



## Seeking the Self Review: Psychology in Twenty-First-Century English Literature

Dr. Saed Jamil Shahwan

Associate Professor, Department of English, Faculty of Arts, Hail University; P.O. Box 2440, Hail, K.S.A

### ABSTRACT

Several psychological tendencies emerged in the latter few decades of the twentieth century, and they have continued into the twenty-first. Psychology has its origins in nineteenth-century physiology, and psychologists have long been fascinated by the brain-behaviour link. Darwinian thought has always been critical in psychology (for example, it forms the foundation of functionalist thinking). Still, in recent years, a new sub discipline called evolutionary psychology has emerged, employing evolutionary concepts to explain various human behaviours. The advancement of high-frequency computer capability has had and will endure to impact psychological study significantly. As the twentieth century came to a close, psychology had grown more specialised and, as a result, more fragmented—cognitive neuropsychologists, school psychologists, and industrial psychologists seemed to have nothing in common. This trend toward specialisation will undoubtedly continue, but it's crucial to realise that all psychologists have one thing in common: their background. This article begins with a review of psychology in the twenty-first century and finishes with a discussion of psychology's future by looking at current uses.

**Keywords:** *Psychology; 21<sup>st</sup> Century; Human behaviour; Globalisation; Cognitive perspective.*

**Citation:** Dr. Saed Jamil Shahwan (2022). Seeking the Self Review: Psychology in Twenty-First-Century English Literature. *Int J Arts Huma Social Studies*, 4(5), 41-48.

### INTRODUCTION

Toward the end of the previous century, psychology began to transition away from behavioural to cognitive viewpoints. That is, away from relying on empirical sources of information and accepting reason as an independent source of knowledge. Psychological research is experiencing a rebirth in the twenty-first century's first decade; alternatively, it may just be returning to its roots. Like the rest of society, psychology is re-discovering spirituality and re-establishing religion as a valuable source of information and understanding [1]. A reminder of our acceptance of non-empirical forms of communication may be found in the media's frequent usage of the phrases faith and intuition (Malcolm Gladwell's best-selling book *Blink* attests to the attraction of intuitive thinking), which helps to serve as a constant reminder to us. The Internet and 24-hour news networks, among other breakthroughs in information technology, have made psychology available to the general public in all its manifestations, including counselling, therapy, and counselling psychology. It is this rising globalization of brain research that is reflected mostly flow rendition of the DSM (Diagnostic and Statistical Manual), which emphasises the need for cultural sensitivity in treating and diagnosing mental illness, as well as in other recent editions of the DSM. At the end of the twentieth century, a study includes a chapter entitled "At the End of the Century." He spoke on psychological themes that would continue into the twenty-first century, including neurology, evolution, technology, and fragmentation, among others. This article will discuss modern uses of psychology, and it will finish with a discussion of the field's prospects shortly.

### MAJOR TRENDS IN PSYCHOLOGY

#### Neuroscience

The 1990s were dubbed the "Decade of the Brain" by the American Psychological Association (APA). Neuroscience research flooded during the 1990s. For instance, specialists found that more than half of all human DNA are engaged with cerebrum related cycles and that these qualities might impact various social characteristics[2]. Brain scans have long been used to deduce the brain's anatomy. Historically, established neuroscience techniques (such as ablation) were used to ascertain whether these "areas" of the brain were involved for specific activities. The ability to scan the brain as an individual accomplishes complex tasks is a significant recent achievement. This strategy provides a considerably more precise indication of which areas influence various behaviours. Around the turn of the century, the "Decade of Behavior" was developed by a multidisciplinary effort (including the APA) to mainstream social and behavioural research [3]. This curriculum was founded on the notion that an in-depth understanding of the brain is critical; after all, human behaviour underpins all triumphs, failures, and solutions.

Along with academic acknowledgement, there is a growing awareness of the value of neurological study in the commercial sector. Brain-related subjects are often covered in journals and the press, and no cable news network goes a

week without reporting on a notable neuroscience advancement [4]. Furthermore, the Allen Brain Atlas (2006), which was funded entirely by private donations from billionaire Paul Allen, was created on being openly accessible for everybody. A private individual saw the need of establishing an effective archive with which independent researcher groups could examine hereditary trends. Brain MRI scanning appear to anticipate some characteristic features in an almost Orwellian sense. Brilliant children's brains grow in their own way [5]. Despite its complexity, the pattern for very brilliant children differs significantly from that for children of medium intelligence. It should be able to "predict" the intellect of an unborn kid based on this precise pattern (at least in theory). For quite a long time, mind varieties in character, demeanor, degenerate conduct, and other intellectual cycles have been accounted for, and it is likely that more will be found sooner rather than later. Significant ethical concerns are necessary in this domain, especially given the possibility of prediction [6]. Why squander valuable resources on those who will not profit from them if an individual's potential is recognised in advance? Should society forbid such "future" acts of violence if a person's proclivity for violence can be discovered by brain scanning? Not coincidentally, a similar situation was shown that blockbuster film *Minority Report*, wherein criminal activity may be expected ahead of time and offenders were imprisoned for crimes they had not yet done [7]. Neuroscience may offer the answer to pushing psychology away from social science and into the domain of scientific sciences, where predictions are more absolute. Rather of anticipating the behaviour of the "average" person, neuroscience may one day enable us to foresee the behaviour of a single person [8].

