

# Historical Review of Occupational Psychological Health Research and Philosophy

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## Abstract

Historical review on earlier research works provides a broader perspective on the subject area to help improve on current research efforts. Santayana, a philosopher in 1905, stated that when one does not remember the past, it is likely the same mistakes will be repeated in the future. Historical perspective also allows for possible right guesses to be made for future outcomes. This study conducts a historical review on occupational psychological health research, its evolution, and key research perspectives. A comprehensive review of pertinent literature was undertaken to understand the scientific concept of occupational psychology and applications. The historical review provides a perspective that occupational psychological health research is an excellent and important area for exploring behavioural issues in organisations and one in which an original contribution to research as well as practice can be made.

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## Introduction

Psychology in the workplace is a new trend and a very important area needed in all aspects of any organisation's life [1]. Occupational psychology adopts ideas and research strategies from social psychology and combines with organizational behaviour to address the emotional and motivational part of the work [2]. Psychology in the workplace concerns itself with various aspects such as:

how workers perform their job, learning growth patterns of workers, interpersonal relationships at the workplace, as well as effective functionality of the responsibilities of both employees and organisation for mutual benefits [3, 4]. Occupational psychology seeks to know how workers are motivated and rewarded, how leaders behave, and how leaders emerge, as well as the formal and informal structure of the organisation by focusing on groups, teams, and sections [5]. The organizational influences on the feelings, thought, and behaviours of workers are evaluated as a result of the

imagined, implied or actual behaviours of management and other persons in the organisation [5, 6].

Beginning in the mid-1990s, there has been a substantial and rapid increase in research in occupational psychology [3]. The studies usually relate to the emotions workers bring along and the emotions they take from the workplace, as well as focusing on areas such as work-life balance [2]. Research in psychology revealed that working experience is more complex than the simple job task, productivity, and safety issues [7, 8]. However, there is a contrast between the research interest of the past, and current researchers, the past research in workplace psychology was focused on social intelligence, where the present research investigates emotional intelligence [2, 3]. This trend can be revealed by comparing the articles published in occupational psychology journals in the years 1977 and 2019. In the 21st century, occupational psychology research and practice continually sort to address issues such as workers' productivity, and efficiency, while exploring issues such as workers' well-being, maintaining family and work balance and the workers' experience and responses to work conditions [9, 10].

The aim of occupational psychology is, therefore, to enhance workers' well-being and work effectiveness by conducting a systematic study of the processes in the organisation, which affects individuals as well as groups [11, 4]. The well-being of workers should be a priority concern for stakeholders and management of all organisations [12]. Human resources form the organisation and are the organisation, and there is no functionality in the organisation without the existence of people [13]. However, Gardner [1] stated that many organisations often ignore how workers conceptualize their daily experiences and concerns to be incorporated into the goals of the organisation. Occupational psychology, therefore, concentrates on people's reactions to work and adopt action plans to boost workers' job satisfaction for increased job performance [2]. The theories and basic principles of occupational psychology reviewed can be employed in any organisation to enhance the psychological health and well-being of its workers.

### **Definitions of Occupational Psychology**

Psychology in the workplace has several names such as "occupational psychology", "work psychology", "organisational psychology", "industrial psychology", "vocational psychology" and "applied psychology" [3].

These names could be used interchangeably to describe psychology in the workplace. European psychologists use the term "work psychology", those in Britain prefer to use "occupational psychology" and American psychologists use both "organisational and industrial psychology" [14, 3]. In the mid-1960s, there was a demarcation between "modern" and "classic" thinking, and industrial psychology was changed to organisational and industrial psychology by the Americans [2]. Industrial psychology has its roots from heavy-duty manufacturing industries and was widely used in the 1900 and 1920s but is now irrelevant and out-dated [4].

The exact definition of psychology and what the context should be has created a lot of disputes among psychologists [15]. The definitions of workplace psychology have been changed concurrently over the period of 100 years [3]. Occupational Psychology can be defined as the application of the principles, theories, and research ideas of the psychological discipline into the workplace [12]. Workplace psychology is the science of humans in the workplace, with the aim of improving worker's input and organisational responsibility of ensuring worker's well-being [14]. Workplace psychology has also been described by Baron and Greenberg as the field of organisational behavioural science that looks at human behaviours in all aspects of organisational settings [11]. Furnham also describes occupational psychology as the study of all areas which concern people in the workplace, such as recruitment, selection, and socialization [5].

