

The Controversy Over Physicalism vs. Non-physicalism: Which One Is More Supported?

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Abstract

Physicalism and non-physicalism are the two dominant ideas currently being used to propose explanations for consciousness. However, a final consensus for an explanation of the basis of consciousness has not yet been achieved. This study analyzes the current viewpoints of physicalism and non-physicalism and the weaknesses of these viewpoints in order to determine which argument, if any, is more likely to comprise a definitive explanation for consciousness in the future. It assesses the popularity of each argument and the possible future direction for the overall debate. The study results suggest that physicalism is more popular than non-physicalism, although non-physicalism is expected to grow as an argument in the future in the debate. This indicates that a new explanation for consciousness that incorporates the ideas of both physicalism and non-physicalism may be developed.

Key Words: consciousness, physicalism, non-physicalism, popularity, debate

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Introduction

The topic of consciousness remains a highly controversial and ongoing debate in fields ranging from neuroscience to philosophy. Despite numerous discussions, scholars from various disciplines have yet to reach a final consensus on what consciousness is and how it functions. Therefore, it is crucial to assess the current arguments surrounding consciousness to determine the future direction of this controversy and make progress toward a consensus.

There are two main dominant explanations for consciousness: physicalism and non-physicalism (Baysan and Wildman, 2024; Mørch, 2023). Physicalism posits that consciousness originates from "physical" processes, while non-physicalism holds that consciousness is a phenomenon that is not physical in nature and transcends physical processes. Certain scholars support physicalism because it is easy to conceive. That is, it is easy to attribute consciousness to biological processes such as neural signals in the brain. Meanwhile, there are other scholars who support non-physicalism because, although it is not as easy to conceive, researchers have not been able to identify the physical processes responsible for consciousness conclusively (Mørch, 2023). Overall, the plausibility of both arguments has led to a sort of "stalemate" in the ongoing debate between physicalists and non-physicalists.

There are several potential benefits to conducting an in-depth assessment of the debate of physicalism vs. non-physicalism. Firstly, it can allow for better insight into the current arguments for each idea. There are many sub-ideas within the ideas of physicalism and non-physicalism, so understanding these sub-ideas can allow for a better evaluation of the overall status of the debate. Secondly, an assessment can help reveal the weaknesses of each main argument. Learning about these weaknesses can help in evaluating which argument is stronger at present. Thirdly, it can help determine the overall popularity of each argument and, based on the popularities and relative strengths of each argument, aid in predicting the future of the debate.

The goal of this literature review is to assess the current research on physicalism and non-physicalism and determine the overall popularity of each argument. This study is not just an academic exercise but a crucial step in advancing research into these arguments and guiding the future direction of the debate between physicalism and non-physicalism. In a time when consciousness is yet to be fully understood, it is essential to conduct studies that will help in arriving at a conclusive theory for understanding this phenomenon.

Present Issues of Physicalism vs. Non-physicalism Debate

One of several issues at the center of the debate between physicalism and non-physicalism is the relationship between the mind and the body (Zietsch, 2024). This relationship concerns how mental processes interact with physical processes. It is generally accepted in the literature that mental processes can drive physical processes and vice versa. However, when consciousness is at play, its place in this interaction is not entirely clear. For one, it is unknown whether the mind and body are one single entity or two separate entities (Zietsch, 2024). This difference can affect where consciousness resides in humans. Additionally, due to the controversy surrounding

physicalism, it is unknown how to exactly classify consciousness as a mental process, as it may or may not be driven by physical processes (Mørch, 2023). The mind-body problem of consciousness creates a dilemma over where consciousness resides in humans and how it interacts with the body.

Another issue in the debate of physicalism versus non-physicalism is the nature of reality itself (Cutter, 2024). Physicalists believe that consciousness is a physical process because they believe that everything is physical in nature and can be explained by physical processes (Baysan and Wildman, 2024). That is, the physical forces of weak and strong interactions, electromagnetism, and gravitation can explain every phenomenon in existence. Non-physicalists, on the other hand, are reported to believe that non-physical entities can exist, which may be why they believe that consciousness can be non-physical (Cutter, 2024). In other words, non-physicalists believe that there are certain phenomena that cannot be ontologically reduced to a physical medium and, instead, supervenes it. This fundamental difference in viewing reality between physicalism and non-physicalism creates a deep divide between the two viewpoints.

