## Differentiating Theories for the Human involvement in Neuroscience Patrono Enrico Salvatore\*

## Abstract

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X . : Neuroscience; Psychological sciences; fMRI techniques; Mechanistic explanations

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For thousands of years, philosophy and science have focused heavily on the idea that a person's soul or non-physical essence is what makes them who they are. Some academics have lately proposed that agency detecting cognitive processes are hard-wired in all cultures and share the belief in souls. But more than just a means of comprehending other minds, faith in the existence of the soul aids individuals in explaining the experiences of their own minds. Subjective experience appears to appear magically whenever one thinks, feels emotion, or exercises free will and is not obviously connected to any physical event [1, 2]. It appears that humans are formed of two parts: mind and body since the act of re ecting reveals a qualitative distinction between the mental and the physical. Although the origin of the body's physical makeup is intuitively recognised, the origin of the mind is less certain; in fact, the mind appears to be the product of some force that is not physical, and the idea of the soul is frequently invoked as the source of this intangible aspect of self.

Physical explanations for the mind could jeopardise the belief in the soul, to the extent that it serves as a metaphysical justication for the mind. e current study investigates the impact of neuroscience ndings that suggest a physical origin for the mind on soul belief. Numerous psychological processes that are considered to be essential to the human experience, such as moral judgements, emotion, and personal agency, have been linked to brain activity in fMRI research [3]. fMRI study appears to nally o er concrete proof that the mind is rooted in the physical, accompanied with striking visuals of the brain "lighting up" during mental activity. Additionally, the appeal of fMRI research transcends the academic community and has attracted the interest of the general public. Even though the inclusion of neuroscience material in psychology study does not contribute to the body of evidence supporting the hypothesis, laypeople show increased interest and belief in it. General perceptions of the soul may be signi cantly impacted by the widespread adoption of fMRI as an explanatory technique. Studies on causal discounting show that several theories for the same phenomenon can compete with one another cognitively, so that growing conviction in one causes decreasing belief in the other [4]. Reading scienti c explanations for signi cant phenomena, for instance, tends to diminish faith in religious explanations, but when scienti c explanations are presented as inadequate, they tend to increase faith

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pinpoint how brain activity generates the experience of these mental events. Regarding the concept of the soul, this question may have very signi cant rami cations [5, 6]. If fMRI's ability to record brain activity helps to demystify the mind, then being aware of an explanatory gap might only serve to re-mystify it. Indeed, although some scientists cite unsolved brain phenomena to support a materialistic theory of consciousness, others defend dualism and a spiritual approach to the mind by citing unexplained neurological phenomena. An seeming research, so ware engineering, materials science, medical literature, or psychology, in addition to large-scale studies about worldwide gender imbalance in science. According to the category description from Web of Science, "covers information on all aspects of basic research on the brain, neural physiology, and function in health and illness," neuroscience, or the scienti c study of the brain and nervous system, is a tremendously active and increasing research topic [7, 8]. Neurotransmitters, neuropeptides, neurochemistry, brain development, and neural behaviour are the main topics of study. Resources on the neuro-endocrine, neuro-immune, somatosensory, motor, and sensory-motor integration systems, as well as on nervous system illnesses, are also covered. As a result, it is an interdisciplinary

eld that works in tandem with many other disciplines and has an expanding in uence on modern science and society. No publication, to our knowledge, has conducted a quantitative analysis of women's participation in contemporary neuroscience. Several scientometric analyses without gender distinctions have concentrated on the study of neuroscience production in various nations, such as India, Italy, Sweden, or China.

Women have made major contributions to the advancement of neurosciences for many years, yet there is still a sizable gender gap in the eld today. Only one out of every ve papers published in the prestigious journal Nature Neuroscience had a female corresponding author in 2006, and the editorial's authors expressed concern about whether this asymmetry was simply a re ection of reality or whether it "could also contribute to perpetuating the problem." ere has been a considerable interest in promoting their contribution to current neuroscience since Women in Neuroscience, an international organisation founded in 1980, "whose principal purpose is to encourage the professional growth of women neuroscientists," was founded [9, 10]. e Society for Neuroscience prioritises this objective and is now working to increase the number of women working in neuroscience, both in academia and research.

We propose a bibliometric analysis of the most signi cant neuroscience publications in order to quantitatively analyse the current participation of women in scienti c production in this research eld, given the signi cance of knowing what women's representation is

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