### **A Brief History of the Evolution of Research in Occupational Psychology**

Psychology studies in the workplace have its roots traced back near to the beginning of psychology as a scientific discipline between the years 1876 and 1930 [2]. The concept of occupational psychology evolved in the mid-19th century after the industrial revolution [4]. With changes in technology and culture, there was the need for organisations to change their way of working for more effective and efficient methods that meet client's needs at the optimal level [12]. The First psychological laboratories were founded in Leipzig, Germany, by Wilhelm Wundt in 1876 [14]. In a period of 10 years, Wilhelm had established an enterprise for research and graduate training [3]. In the mid-1880s, Wilhelm trained two influential psychologists who brought about workplace psychology, namely- James Mckeen Cattell and Hugo Munsterberg [15, 16]. Hugo Munsterberg, who was one of the earliest trained psychologists in the mid-1880s and an expert in experimental psychology [15]. Hugo

initially rejected the idea that the principles of psychology be applied to the workplace, as he saw no significance of it in the workplace [16]. Nevertheless, in the early 20th century, Hugo changed his mind-set and recognized the significance and effectiveness of the principles of psychology been applied in the workplace to solve practical problems [17, 2].

In the late 19th century and the early 20th century, researchers had focused mainly on strategies to improve the task performance of workers [18]. They were not particularly concerned with human factors like workers' well-being, job satisfaction, interpersonal relationships as well as individual differences and attitudes at the workplace [19, 18]. For instance, researchers like Frederick W. Taylor outlined scientific methods to be applied to the management of workers that would help improve job performance and increase the profitability of the company [20]. These principles were based on observations and experiments [3].

Adopting systematic work approaches that involve continually testing the works done by people was sure to increase work production efficiently [14, 3]. However, there is a need to give workers incentives, pay bonuses, and profit percentages as a means to motivate them to put their best efforts into their work [21]. Taylor also prescribed other methods to promote job performance such as: measuring the time it took each worker to complete a task to gain specialisation; standardizing the working procedures by documenting optimal performances; improving workers' skills; and knowledge through training and offering rewards to deserving workers through incentive or bonus schemes [20]. There was an increase in performance as many organisations employed Taylor's methods [19]. However, many organisations failed to apply the last principle of establishing reward systems [3].

The unfair treatment of workers had severe consequences especially on the level of productivity of the workers, some of the consequences also included: dissatisfied workers, repetitive menial tasks, management distrust, and threat of losing jobs with specializations, rebellious behaviour and management resistance [18, 19]. The scientific principles of management were also applied by Henry Ford in 1920, for the line of production of automated car manufacturing [14]. Efficiency in work was gained through the application of this theory; however, human-related factors such as job satisfaction and well-being were also greatly ignored [22].

Psychology in the workplace took a dramatic change when Elton Mayo, an Australian psychologist, arrived in the United States of America in the year 1924 [23]. Elton began studies on workers' emotions rather than their job efficiency, and he titled his research "Hawthorne" studies [6, 2]. The Hawthorne research studies aimed at increasing productivity by incorporating lighting, relaxation breaks, and minimal working hours per period into the organization's culture [24]. Elton Mayo revealed that a mental condition is known as "revery" obsession, which usually results from the nature of work being repetitive, mind-numbing and difficult, with the effect of workers behaving in pathological ways [25]. The obsession of management to control material and human resources by consistently measuring work performance, intensely supervising and monitoring workers' daily activities, have the resulting effect of high workers' turnover, absenteeism, and dissatisfied workers [5, 18]. The consequence of these also includes an unhappy workforce, who is also prone to the resistance of management efforts to improve work productivity; these workers, therefore, seek support from the sympathetic workers' union [2]. It was further revealed Elton Mayo that most organisations allow their workers to use only their physical effort and not their intellect, this could affect the functionality of minds negatively, as idle minds wander and result in the development of paranoid thoughts [25]. The human relations movement was developed with the intention of limiting the number of work-related grievances of workers [23, 26]. The realization that people were treated important as their productivity was a great insight to the work psychologists [26]. The human relations movement brought great understanding and insight into workers' needs and motivation in the workplace [2]. The Hawthorne study effect revealed that when workers are being given some attention, their work output increases as well as their overall job satisfaction [28]. It was further revealed in the Hawthorne studies that when time is spent to observe workers, they perceive themselves to be worthwhile, special, and of value to their organisation [29, 28].