One more issue in the debate of physicalism versus non-physicalism is the types of methods used to assess each viewpoint. Consciousness is demonstrated to be difficult to measure objectively because of its very subjective nature. In the case of physicalism, neural correlates that can be linked to consciousness can be identified (Mørch, 2023). However, it is difficult to solely attribute neural activity to consciousness and prove that consciousness is only the result of this activity. In the case of non-physicalism, consciousness is usually only measured through the subjective conscious experiences of individuals and theories based on these experiences (Mørch, 2023). The variation in the objectivity of the methods used to support each argument is one more key characteristic of the debate between physicalism and non-physicalism.

Main Arguments for Physicalism

A key argument for physicalism is the mind-brain identity theory. This theory states that brain states do not drive experiences but that they are identical (Zietsch, 2024). This, in turn, implies that experience is, in a sense, a brain state. The mind-brain identity theory is used to support physicalism because if conscious experiences are brain states, then they must be physically based on brain activity that gives rise to such brain states. A line of logic that the mind-brain identity theory follows is that neural processes that improve overall fitness are adaptations. A part of these neural processes is the same as conscious states, meaning that conscious states are adaptations that are physically rooted in the biology of individuals.

Another key argument being used for physicalism is the theory of illusionism. According to this theory, conscious experience is not a real phenomenon, but it is rather an illusion that individuals believe to exist (Frankish, 2016). Proponents of illusionism argue that consciousness is an illusion that is caused by the brain's physical processes, and there is no non-physical basis at play. Illusionism is a significant argument in the realm of physicalism mainly because it is able to eliminate many of the dilemmas that exist surrounding consciousness (Chalmers, 2018). By denying the existence of consciousness altogether, illusionism is able to avoid being subject to many concerns that would be present with other theories of consciousness (Chalmers, 2018). However, despite the significance of illusionism, its popularity is not very high due to the controversial action of denying the existence of consciousness. Many scholars are skeptical of ruling out the existence of consciousness completely and are, therefore, hesitant to support the idea of illusionism.

One more key argument being used to support physicalism is the anti-zombie argument (Baysan and Wildman, 2024). This argument follows a line of logic that supports the conceivability of physicalism. In the argument, an anti-zombie is defined as a clone of a conscious individual who has the ability to have subjective, conscious experiences. The logic for the anti-zombie argument is as follows: 1. It is possible to conceive an anti-zombie. 2. Anything that is conceivable is metaphysically possible. 3. If it is metaphysically possible for antizombies to exist, then the consciousness of subjective experiences is a physical property. 4. Thus, the consciousness of subjective experiences is a physical property (Baysan and Wildman, 2024). The anti-zombie argument is relatively popular because it uses logic to make its argument. However, the conception of the anti-zombie and the linking of consciousness of subjective experiences to an antizombie is controversial. Overall, however, the anti-zombie argument is able to use reasoning and logic to support the idea of physicalism.

Main Arguments for Non-Physicalism

A key argument for non-physicalism is dualism. Dualism is the idea that the mind and body are both pure in essence and have a causal relationship (Mørch, 2023). Proponents of dualism are reported to possibly claim that psychophysical laws, which are laws that connect the mental realm to the physical realm, exist in that they depend on how physical states affect consciousness, which, in turn, creates physical effects. There are two main types of dualist views that currently exist: substance dualism and property dualism. Substance dualism is the more traditional view held by dualists; it holds that the mental and physical realms are two different entities (or substances). It has the advantage of being in line with conceivability arguments of non-physicalism and unity arguments of consciousness. Meanwhile, property dualism holds that while the mental and physical can be two

types of properties, they can be part of the same group (or substance). Property dualism has the advantages of being somewhat simpler and being able to explain why the phenomenon of consciousness depends on the brain, making it more appealing to some philosophers compared to substance dualism (Mørch, 2023). Overall, dualism is considered to be intuitive because the 'thesis of revelation,' which is the claim that the fundamental aspects of qualities that compose consciousness are shown through experiences, is naturally a part of the ordinary conception of experience, and the intuition of dualism can be inferred through this (Liu, 2021). This makes dualism the dominant argument of non-physicalism.