### **Evolution**

Along with academic recognition, there is a rising realisation of the business significance of brain research. Brain-related topics are often covered in journals and the press, and no cable news network goes a week without reporting on a significant neuroscience breakthrough [4]. A private individual saw the requirement for an exhaustive chronicle to which individual scientists might look at hereditary examples. MRI brain scans seem to predict some psychological traits in an almost Orwellian sense. Brilliant children's brains develop in their own unique manner [5]. Despite its complexities, the pattern for very gifted children varies dramatically from that for youngsters of average intellect. Based on this specific pattern, it should be able to "predict" an unborn child's intelligence (at least in theory). For years, variances in the brain have been recognised in personality, disposition, deviant behaviour, as well as other mental abilities, yet are expected to be discovered in the near future. In this arena, significant ethical issues are required, particularly given the potential of prediction [6]. Why squander significant assets on individuals who won't profit from them in case a singular's latent capacity is recognized early? Should society bandit such "future" demonstrations of brutality in case an individual's inclination for violence can be identified by mind scanning? Not by some coincidence, a comparable situation was displayed in the new blockbuster film *Minority Report*, in which violations could be anticipated ahead of time and hoodlums were detained for wrongdoings they had not yet carried out [7]. Neuroscience might hold the way to moving brain research away from sociology and into the domain of logical sciences, where forecasts are more exact. Maybe than expecting the conduct of the "normal" individual, neuroscience may one day permit us to foresee the conduct of a solitary person [8].

### **Computers**

Computers have revolutionised how we think about and research the mind and its activities, from the 1960s data-handling procedure to memory through the 1980s artificial neural language classes to today's AI and neural networks. Academics claim that, despite its high speed, modern computer science is limited in its ability to perfectly duplicate the brain activity due to serial processing restrictions [9]. Artificial intelligence will stay artificial until an accurate parallel processing system is constructed. "Anyone now can purchase a chessboard computer capable of defeating a master, but you cannot yet purchase a vision machine capable of surpassing the vision of a child," Donald Hoffman says (1998). Computers' research h skills have also had an influence on psychology. Computerized test item presentation, for example, offers far better levels of standardisation and control in research than were previously achievable [10]. Furthermore, statistical software systems have enabled academics to investigate complex statistical linkages that would have gone unnoticed in the absence of statistical software systems.

### **Fragmentation**

The age of the nineteenth-century "gentleman scientist" is passed. The last century's trend of increasing fragmentation (specialisation) in psychology seems to be continuing. The American Psychological Association already includes 54 divisions, with more on the way, each concentrating on a different aspect of psychology [11]. Researchers in a certain area of psychology may be members of a specific organisation, for example a search in child development that uses very precise language which is unfamiliar towards those working within another field of brain research. Specialists confronted with a challenging circumstance must remain informed about advancements in their profession [12]. Individuals are awe-inspiring, and it looks difficult to comprehend one aspect of brain study in isolation from the others. Regardless, there is evidence of increased interdisciplinarity collaboration (particularly across brain research, science, and software engineering). Intellectual therapists are commonly misperceived as analysts; their shelves may include books by anthropologists, linguists, financial analysts, and biologists, among others. According to some accounts, Skinner is among the last genuinely identifiable personality in the area of brain research [13].

## **The Future**

Psychology, like other disciplines, must eventually give useful information for the benefit of society as a whole. Psychology's popularity and acceptability among the general public has grown in recent years. In the twenty-first century, we've observed a growing trend toward mainstreaming psychological research and ideas [14]. Despite the fact that the general public has little grasp of psychology, it is used in practically every facet of our everyday life [15]. An example is a unique toilet that incorporates tunes in order to aid with discharge, is a superb example of psychological research integration into popular culture that had thrilled B. F. Skinner. Similarly, State media reportedly wrote an article entitled "How to Read a Face," which covered social neuroscience, a relatively new field of study [16]. The omission of the term "psychology" is perhaps the most remarkable aspect of this text. It seems that the triumph of psychology will result in its death as a distinct field and fusion with public thought, similar to George Miller's intense solicitation in his American Psychological Association official discourse that we part with brain research. In the accompanying segments, we will rapidly talk about a couple of regions where brain science (and the exploration instruments it has delivered) has had a huge impact [17].