There are professional organizational bodies that are formed to back studies on psychology such as the American Psychological Association (APA), which was formed in 1892 and the Association of Psychological Sciences (APS), which was formed a century after the formation of APA [30]. Another organisation is the Society for Industrial and Organisational Psychology, which includes student membership with the aim of promoting the science of workplace psychology [2]. There is also, the British Psychological Society.

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Period	Major Achievement/ Event	Key Proponent(s)
1891	Mental Test development	James McKeen Cattell
1892	Formation of the American Psychological Association (APA)	Hugo Munsterberg in Harvard
1913	First Publication of Industrial and organisational psychology in the English language	American Psychologists
1914 - 1918	World War 1	Psychologists in the United States of American
1917	First Publication and issue of Journal of Applied Psychology	American Psychological Association
1930	Hawthorne Studies publication	Elton Mayo
1932	The First Modern text publication of Industrial Psychology	Morris Simon Viteles
1938	First Publication of Dictionary of Occupational Titles (DOT)	United States Department of Labour
1939 - 1945	World War 11	United States Psychologists
1945	Industrial and Business Psychology was named after the establishment of Division 14 of APA.	American Psychologists
1950	Commercial Tests explosion	United States of America
1953	Publication of a book titled "Motivation and Morale in industry" for additional focus on organisations.	Morris Simon Viteles
1953	Publication of a book titled "Motivation and Morale in industry" for additional focus on organisations.	Morris Simon Viteles
1963	Equal Pay Act was passed as law	President John F. Kennedy
1964	Civil Rights Act Title V11 was passed as law	President Lyndon B. Johnson
1970	Membership of Division 14 exceeded 1,100	
1982	Division 14 was renamed as Society for Industrial and Organisational Psychology (SIOP)	
1983	First edition of Handbook of Industrial and Organizational Psychology, Volume 1, was published	Marvin Dunnette
1990	Americans with Disability Act was signed into law	President George H. W. Bush
1990	Membership of SIOP exceeded 2,500	
1992	The second edition of Handbook of Industrial and Organizational Psychology, Volume 4, was published	Marvin Dunnette and Leetta Hough
1995	Publication of Occupational Information Network (O*NET) to replace DOT	US Department of labour /Employment and Training Administration
1997	Annual Conference celebration of SIOP's golden anniversary in St. Louis	
2008	The emergence of the SIOP new journal "Industrial and Organisational Psychology" with the first journal article publication titled "Perspectives on Science and Practice".	
2010	Publication of the 3 edition of APA Handbook of industrial and organisational psychology, Volume 3	Sheldon Zedeck
2015	Membership of SIOP exceeded 8,600	

[Source: 2, 3, 30]

## 2.1 Major Psychological Perspectives employed in Occupational psychology research

The five key disciplines of psychology have emerged over the last 120 years and are the perspectives from which occupational psychology research was drawn from [17, 3, 30, 31]. Table 2 presents these five major occupational

psychology theories, the key proponents behind these theories, and their timelines. The school of thought and the key tenets of each of the theories have also been presented in Table 2.

<b>1. Psychodynamic theory</b>	
<b>Key Proponents and timeline</b>	Sigmund Freud (1856 – 1939); Carl G. Jung (1875 – 1961); Horney K. (1885 -1952); Winnicott D. (1896 – 1971); Erich Fromm (1900 – 1980)
<b>School of Thought</b>	This theory was related to motivation, personality development, and dysfunctional behaviours. This theory considered the factors in a person’s childhood, which could have shaped the personality of the adult.
<b>Key tenets</b>	Freud developed this theory as he treated the psychological problems of people, such as anxieties, phobias, and unresolved conflicts.
<b>2. Behaviourism theory</b>	
<b>Key Proponents and timeline</b>	Key Proponents and timeline
<b>School of Thought</b>	John Watson stated that in order to understand people, their behaviours should be observed and measured.
<b>Key tenets</b>	This theory focused on the idea that human behaviours are as a result of situational and environmental factors. This idea began the theory of “Nurture versus Nature”.
<b>3. Humanism theory</b>	
<b>Key Proponents and timeline</b>	Erich Fromm (1900 – 1980); Rogers Carl (1902 – 1987); Abraham Maslow (1909 – 1970); Mihaly Csikszentmihalyi (1934); Martin Seligman (1942).
<b>School of Thought</b>	The researchers believed that people’s behaviours are cultivated by their experiences from relating with others. People are unique and have diverse qualities with freedom to choose who they are and how they relate to others.
<b>Key tenets</b>	The theory focused on the wholeness of a person which is different from their behaviour and is determined by their individual self-worth and concept.
<b>4. Trait theory</b>	
<b>Key Proponents and timeline</b>	Allport G. G. (1897–1967); Raymond Cattell (1905–1998); Eysenck H. H. (1916 – 1997)
<b>School of Thought</b>	Allport, stated that the heritable and stable traits of a person shape his or her intellectual functionality. This is a typical biological personality theory.
<b>Key tenets</b>	This theory focused on traits measurement, which is defined by habitual behaviour patterns, emotions and thoughts of an individual.
<b>5. Cognitive Psychology theory</b>	
<b>Key Proponents and timeline</b>	Bartlett (1886–1969); Piaget (1896–1980); Bandura (1925); Broadbent (1926–1993); Neisser (1928); Chomsky (1928); Baddeley (1934); Damasio (1944).
<b>School of Thought</b>	The researchers stated that to understand a person fully, one should know what is going on in their minds.
<b>Key tenets</b>	This theory focused on how people perceive things in their thoughts, how they learn information, process and remember information.