Another argument being used for non-physicalism panpsychism. The idea of panpsychism is that consciousness is not a phenomenon exclusive to living organisms but is present throughout the world (Mørch, 2023). This indicates that even non-living entities have a form of consciousness, and this consciousness can take on the form of full consciousness or proto-consciousness, which is a nonphysical precursor to full consciousness. Panpsychism originates from the idea that consciousness can be "de-psychologized," which means that it does not have to be defined as a psychological state (Frankish, 2021). As a result, panpsychism does not have to be restricted to entities that are capable of having psychological states. Panpsychism is regarded as a theory that proposes a clever way of explaining how a de-psychologized form of consciousness can fit into the world (Frankish, 2021). Because of this, panpsychism has grown in popularity over the years as a non-physicalist theory as it goes beyond the traditional explanations of physicalism.

One more argument being used to support non-physicalism is the zombie argument (Baysan and Wildman, 2024). This argument is essentially the opposite of the anti-zombie argument discussed in the previous section. In the zombie argument, a zombie is defined as a clone of a conscious individual who does not have the ability to have subjective, conscious experiences. The line of reasoning for the zombie argument is as follows: 1. It is possible to conceive a zombie. 2. Anything that is conceivable is metaphysically possible. 3. If it is metaphysically possible for zombies to exist, then the consciousness of subjective experiences is a non-physical property. 4. Thus, the consciousness of subjective experiences is a non-physical property (Baysan and Wildman, 2024). As with the anti-zombie argument, the zombie argument is popular because it uses logic to make its argument. However, it also faces similar controversy surrounding the conception of a zombie and the linking of consciousness of subjective experiences to the zombie. Because of this, the zombie argument is treated much the same as the anti-zombie argument and has about the same popularity.

Weaknesses of Physicalism

One potential weakness being used for physicalism lies in the knowledge argument. This argument claims that what is known about consciousness cannot be concluded from any physical knowledge. In other words, no matter how much knowledge is obtained about an organism's physical characteristics, it is impossible to deduce what it is like to be that organism (Mørch, 2023). This argument is exemplified by an experiment of thought concerning a scientist named Mary, who has not had the experience of seeing any colors due to growing up in a room of black and white. However, Mary had spent her whole life reading about colors from black and white books in her room. One day, Mary is released from the room and sees a rose for the first time, and says, "So this is what it's like to see red." Mary learns a new fact about the color red despite having all of the physical knowledge about the color through her readings (Mørch, 2023). This exemplification helps demonstrate the knowledge argument using an experience that many humans can have, making it widely appealing to many.

Another potential weakness of physicalism lies in the explanatory argument, which states that it is impossible to explain the phenomenon of consciousness using physical terms (Mørch, 2023). This argument can be exemplified by David Chalmers's easy problems and hard problems of consciousness. The easy problems of consciousness relate to not explaining consciousness itself but rather the functions associated with it (Chalmers, 2018). Modern neuroscientific methods have been able to explain these functions by simply identifying the mechanism(s) responsible for them. However, such methods have not been able to resolve Chalmer's hard problem of consciousness. This problem relates to why the consciousness of subjective experiences is associated with these functions at all (Chalmers, 2018). Because standard neuroscientific methods have not been able to resolve this problem, it invites other fields that may use non-physical theories that can explain consciousness. Physicalists have responded to this problem by assuming that physical states constitute conscious ones. However, this assumption does not explicitly show that this is the case, helping add to the popularity of the explanatory argument.