## **PSYCHOLOGY AND OPINION**

### **Consumer Behaviour**

John Watson is the most well-known name in the history of consumer psychology. While investigating Baby Albert, Watson co-founded the J. Walter Thompson Advertising Agency with Rosalie Rayner, which employs classical conditioning methods. We are continuously inundated with new items (CS) connected with people or locations (US) that stimulate favourable emotions (UR). Corporations expect that frequent bombardment (acquisition) will result in favourable sentiments about the new product (CS) (CR) [18]. When it comes to new product development, no successful firm will introduce a new product without comprehensive testing. Polling and focus groups are research methods that originated in psychological studies. Because of the Internet's and e-ubiquitous mail's availability to large audiences, this kind of work may be completed more quickly and cheaply (but not necessarily better) [19].

### **Politics**

Using polls and focus groups as psychological tools, political strategists have established a new art form. At times, it seems that a politician's public image is more essential than what they say or do (particularly during heated political campaigns) [20]. All that a competitor recommends is first tried in a center gathering to perceive what it will mean for popular assessment [21]. Fresher surveying procedures, for example, miniature surveying, empower political planners to make considerably more exact forecasts regarding which competitor every family will decide in favor of. This data is then used to lead focused on "get out the vote" crusades [22].

## **PSYCHOLOGY AND THE JURISDICTIONAL SYSTEM**

Unsurprisingly, psychological fundamentals are utilised inside courtroom proceedings. The insanity defence is among the first examples of the use of psychological notions within a field. Recent developments, for instance 1990s "recovered memory" cases, emphasised court system's fundamental premise: that the words said by an observer (regardless of whether for the protection or the indictment) should be a precise portrayal of the real world [23]. In an uncommon twist addressed by the popular film Runaway Jury, we are helped that reality to remember a situation doesn't impact the result of a preliminary. Analysts were used in the film to guarantee that attendants chose from a pool of potential hearers were thoughtful to the indictment or safeguard, contingent upon the circumstance. Circumstances like these fill in as an update that therapists should cling to thorough moral principles that reach out a long ways past understanding secrecy [24].

## **THE USE OF PSYCHOLOGY IN EDUCATION AND INDUSTRY FOR PREDICTION AND ASSESSMENT**

Since Yerkes and his colleagues employed psychological tests on a large scale to evaluate draftees' academic performance during World War I, psychological tests are increasingly being used by businesses and educational institutions alike. ASVAB (Armed Services Vocational Aptitude Battery) results show that efforts in this area are ongoing [25]. Despite critiques about the "fairness" of aptitude tests, they continue to be a significant and consistent source of professional and academic accomplishment (like the SAT, ACT, or GRE in advanced education). Other spearheading employments of mental testing, for example, the Myers-Briggs Type Indicator (MBTI) and the Minnesota Multiphasic Personality Inventory (MMPI), have been analyzed for their legitimacy and propriety (similarly as talented association) [26]. Psychological tests are predicted to have the greatest influence on the evaluation field in the future. Employers and educational institutions are increasingly demanding "evidence" that new and old strategies work. A law passed in 2001 called "No Child Left Behind", most significant educational reform in a generation, mandates schools to use evaluation methods to evaluate whether or not they are fulfilling their objectives. Such advancements ensure that psychological evaluation systems have a bright future [27].

## **THERAPY**

For many decades, treatment has been developing. Psychoanalytic therapists are becoming scarce, with cognitive therapists taking their place. When used for certain disorders specifically, the mental-approach to therapy encourages the person by providing them control over their healing. Changes were also made in the people providing the care. Medicine costs have skyrocketed recently, and health management companies are on the increase (HMOs) has increased demand for "less expensive" mental health care. Psychiatrists, psychologists, therapists, doctors, and clergy are increasingly practising medicine, which was once reserved for psychiatrists [28].

There is likewise a progress from individual to bunch treatment. On account of the change in psychological wellness treatment toward "less expensive" techniques and suppliers, a bigger level of the populace approaches emotional well-being care now than at some other time in history [9]. These changes raise other cost-efficiency problems, most notably prescription privileges, which are promoted by HMOs. Historically, only psychiatrists were permitted to administer medication; however, there is a growing trend toward allowing licenced clinical psychologists to do so (Currently, clinical psychologists have prescription rights in Louisiana and New Mexico, and legislation is being considered in numerous more states) [29].