**Table 2:** Theories employed in occupational psychology research



## Research Designs and Methods Adopted For Occupational Psychology Research

Research design denotes the structure and plan of the investigation used purposely for the attainment of the research objectives [32]. Various types of methods and designs can be adopted for human behaviour research [14]. The research strategy adopted should be based on the nature of research, the study context, and psychological paradigm [30, 19]. The strategy of the research is the action plan, which should be informed mainly by the theory of psychology, from which the specific aims of the research study can be structured [30]. There is the need to adopt the appropriate research design and methods for the right information to be gathered, to provide answers to the research questions or test the hypothesis [33]. The research design spells out how the research plan will be operationalised.

Research methods used in psychological studies have been influenced controversially by the originators of psychology in a polarised manner [32]. The two common philosophical research approaches in the study of occupational psychology, as revealed by Ashleigh and Mansi, [3] are: Phenomenology / Social constructionism and Positivism / Empiricism.

The research study designs and methods adopted for a study should base on the following critical factors, including;

1. Research context
  2. The research aims and objectives
  3. Practical implications such as the availability and readiness of respondents to be investigated
  4. Resources available to conduct the study, which includes time and money.
- [34, 30].

## The concept of Phenomenology

The phenomenological approach adopts qualitative methods of collecting data such as in-depth interviews, focused group studies, and naturalistic or participant observations [3]. The perspective from this approach provides an understanding and explanation of the reasons why people have diverse experiences instead of seeking

for fundamental laws and external causes to explain people's behaviour [32]. Thus, the phenomenological research approach is interpretive and allows meaning to be derived from people's emotions, cognition, and interaction with others [30]. The phenomenological research approach states that to understand the behaviour of humans, the subjective and personal experiences of the individual should be appreciated [33, 3]. The methods of phenomenological research seek to penetrate the thoughts and emotions of a person in a personalized way than the quantitative method [35]. Although the methods of phenomenological research such as interview and focus group discussions produce data that are subjective and bias, they produce a more detailed and rich context [36, 37].

## The Key Determinants of Phenomenology or Social Constructionist

**Subjectivity:** the research is designed to adopt strategies that question people who are involved in the problem to be solved directly for their subjective opinions.

**Research Study Design:** this is usually a longitudinal study with researchers having long term view of issues as compared to positivists who take a snapshot in a time to conduct a study. This approach adopts Qualitative methods, such as in-depth interviews, focus group discussion, diary studies, or case studies.

**Data Collection:** the researcher interacts with the participants, and this can lead to the researcher influencing the participants' behaviour, which is related to the Hawthorne studies effect and participant-observer effects.

**Analysis:** Content analysis of the data can be done as themes that are different or similar could be drawn from the data collected. The data collected may seem very different. In order to create a useful taxonomy of categories or themes, there is a need for several iterations.

**Interpretation:** the results of the data collected through observation or interviews are interpreted based on the subjective view of the researcher.

**Conclusions:** Findings from this research approach are open to personal bias as they are from individual respondents and cannot be generalized. [3, 37, 36].

## **The Concept of Positivism Research Approach**

Positivism is a scientifically based approach with emphasis on the significance of laws and principles to create hypotheses that can be tested, with the aim to understand the reasons of human behaviour for future predictions [30]. This approach is characterised by controlled processes of variables for validity and reliability [3]. A scientific research approach requires a systematic and relevant data collection, observation of people objectively, and validation of adopted techniques [38]. The scientific based methods of this approach are quantification and verification of the causes associated with the behaviours [14]. The collection and analysis of objective data are done through processes such as observation, conducting experiments, and transferring the results of the data to other contexts [19, 35]. Positivism necessitates studies that are replicable, and methods within this scope are quantitative [38].