Yet another potential weakness of physicalism lies in the many-subjects argument. The many-subjects argument concerns how physicalism explains the experiences of conscious beings in one's vicinity (Cutter, 2024). The logic of this argument states that the only conscious being in one's vicinity is oneself. However, if physicalism was true, then many conscious entities would be in that individual's vicinity, all with similar conscious experiences. This is untrue as individuals can have unique experiences, and therefore, physicalism is false. This line of reasoning can come in many forms. One form is the "threat of conscious parts" argument, which states that different parts of the body are conscious if physicalism holds true. Another form

is the "threat of conscious coinciders," which states that everything that an individual coincides with, including inanimate particles, is conscious if physicalism is true. One more form is the "threat of conscious person candidates," which states there will be many material objects that are shaped like people who have consciousness in one's vicinity if physicalism holds true (Cutter, 2024). Physicalists can attempt to avoid the possibility of many subjects being present in one's vicinity in order to circumvent the many-subjects argument. However, the many-subjects argument is still considered to be a significant drawback of physicalism.

One more potential weakness of physicalism lies in the conditions of the anti-zombie argument in particular (Baysan and Wildman, 2024). It turns out that connecting the possibility of antizombies to the physical nature of consciousness creates a false connection. Anti-zombies can be defined as a bare or minimal physical duplicate, with the difference being that anti-zombies of a bare physical duplication do not have any additional non-physical properties but could have additional physical properties, while a minimal physical duplicate does not have any additional properties at all. Additionally, creatures must possess at least one of both physical and non-physical consciousness of subjective experiences in order for them to have a complete conscious awareness of these experiences. Anti-zombies that are bare physical duplicates may have a physical form of consciousness of subjective experiences, but they must also have a non-physical form of this consciousness in order to have their complete conscious awareness of these experiences, making the antizombie argument not hold. The same will also happen if anti-zombies are defined as a minimal physical duplicate because they will have the non-physical form of this consciousness naturally, meaning that the anti-zombie argument still does not hold (Baysan and Wildman, 2024).

Weaknesses of Non-physicalism

One reported weakness of non-physicalism is the interaction problem of dualism. This problem states that the interaction between physical and mental cannot be explained because they are fundamentally two different substances (Mørch, 2023). It implies that the interaction between physical and non-physical entities can be eliminated for a reason pertaining mainly to philosophy rather than science. The interaction problem does face the counter-argument that physical causes and effects cannot be explained either, meaning that the interaction between physical and non-physical entities does not have to be explained either (Mørch, 2023). However, that has not stopped some from believing that cause and effect cannot be explained. Because of this, the interaction problem has gained considerable popularity, creating one weakness for non-physicalism.

Another reported weakness of non-physicalism lies in the problems of panpsychism. One of these problems lies in the emergentist viewpoint on panpsychism. This viewpoint has two forms: strong emergentism and weak emergentism (Goff, 2024). Strong emergentism conveys that a specific arrangement of conscious particles will cause the whole system to be conscious because it is a "law of nature" (Goff, 2024). Weak emergentism, on the other hand, states that such a law does not fully explain consciousness and that the phenomenon emerges through another means (Goff, 2024). The strong emergentist viewpoint faces the causal exclusion problem, which states that any event that is physical will have a cause that is also physical nature (Goff, 2024). Since neurophysiological events are physical in nature because of neural signals, it can be argued that consciousness is a physical neurophysiological event that has a physical cause. Meanwhile, weak emergentism faces the problem of physicalism potentially being involved, which can undermine the nonphysical nature of the panpsychism theory (Goff, 2024). On the other hand, panpsychism has the additional possible problem of not being able to take the physical world into consideration (Aleksiev, 2021). This has been called the "missing entities problem" by Damien Aleksiev, and it cannot explain entities such as quantum states and space-time. Overall, because of these problems, some scholars are less in favor of panpsychism because of the emergentist view.

another weakness of non-physicalism lies in the epiphenomenalist component of dualism (Mørch, 2023). According to this component, the connection between the physical consciousness is one-way; that is, physical causes can bring about psychological effects, but psychological causes cannot create physical effects. Scholars contend that conscious experiences can cause physical effects. For example, consciously perceiving a color allows an individual to say what that color is. Additionally, some scholars say that if epiphenomenalist dualism is true, then people's lives would be completely undermined as their entire view of the world would turn out to be false. Epiphenomenalists can argue that the world may not appear as it may seem to individuals. However, despite this counterargument, epiphenomenalism is viewed with great skepticism because of its radical implications for how individuals perceive the world (Mørch, 2023).