## **WOMEN IN PSYCHOLOGY**

### **First-wave "Feminist" Psychologists**

The space of brain science has been overwhelmed by ladies since the late nineteenth century, when brain science was formalized as a deliberate logical review in both Europe and North America. In spite of their minuscule numbers and gigantic hindrances to defeat in a male-overwhelmed field, ladies made huge scholarly and institutional accomplishments, for example, making the American Psychological Association and E. B. Titchener's Society of Experimentalists, among others. Mary Whiton Calkins and Margaret Floy Washburn were dual of these females who served as presidents of the American Psychological Association, respectively, in 1905 and 1921 [30]. Anne Anastasi would not appear for another 50 years (1908–2001) achieved the distinction of becoming the first female president. Three early psychologists who spoke out against gender conventions and cultural expectations will be discussed in this section. Psychologist Leta Stetter Hollingworth and social psychologist Helen Bradford Thompson Woolley used psychological research to deconstruct and counter usually accepted assumptions about women's lowliness. Christine Ladd-Franklin battled relentlessly throughout her career for gender equality in professional behaviour and interaction among psychologists, as well as for women's fair access to higher education and honours programmes [31].

### **Feminism and Psychology of the Second Wave**

Betty Friedan (1921–2006) published *The Feminine Mystique* in 1963, ushering in a nexttrend of American women's rights. Throughout the following decade, women's activist analysts fought for the identification and rectification of chauvinist practises and androcentric perspectives. Naomi Weisstein was one of these therapists, a Harvard-educated intellectual scholar and co-benefactor of the Chicago Women's Liberation Union. In 1968's autumn, she presented a study that would turn out to be one of the seminal works of women's activist brain research. The New England Free Press initially published the book in 1968 under the title "Kinder, Kirche, Küche as Scientific Law: Psychology Constructs the Female." It was reviewed and extended in 1971 and has since been republished several whiles in a variety of distributors [32]. In this book, Weisstein argued that brain research had nothing to offer to the discussion of what females were genuinely akin to, since brain science, on the whole, had a notion. This disappointment was caused by therapists' emphasis on inner attributes, which resulted in a lack of social context understanding and an inability to critically assess material. This section will examine the institutional changes in brain research that happened resultant to second-wave women's liberation of women's activist physicians. Following that is a brief account of women's activist brain science's internal struggle to allow for variety while being relevant to all existences [32].

## **MINORITIES IN PSYCHOLOGY**

Specialists examined the history of people of color in the field of psychology as a Discipline in this part. Despite their rarity, the history of minorities in other nations and civilisations is a rich source of information for our work here at the University of California. As is the case with all accounts, it is a temporary record. Given the varying demographics of the US, which suggest that by 2050, European origin's Americans would be a statistical distinct ethnic group, our information here is highly speculative. A century from now, a profession's history may place a completely different emphasis on the concepts discussed here. The American Psychological Association was formed in 1892 by G. Stanley Hall, and its early membership included representatives from a wide variety of scientific and intellectual domains, including psychology, philosophy, physiology, and medicine. Despite this, neither the founders nor later members were members of a minority race or ethnic group [33]. This is unsurprising, given the minority status of scientists and academics at the time. In some ways, the factors that contributed to this disparity are both perplexing and obvious. The United States was established on white people's elitism. In educational institutions, whites of Anglo-Saxon or Northern European origin were given precedence. However, with the establishment of compulsory schooling, the educational opportunities of the bulk of the people improved. Due to the fact that Native American, African American, Latino/a, and

Asian American children get less funding, minority children face unique educational opportunities in terms of both kind and quality [34].

Regardless, as the 20th century advanced, race and identity turned out to be more conspicuous. W. E. B. DuBois, a noticeable dark researcher and social scientist, said in 1903, "The issue of the 20th century is the issue within the shading line." (p. Ethnic minorities' obligation to build up a presence in the new discipline and to foster a group of information and practice equivalent with their convictions and customs is imperative to the historical backdrop of that shading line in brain research. Robert V. Guthrie, an African-American psychologist and historian, has provided an accurate history of the conflict's early years (1998). According to Guthrie, blacks have been deliberately removed from traditional psychological histories like those published by Boring and Murphy [35]. Racial minorities did get active in the field, most notably in racial disparities study. The findings of such studies were often interpreted as implying that African Americans, Chicanos (Americans of Mexican origin), and other minorities were inferior. Minorities had few prospects for higher education and even fewer professional opportunities beyond a bachelor's degree at the start of the twentieth century. Despite a history of people of color being underrepresented in the profession, minority groups worked on applied psychology.. Wilberforce College in Ohio, for example, had a roughly 40-member honours psychology club in 1914. [36].