Easterby-Smith et. al., [32] stated that from the perspective of positivism, a quality research work must possess these four characteristics;

1. The research findings should possess credibility, reliability, validity, and generalization
2. The measures adopted for the study should produce the same outcomes for different occasions
3. Other researchers should reach similar observations and conclusions
4. Research should be conducted in a replicable and transparent manner.

## **Key Determinants of Positivism Approach**

**Testing of hypothesis:** to produce systematically one or two statements, which can be tested to establish whether there is a relationship between two or more variables, whether the hypothesis is true or false.

**Measurement of Variables:** anything such as attitude, performance, and event that can be observed and/or tested.

**Controlling the Variables:** having say two groups with some giving interventions such as training and the other controlled group with no intervention.

**Data Collection and Analysis:** adopting the appropriate techniques and correct methods to provide answers to the research questions.

**Repetition and Validation of Findings:** findings should be replicated and should represent the intended research aims.

[3, 2, 37]

## **Phenomenological research approach versus positivism research approach in occupational psychology research**

The appropriate research approach to use in a study of psychology has attracted a lot of controversies [35]. Psychologist has stated that Positivism does not recognise the subjective explanations of people and personal account of their own behaviour [27]. Some research psychologists also argued that the positivism approach has been embraced and has endured in the research field for far too long a period, which is enough [3]. Also, Breen and Darlaston- Jones [19] added that there is a need to oppose the enduring hegemony of positivism to provide a better understanding of psychological antecedents. The phenomenological research approach allows for the provision of solutions that are sustainable and meaningful to complex issues of humans, without any constraints from narrowly focused methods [35]. Quantitative methods are also rigorous and not appropriate to capture the complexities of social human interactions, which include the belief system, values, and cultural norms that exist presently in the world of work [37, 39].

Practically, both phenomenology and optimism approaches can be included in solving workplace psychological problems [37]. The specific approach to adopt should be determined by the problem to be solved, its context, and practicality concerns of time availability, workload, and funding [3, 39].

## **Research methods and materials for conducting occupational psychology research**

### **Observations**

The researcher can adopt observations as a means

of collecting data by observing people's behaviour in the workplace over a period of time and tracking their frequency [34]. It is essential for the researcher conducting a naturalistic or participant observation to be unobtrusive, so as not to influence the behaviour of the subject under study [40]. This method of data provides rich context data, however, the researcher should have clear objectives so as to avoid a lot of unnecessary information, which is difficult to interpret and analyse [33, 37].

### **The Focus Group Study Method**

The focus group method is an exploratory research technique for collecting data from interactive and dynamic group discussions [36]. The focus group study was introduced in 1956 by a sociologist called Merton [41]. The method of focus group discussion is one of the qualitative research methods, that are widely used for research studies. It was revealed in the study by Cooper and Schindler [42] that, a focus group study led by one or two moderators, could comprise of two to three groups to form a dyad and triad. For mini-groups the authors suggested four (4) to six (6) groups, seven (7) to ten (10) groups for small group discussions, and eleven (11) to twenty (20) forms supergroups [42]. A group size of five (5) to ten (10) participants was revealed by previous authors to be optimal [43].

### **Interviews**

The qualitative interview is the most suitable way to collect data on the experiences of personnel since the research participants had the opportunity to express themselves freely on the topic [43]. Individual interviews are usually selected over group interviews to encourage those respondents to speak freely about their needs [30]. The interviews are to be recorded and transcribed. The researcher can make handwritten notes to support the data collected for validity and to ensure the quality of the research process [44]. The member check can also be used for the transcripts to ensure the highest level of integrity in the interview process [43]. When the transcripts are compiled, they can be uploaded to software such as Quirkos and NVivo for coding, categorizing, and thematizing system. These software products for

qualitative data analysis are helpful in performing the thematic analysis for this study. Using thematic analysis gives a researcher a flexible but solid methodology with which to develop solid research results [36, 44].

### **Survey Research Design**

Researchers can adopt a survey design to conduct research on large samples of individuals for specific research objectives [38]. Surveys are carried out in a snapshot of time, adopting various methods, which include the use of questionnaires or interviews or both in a structured or semi-structured form [33, 14]. The researcher should try to avoid sampling bias, which complicates the generalization of results for the whole population [3]. The questionnaire can consist of open or closed-ended questions that focused on the subject matter and aimed to cover the objectives of the research [34]. Questionnaires are formulated with appropriate items that are valid for the achievement of the research objectives [43]. Questions should be clearly stated, with no ambiguity, having a focus on one issue at a time [3].

