1996). The striving for perfection and other "contemporary" concepts. *Individual Psychology, 52*(3), 215.

Roweton, W. E. (1981). Who is self-actualized?. *Contemporary Education, 53*(1), 222-234.

Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of happiness studies, 9*(5), 13-39.

Schumacher, P., & Morahan-Martin, J. (2000). Gender, internet and computer attitudes and experiences. *Computers in Human Behavior, 17*(1), 95-110. https://doi.org/10.1016/S0747-5632(00)00032-7

Smythe, T. W. (2016). The self and self-awareness. *Open Access Library Journal, 3*(7), 1-5.

Strombach, T., Strang, S., Park, S., & Kenning, P. (2015). Common and distinctive approaches to motivation in different disciplines. *Progress in Brain Research, 22*(9), 3-23. https://doi.org/10.1016/bs.pbr.2016.06.007

Swade, D. (2000). *The cogwheel brain: Charles Babbage and the quest to build the first computer*. Little, Brown.

Swade, D., & Babbage, C. (2001). *Difference engine: Charles Babbage and the quest to build the First Computer.* Viking Penguin.

Teo, T., & Koh, J. H. L. (2010). Assessing the dimensionality of computer self-efficacy among pre-service teachers in Singapore: A structural equation modeling approach. *International Journal of Education and Development using ICT, 6*(3), 7-18.

Watts, R. E. (2012). *On the origin of the striving for superiority and of social interest. alfred adler revisited (1st ed.).* Routledge.

Wilfong, J. D. (2006). Computer anxiety and anger: The impact of computer use, computer experience, and self-efficacy beliefs. *Computers in Human Behavior, 22*(6), 1001-1011. https://doi.org/10.1016/j.chb.2004.03.020

Whitehead, P. M. (2017). Goldstein's self-actualization: A biosemiotic view. *The Humanistic Psychologist, 45*(1), 71–83. https://doi.org/10.1037/hum0000047