Black colleges and universities place a high value on applied psychology as compared to white colleges and universities. As a result, functional areas such as education and guidance counselling got more focus. Students may return to their villages as a result of their education and give practical support via (separate) school systems and churches. Psychology was taught and practised by a minority, mainly African Americans, throughout the first two generations following its establishment [37]. Due to the limited opportunities for blacks to pursue higher education, several African American societies centred on transferring a limited exceptional students to college to train as teachers, preachers, attorneys, dentists, and surgeons.

### **TOWARD INCLUSIVENESS IN 21ST-CENTURY PSYCHOLOGY**

As may be seen, tremendous progress in terms of curricular diversity has been done in psychology in the United States [38]. Nonetheless, ethnic minorities have a far smaller percentage of membership in the American Psychological Association (APA) and other general psychological organisations than they do in the general population of the United States. Despite this, there is considerable opposition to requiring all psychology training programs—clinical, counselling, and school—to prepare all students to provide mental health services in a culturally appropriate manner [39]. Where can we find an excellent example of how to do this? Shockingly, ideal diversity training models may be found at a variety of professional training institutions, many of which provide the Doctor of Psychology degree. The management and faculty of the most exceptional programmes have the following characteristics:

- Dedication on the part of all parties
- Sufficient financial assistance in the form of scholarships and fellowships, and so on
- Pliant entry requirements, such as life experiences
- Incorporation of cultural diversity into all parts of the curriculum
- The participation of one or more members of a minority group on the staff
- Nurturing and encouraging atmosphere

These features are necessary, but they cannot be applied consistently. Rather, each programme must devise a strategy for developing a curriculum that is conscious of and responsive to diversity. That's no longer possible, given America's shifting demographics; the field of psychology must evolve in order to stay viable as a science and career. We may expect the job to become more diverse in the future if these initiatives are properly implemented. As people's perceptions about psychologists shift, the psychological information provided by the profession will become more relevant to all customers [40].

### **COMPARATIVE PSYCHOLOGY**

Regardless of their area of research, comparative psychologists are scientists that investigate behaviour in terms of adaptive function, evolutionary history, and developmental processes. This psychology efforts to tie the gap between psychology's behavioural emphasis and biology's evolutionary emphasis through bridging the gap between psychology and biology [3]. Since the seventeenth century, scientists have been intrigued by the hypothesis that growth often begins with a functional variation, like a new foraging strategy or mating strategy, and then advances to morphological alterations. According to Lamarck, the well-known illustration of giraffes elongating their necks in order to reach higher plants and conveying this information to their offspring on long necks emphasises the significance of function over form [41]. However, even if current evolutionary theorists have largely abandoned the Lamarckian method of acquired features inheritance, the fundamental importance of process in evolution has not been lost. Darwin's famous picture of the beaks of Galapagos birds may serve as an illustration of this concept. When it comes to wild populations, the link

among population diversity in beak size and shape and seed obtainability has developed into a valuable instance of Darwin's natural selection mechanism at action [39].

As a result, the direction of evolutionary change in beak morphology is influenced by finch foraging behaviour. Several early Greek and Roman philosophers believed in evolutionary ideas similar to the contemporary concept of natural selection. However, as far as we know, early conceptions about nature were mostly non-evolutionary. Aristotle, for instance, believed that individuals are at the top of the food chain owing to their rationality [42]. Humans have been separate from the rest of nature throughout history for cultural and religious reasons. Naturalistic ideas of behaviour arose in the aftermath of the European Renaissance. Gómez Pereira's and René Descartes' well-known mechanical explanations of animal behaviour were among these theories. These ideas centred on the reflex, a basic unit of behaviour comprised of an external stimulus, some fundamental nervous system processing, and a motorized response outcome[43]. During the latter 1800s, this fundamental premise would provide the framework for initial advances in the neurophysiology of behaviour and knowledge. At the same time, Darwin's theory of natural selection established the notion of physical and behavioural continuity between species. Darwin himself emphasised the need of recognising fundamental mental processes in inhuman animals in order to build the concept of mental continuity and pave the way for future research into the evolutionary foundation of psychological processes [9]. These are the fundamental characteristics of the historical setting in which comparative psychology evolved. In 1894, Clifford L. Morgan published the first comprehensive Introduction to Comparative Psychology, there he projected the fundamental rule founded on the stinginess concept. "We may never understand an act as the product of the exercise of a higher psychic ability if it may also be read as the consequence of the practise of a lower psychic faculty," Morgan said in response to scepticism over anecdotal evidence for mental continuity [44]. When presented with many equally effective explanations for particular behavioural outcomes, the one created on the most basic psychological process should be chosen. When more basic reflexes can adequately explain a behavioural phenomena, they should not be attributed to an emotional reaction [34]. Morgan's canon is meant to protect researchers against researcher bias and anthropomorphic interpretations of behavioural data. Ethology, a branch of comparative psychology, arose throughout the twentieth century as a result of a trend within the biological sciences. Ethologists have traditionally investigated behaviour in naturalistic or semi-naturalistic settings rather than controlled laboratory settings, emphasising "innate" rather than "taught" behaviours. In the second part of the twentieth century, these techniques began to converge [45]. Multidisciplinary integration is an important aspect of modern comparative psychology. This article's goal is to offer a summary of the methodologies and concepts which are predicted to underlie relative psychology in the twenty-first century.