### **Archive or Secondary Material**

A secondary source in the form of a review of related literature can mainly be obtained from documented written and non-written materials [40]. The literature review of the area of study will be used to obtain information on the subject area, from which conceptual models will be developed [35]. The researchers can utilize secondary or archive materials as a support for the primary data collection conducted [44].

### **Discussion**

#### **Earlier Challenges of Research in Psychology**

The concept of psychology over a long period of time in the past was faced with great opposition before it was recognised as a scientific concept in line with other disciplines in the sciences [30, 3]. There was a need for psychology to be grounded in the scientific method [14]. From the early 1990s, legislative bodies like the court systems were more concerned with scientific-based testimonies and evidence [2]. Psychology, as a discipline, has been derided upon by more complex sciences such as mathematics and physics [30]. This is because with



the study of psychology, it is sometimes impossible to provide tangible evidence to back psychological claims, and it is also challenging to measure innate processes in a psychological study [3].

It was revealed by Fowers and Richardson that most studies conducted in psychology often ignores authentic and actual differences that define various features of people's identity [45]. The differences in the behaviours of humans resulting from diverse factors are to be considered in psychological research [5]. Behavioural differences make it very complex to conduct a study on humans and their mental processes; thus, it makes psychology a less defined subject as compared to other scientific disciplines [3]. What cannot be seen, felt, heard, or smelled cannot be proven to exist, and any claim is simply a theoretical assumption which has no validity [37, 2]. There are thus no absolute truths which question the concept of both empiricism and positivism [14]. Conversely, social realists, and constructionists are concerned with the diversity of individuals' perception and thinking and argue that there is relativity in people's reality [3].

Over the years, some social critics and observers also questioned the objectivity of occupational psychology, as it relates to only the needs and values of workers rather than managerial objectives [31, 14]. In contrast to these arguments and suspicions, one of the renowned social observers named Arthur Kornhauser, in the early 1920s and 1950s, gave immense support to the idea that the principles of psychology should be applied in the workplace for the benefits of workers rather than management [4]. Research in occupational psychology was categorized by some researchers under important, unimportant, fascinating, shoddy, or well-designed research [10]. As can be seen, the discipline of psychology is associated with a diverse perspective, which makes it more complicated as a subject area of study in the organisation.

### **Scientific Considerations in Conducting Research in Psychology**

Psychology as a scientific discipline is the study of human behaviours based on scientific principles [46].

Sir Isaac Newton (1643 – 1727), stated that research in psychology should employ scientific methods and be subjected to the principle of reasoning as well as based on observation, empirical evidence and be measurable [14]. The interpretation of data collected on psychological research should utilize rationality for constructive arguments to either argue for or against existing knowledge [30, 3]. Scientific methods such as systematic and careful observation, development of “testable” hypothesis, data collection, and analysis with a logical cohesion between data collected and its interpretation, were recommended to be the basis of a psychological research study [37, 2]. There is a need for evidence-based results to support any claim to make psychological research valid and scientific [30].

The study of psychology as science should aim at understanding knowledge as depicts the meaning of scientific, which is derived from the Latin word “Scientia” [3]. Research in psychology, as stated by Landy and Conte [2] should be conducted by applying pragmatic principles of science to make the research work more important, and the research should be designed appropriately. Ashleigh and Mansi [3] also added that the principles of empirical science, with observations made objectively through experiments and the principles of positivism, which is applying logic and reasoning to arguments, should be applied in psychological research to verify or falsify data rationally.

### **Conclusion**

This paper explores the past research on occupational psychology. A brief description of the evolution of occupational psychology was given, with the important years, the evolution took place. Earlier challenges in conducting research in occupational psychology were presented with some scientific considerations to be employed in conducting research in occupational psychology. This paper also presents the key perspectives of psychology that are employed in occupational psychological research. The historical review indicated that research work on occupational psychology has the potential of achieving something impactful for the accomplishment of improved psychological health and wellbeing of workers. This study also provides an

understanding of the research context, gives insight into the research conduct and research methods that could be applied for a better appreciation of the current research study. This study will be added to existing knowledge and be a form of reference on occupational psychology in the construction industry, for academicians, students, and future researchers.

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