One more weakness of non-physicalism lies in the zombie argument. This weakness follows a very similar logic to the weakness of the anti-zombie argument described in the previous section. This weakness is that connecting the possibility of zombies to the physical nature of consciousness creates a false connection (Baysan and Wildman, 2024). Like with anti-zombies, zombies are defined as bare or minimal duplicates. A duplicate zombie has all of the physical characteristics of the original zombie, which is conscious in theory, but none of which may form the basis of consciousness. However, this does not rule out the possibility of physical consciousness because

there is still a chance that there are other physical properties that are not being accounted for that are bringing about the consciousness in the original zombie. As a result, the linking premise in the zombie argument cannot hold (Baysan and Wildman, 2024). As a result, the zombie argument has reduced in popularity because of the connections it makes.

Overall popularity of Physicalism & Non-physicalism

The argument of physicalism is, by and large, the more popular argument in the debate of physicalism vs. non-physicalism. It is not only supported by most non-neutral articles included in this review but also is explicitly mentioned as the more dominant argument (Zanotti, 2023; Mørch, 2023). In addition to being easier to conceive, as discussed in the introduction, physicalism may have this popularity due to the fact that it is largely grounded in empirical research. While non-physicalism relies heavily on theories that are mostly philosophical in nature, physicalism is grounded largely on theories that are based on the science of how the brain works. This objectivity likely helps add to the popularity of physicalism. Further, many developments in history, such as understanding diseases, have been a result of creating physical explanations. This can make physicalism more appealing, as physical explanations have already had great success in the past.

Meanwhile, non-physicalism is the less popular argument in the debate. It is supported by fewer non-neutral articles in this review and is implied to be the less dominant argument (Zanotti, 2023; Mørch, 2023). As discussed earlier, non-physicalism is more difficult to conceive and is more philosophical in nature. Because of this, much stronger reasoning and logic are needed to support the argument of non-physicalism. However, even then, many scholars are still hesitant to fully adopt the ideas of non-physicalism. Despite this hesitancy, there is still support for non-physicalism. Certain scholars are full proponents of non-physicalism (Zietsch, 2024). Others, on the other hand, have incorporated non-physicalist ideas into explaining consciousness, even if these ideas do not fully comprise the explanation (Baysan and Wildman, 2024). Overall, while nonphysicalism is not the dominant argument in the debate of physicalism vs. non-physicalism, it is still garnering support in the debate.

Based on the current literature available on the debate of physicalism vs. non-physicalism, it is likely that the popularity of each argument will shift in the future. Although physicalism is the dominant argument in the debate, the several weaknesses of physicalism raise concerns over whether it can solely and fully explain consciousness. Non-physicalism helps address these concerns; however, non-physicalism has proven to have its own weaknesses as

well. Because of this, it is possible that popularity may shift to non-physicalism, but non-physicalism would still not be the most popular argument. Instead, it is likely that scholars will come to a consensus with a 'hybrid' explanation for consciousness that combines elements of both physicalism and non-physicalism. This explanation would combine the strengths of both arguments and create a new perspective that scholars on both sides of the debate on the origins of consciousness can agree upon, helping to arrive at a conclusive understanding of the basis of consciousness.

Summary and Outlook

The literature surrounding the debate of physicalism vs. nonphysicalism demonstrates that there are a vast number of theories being used to explain consciousness, ranging from the mind-brain identity theory, illusionism, and the anti-zombie argument for physicalism, and dualism, panpsychism, and the zombie argument for non-physicalism. Currently, the literature suggests that physicalism is the argument that is more supported by scholars. Although physicalism and non-physicalism both have their weaknesses, the empirical basis that physicalism has aided the argument significantly in terms of its popularity, while the largely philosophical basis of the argument of non-physicalism hinders it from being as popular. However, despite this hindrance, the argument of non-physicalism is growing in popularity, and it may be used alongside physicalism to provide a conclusive explanation for consciousness. It is, therefore, unlikely that either of the arguments will cease to be supported in the future.

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