## **PERSONALITY PSYCHOLOGY**

This article provides a synopsis of the key theoretical viewpoints on human personality. I do this by outlining the key theoretical components of each viewpoint, as well as the research technique and data acquired in support of the theory, as well as some related theoretical viewpoints, theory applications, and cross-theory comparisons [1]. I also undertake a brief study of each theoretical perspective's contributions using widely acknowledged criteria for evaluating any theory [5]:

- 1) **Comprehensiveness:** The ability of a theory to account for a wide variety of personality traits. This is commonly referred to as an idea's explanatory capacity. In all other cases, the more comprehensive theory is favoured.
- 2) **Parsimony:** A hypothesis's simplicity. When comparing two hypotheses with equal explanatory power, the hypothesis with the more sparse structure is selected. Occam's Razor is another name for this idea, which was popularised by a 14th-century English Franciscan friar.
- 3) **Relevance:** The extent to which a theory, such as a behaviour modification strategy (i.e., therapeutic procedures), is relevant in practise [4].
- 4) **Heuristic Function:** How much a theory impacts or guides later research. A hypothesis that stimulates a lot of research or sparks a lot of theoretical discussion is a useful scientific heuristic.
- 5) **Empirical Validity:** How well evidence supports an empirical theory. A theory's capacity to describe the circumstances under which it may be proved untrue is a subtle but crucial component of its empirical validity. This concept, often known as the repudiation criterion (or falsifiability), is an important component in empirically validating a theory [42].

Regardless of the criterion, only a few theories will be compelling. However, applying these criteria to concepts provides a decent indication of their total value and usefulness [15].

## **CONCLUSION**

When it comes to the scientific revolution, Francis Bacon's (1620/1994) views at the commencement of the technical revolution appear unavoidable in the fast-paced biosphere of the late twentieth and early twenty-first centuries, when financial choices are mostly determined by "bottom line." As Albert Einstein said, "When human knowledge and human power join together, a result cannot be formed until the cause is understood." In order to advance, all branches of

research must communicate useful knowledge to the public [5]. APA's 2006 mission statement is that "the American Psychological Association should seek to promote psychology as a science and occupation, and to utilise psychology to enhance health, education, and the welfare of individuals." Perhaps psychology is approaching the point where its value can be shown.

## REFERENCES

- Furlong, M., Morrison, G., & Pavelski, R. (2000). Trends in school psychology for the 21st century: Influences of school violence on professional change. *Psychology in the Schools, 37*(1), 81–90. [https://doi.org/10.1002/\(SICI\)1520-6807\(200001\)37:1<81::AID-PITS9>3.0.CO;2-O](https://doi.org/10.1002/(SICI)1520-6807(200001)37:1<81::AID-PITS9>3.0.CO;2-O)
- Press, I. (2016). *Review : The Revolution Is Coming : Will Psychology Be Ready ? Author ( s ) : Susan Krauss Whitbourne Review by : Susan Krauss Whitbourne Source : The American Journal of Psychology , Vol . 116 , No . 1 ( Spring , 2003 ) , pp . 150-156 Published by : University of Illinois Press Stable URL : http://www.jstor.org/stable/1423343 Accessed : 30-05-2016 07 : 46 UTC. 116*(1), 150–156. <http://www.jstor.org/stable/1423343>
- Karomat Klicheva, Gavkhar Klicheva, K. N. (2021). The Concept of Self - Actualization in the 21st Century. *Psychology and Education Journal, 58*(2), 304–308. <https://doi.org/10.17762/pae.v58i2.1760>
- de la Fuente Arias, J., & Martínez, M. M. V. (2010). Educational Psychology and R&D&I: a Strategic Action Programme for the Twenty-First Century. *Papeles Del Psicólogo, 31*(2), 162–170.
- Flink, I. K., Reme, S., Jacobsen, H. B., Glombiewski, J., Vlaeyen, J. W. S., Nicholas, M. K., Main, C. J., Peters, M., Williams, A. C. D. C., Schrooten, M. G. S., Shaw, W., & Boersma, K. (2020). Pain psychology in the 21st century: Lessons learned and moving forward. *Scandinavian Journal of Pain, 20*(2), 229–238. <https://doi.org/10.1515/sjpain-2019-0180>
- Hargreaves, D. J., Marshall, N. A., & North, A. C. (2003). Music education in the twenty-first century: a psychological perspective. *British Journal of Music Education, 20*(2), 147–163. <https://doi.org/10.1017/s0265051703005357>
- Sailer, M., Hense, J., Mandl, H., & Klevers, M. (2014). Psychological perspectives on motivation through gamification. *Interaction Design and Architecture(S), 19*(1), 28–37.
- Gehlbach, H. (2010). The social side of school: Why teachers need social psychology. In *Educational Psychology Review* (Vol. 22, Issue 3). <https://doi.org/10.1007/s10648-010-9138-3>
- Poggi, I., & Errico, F. D. (2011). Computer Analysis of Human Behavior. In *Computer Analysis of Human Behavior* (Issue January 2014). <https://doi.org/10.1007/978-0-85729-994-9>
- Chesney, M. A. (1993). Health Psychology in the 21st Century: Acquired Immunodeficiency Syndrome as a Harbinger of Things to Come. *Health Psychology, 12*(4), 259–268. <https://doi.org/10.1037/0278-6133.12.4.259>
- Greenberg, G., & Partridge, T. (2004). Comparative Psychology, A New Perspective for the 21st Century: Response to Criticism. *Developmental Psychobiology, 44*(1), 31–36. <https://doi.org/10.1002/dev.10154>
- DeRobertis, E. M., & Bland, A. M. (2021). Humanistic and Positive Psychologies: The Continuing Narrative After Two Decades. *Journal of Humanistic Psychology. https://doi.org/10.1177/00221678211008353*
- K Murugiah, T. (2020). Challenges in Transforming Assessments for 21st Century Skills Development: Lecturers' Perspective. *Asian Journal of Education and Training, 6*(1), 41–46. <https://doi.org/10.20448/journal.522.2020.61.41.46>
- Seligman, M. E. P., & Csikszentmihalyi, M. (2001). “Positive psychology: An introduction”: Reply. *American Psychologist, 56*(1), 89–90. <https://doi.org/10.1037/0003-066x.56.1.89>
- Erle, T. M., & Tropolinski, S. (2017). The grounded nature of psychological perspective-taking. *Journal of Personality and Social Psychology, 112*(5), 683–695. <https://doi.org/10.1037/pspa0000081>
- DeRobertis, E. M. (2013). Humanistic Psychology: Alive in the 21st Century? *Journal of Humanistic Psychology, 53*(4), 419–437. <https://doi.org/10.1177/0022167812473369>
- Callard, F., Smallwood, J., Golchert, J., & Margulies, D. S. (2013). The era of the wandering mind? Twenty-first century research on self-generated mental activity. *Frontiers in Psychology, 4*(DEC), 1–11. <https://doi.org/10.3389/fpsyg.2013.00891>
- Reevy, G. M., & Bursten, S. N. (2015a). Pedagogical psychology: Beyond the 21st century. *Frontiers in Psychology, 6*(MAR), 10–12. <https://doi.org/10.3389/fpsyg.2015.00280>
- Harris, K. R. (2018). Educational Psychology: A Future Retrospective. *Journal of Educational Psychology, 110*(2), 163–173. <https://doi.org/10.1037/edu0000267>
- Wang, M. C., Lightsey, O. R., Pietruszka, T., Uruk, A. C., & Wells, A. G. (2007). Purpose in life and reasons for living as mediators of the relationship between stress, coping, and suicidal behavior. *Journal of Positive Psychology, 2*(3), 195–204. <https://doi.org/10.1080/17439760701228920>
- Reevy, G. M., & Bursten, S. N. (2015b). Pedagogical psychology: Beyond the 21st century. In *Frontiers in Psychology* (Vol. 6, Issue MAR). <https://doi.org/10.3389/fpsyg.2015.00280>
- Koocher, G. P. (2007). Twenty-First Century Ethical Challenges for Psychology. *American Psychologist, 62*(5), 375–384. <https://doi.org/10.1037/0003-066X.62.5.375>
- Janowski, K. (2019). Psychological perspectives on health and disease, vol. 1. Determinants of somatic and mental

- health. In *Psychological perspectives on health and disease, vol. 1. Determinants of somatic and mental health*. (Vol. 1, Issue December 2019). <https://doi.org/10.5709/pphd-1>
24. Moudjahid, A., & Abdarrazak, B. (2019). Psychology of quality of life and its relation to psychology. *International Journal of Inspiration & Resilience Economy*, 3(2), 58–63. <https://doi.org/10.5923/j.ijire.20190302.04>
  25. Ryff, C. D., & Keyes, C. L. M. (1995). The Structure of Psychological Well-Being Revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727. <https://doi.org/10.1037/0022-3514.69.4.719>
  26. Pérez-Álvarez, M. (2018). Psychology as a Science of Subject and Comportment, beyond the Mind and Behavior. *Integrative Psychological and Behavioral Science*, 52(1), 25–51. <https://doi.org/10.1007/s12124-017-9408-4>
  27. Carroll, J. B. (1993). Educational Psychology in the 21st Century. *Educational Psychologist*, 28(2), 89–95. [https://doi.org/10.1207/s15326985sep2802\\_1](https://doi.org/10.1207/s15326985sep2802_1)
  28. Spitzer, S. P., Franklin, B. J., & Kohout, F. J. (1975). Social Psychology and Everyday Life. *Contemporary Sociology*, 4(3), 298. <https://doi.org/10.2307/2063237>
  29. J. Taormina, R. (2016). Social and Psychological Challenges of the 21st Century and Beyond. *International Journal of Social Science and Humanity*, 6(11), 884–891. <https://doi.org/10.18178/ijssh.2016.v6.766>
  30. Cacioppo, J. T. (2013). Psychological Science in the 21st Century. *Teaching of Psychology*, 40(4), 304–309. <https://doi.org/10.1177/0098628313501041>
  31. Mcdevitt, P. J. (2016). *Teaching psychology in the 21st century*. TEACHING PSYCHOLOGY IN 21 ST CENTURY Running head : TEACHING PSYCHOLOGY IN 21 ST CENTURY The Teaching of Psychology in 21st Century Mary Gloria C. Njoku Godfrey Okoye University Enugu. November.
  32. Nezhad, A. S., & Vahedi, M. (2011). The role of educational psychology in teacher education programs. *Procedia - Social and Behavioral Sciences*, 30, 327–330. <https://doi.org/10.1016/j.sbspro.2011.10.064>
  33. Gregson, R. A. M. (1962). the Psychology of Value. *British Journal of Statistical Psychology*, 15(2), 163–165. <https://doi.org/10.1111/j.2044-8317.1962.tb00098.x>
  34. Linke, S. E., Robinson, C. J., & Pekmezi, D. (2014). Applying Psychological Theories to Promote Healthy Lifestyles. *American Journal of Lifestyle Medicine*, 8(1), 4–14. <https://doi.org/10.1177/1559827613487496>
  35. Højholt, C., & Schraube, E. (2019). Subjectivity and Knowledge: Generalization in the Psychological Study of Everyday Life. In *Theory and History in the Human and Social Sciences* (Issue November). <https://doi.org/10.1007/978-3-030-29977-4>
  36. Vugt, M. Van. (2013). Social Psychology of Social Problems. In *Social Psychology of Social Problems* (Issue January). <https://doi.org/10.1007/978-1-137-27222-5>
  37. Abd El-Hay, M. A. (2019). Social Psychology. In *Understanding Psychology for Medicine and Nursing* (Issue December 2019). <https://doi.org/10.4324/9781003000013-16>
  38. Greenwood, J. D. (2014). The social in social psychology. *Social and Personality Psychology Compass*, 8(7), 303–313. <https://doi.org/10.1111/spc3.12113>
  39. Frings, D. (2018). Social Psychology. *Social Psychology*, July. <https://doi.org/10.4324/9781315147888>
  40. Hill, D. B. (2006). Theory in Applied Social Psychology: Past Mistakes and Future Hopes. *Theory & Psychology*, 16(5), 613–640. <https://doi.org/10.1177/0959354306067440>
  41. Davis, H., & Kenyon, P. (1981). Psychology: Its relevance to the practice of physiotherapy. In *Physiotherapy* (Vol. 67, Issue 3).
  42. Erle, T. M. (2016). *A Grounded Approach to Psychological*. February.
  43. Marcu, G. (2014). Applying psychology to everyday life: food choice-directions for research. *Conference: „PSYCHOLOGY OF ECONOMIC SELF-DETERMINATION OF PERSON AND COMMUNITY”, April 2014*. <https://www.researchgate.net/publication/271466488>
  44. Kalekin-Fishman, D. (2013). Sociology of everyday life. *Current Sociology*, 61(5–6), 714–732. <https://doi.org/10.1177/0011392113482112>
  45. Staudinger, U. M., & Glück, J. (2011). Psychological wisdom research: Commonalities and differences in a growing field. *Annual Review of Psychology*, 62(January 2016), 215–241. <https://doi.org/10.1146/annurev.psych.121208.131659>