



Does Free Will Really Exist? The Motivational Congruence Theory's Perspective

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Abstract

Free will plays a critical role in human motivation. Recent advances in science and technologies have had a significant impact on free will. They have raised serious concerns regarding the threatening effects of such advancements on perceived autonomy. However, there is still a longstanding debate on the existence of free will, known as the problem of free will. Philosophers have provided contrasting views regarding the existence of free will and its relationship with causal determination and mental causation problems. These problems are related to the underlying dualistic approach between mental and physical factors. Similar to the philosophy literature, the motivation literature is concerned with the problem of free will and its influence on motivation and performance. Cognitive evaluation and self-determination theories are the most renowned theories which assert the effect of autonomy (i.e., free will) on intrinsic motivation. However, these theories have mainly focused on the effect of the need for autonomy as an underlying driver of intrinsic motivation. They have not been able to address the fundamental question about the existence of actual free will and its effect on motivation and performance. This is mainly due to their dualistic approach in the form of intrinsic/extrinsic motivation dichotomization. Motivational congruence theory addresses the problem of free will and substantiates its effect by going beyond such a dualistic approach and resolving the related problems of mental causation and causal determination. The theory does this by taking a cotextualist and dialectical approach to the interaction between intrinsic and extrinsic motivational mechanisms and context.

Keywords Free will · Compatibilism · Incompatibilism · Causal determination · Mental causation

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Introduction

Free will plays a critical role in human motivation and behavior (Ryan & Deci, 2022; Wertenbroch et al., 2020). It is defined as a type of volition that endows one with the capability to “choose otherwise” in a voluntary manner (Kane, 2012a) and is linked with the ability to mentally influence the outcomes (Bernstein & Wilson, 2016). Other constructs, including autonomy, self-determination, and choice are used interchangeably to address free will (Duus-Otterström, 2011; Ekstrom, 2012; Holton & Will, 2006; Patall et al., 2008). In recent years, advances in science and technology, including artificial intelligence and machine learning have made the issue of free will even more crucial (André et al., 2018; Lavazza, 2022). These advancements have created conditions that seem to threaten the individuals’ perceived autonomy and free will in significant ways (Sunstein, 2016). However, there are still fundamental controversies regarding free will’s actual existence and effect in philosophy and motivation literature.

In philosophy, there has been a longstanding debate on the existence of free will, which is known as the problem of free will (Fagiano, 2022; Pereboom, 2022). Philosophers have provided different perspectives regarding the actual existence and effect of free will on the physical world (van Miltenburg & Ometto, 2020). The free will problem is linked with causal determination (van Miltenburg, 2022) and mental causation (Batthyany, 2009; O’Connor, 2000; Wegner & Wheatley, 1999) problems. Causal determination refers to the notion that physical events are causally linked with one another according to the laws of nature and prior states of the physical world (Steward, 2015). Mental causation, in contrast, refers to the ability of mental factors to causally influence the physical world through one’s internal states, such as intrinsic desires and motivations (Kim, 1995, 2007; Sartorio, 2016). It is the essential foundation for free and voluntary decision making and behavior (Sinnott-Armstrong, 2021). In other words, for an act to be freely willed, the individual’s mind must have a causal impact on its occurrence (Bernstein & Wilson, 2016).

Causal determination denies mental causation by assuming that mental factors are separate and independent substances which cannot have causal effects on the physical world (Hohwy, 2004; Maoz & Sinnott-Armstrong, 2022). The problems of causal determination and mental causation stem from the dualistic view on the relationship between the mind and the physical world (Maoz & Sinnott-Armstrong, 2022; O’Connor, 2001; Swinburne, 2013).

Similar to the philosophy literature, the motivation literature has long been concerned with the issue of free will and its influence on human motivation (Deci & Flaste, 1995). Most prominently, the two theories, including cognitive evaluation theory and self-determination theory consider autonomy (i.e., free will) as one of the basic needs that underlie intrinsic motivation (Patall et al., 2008; Ryan & Deci, 2022). However, these theories have mainly focused on perceived autonomy rather than the actual one and reiterate its positive effect on intrinsic motivation (Deci & Ryan, 1985; Fang et al., 2020; Ryan & Deci, 2000, 2020, 2022; Ryan et al., 2015; Ryan & Vansteenkiste, 2023). In fact, these theories do not address the fundamental question regarding the actual existence and effect of free will (Baumeister & Monroe, 2014; Feldman, 2017; Wertenbroch et al., 2008). That is, the problem whether free

will actually exists and influences human motivation and behavior is still unresolved from an ontological perspective (Werthenbroch et al., 2008, 2020).

Motivational congruence theory (Hendijani, 2021; Hendijani & Steel, 2020, 2022, 2023) provides a novel perspective on the problem of free will and resolves it by solving the fundamental problem of mental causation in human motivation (Hendijani, 2023). The theory does this by going beyond the prevailing dualistic perspective in the motivation literature and considering a contextualist and dialectical stance on the relationship between motivational mechanisms and the context. The interaction between these motivational mechanisms and the context produces an overall motivation in a dialectical manner and gives rise to action (Hendijani & Steel, 2023).

In the following sections, the author first reviews the literature related to free will, causal determination, and mental causation from a philosophical perspective. Then, she explains free will in the motivation literature. Finally, motivational congruence theory and its perspective towards free will is discussed. The author concludes the discussion by providing implications for motivation and its related literature.

Free Will, Causal Determination, and Mental Causation

Free will is one of the critical issues in philosophy (Pereboom, 2022; Tierney, 2023). Philosophers have defined and interpreted it in many different ways (Kane, 2012a). In Descartes's view: "the will (*voluntas*), or free choice (*arbitrii libertas*) ... simply consists in this: that we are able to do or not do (that is, to affirm or deny, to pursue or avoid); or better, simply in this: that we are carried in such a way toward what the intellect proposes for affirmation or denial or for pursuit or avoidance, that we feel ourselves determined to it by no external force" (Descartes, 1996; Pereboom, 2022, p. 2; Ragland, 2016, p. 8). Ayer (1982, p. 15) provides another explanation: "When I am said to have done something of my own free will it is implied that I could have acted otherwise." In Williams' perspective, free will is the characteristic of something in the form of "the effect that agents sometimes act voluntarily, and that when they do so they have a real choice between more than one course of action; or more than one course is open to them; or it is up to them which of several actions they perform (Williams, 1995, p. 5)." In a more recent definition, Kane defines free will as the condition that one has the ability to do "otherwise voluntarily (or willingly), intentionally, and rationally" (Kane, 1996, 2012b, p. 476).

There is a controversial debate regarding the existence of actual free will, which is known as the free will problem (Fagiano, 2022; van Miltenburg & Ometto, 2020). The problem of free will is tightly linked with the causal determination (Pereboom, 2022) and mental causation (Yablo, 2003) problems (Sartorio, 2016). Stemming from Leibniz' principle of sufficient reason, causal determination indicates that the physical events are causally linked with one another in a predetermined manner and therefore, mental events *qua* mental have no causal efficacy on the physical outcomes (Steward, 2015). In other words, causal determination rules out mental causation (Kim, 1995; Sinnott-Armstrong, 2021) and its role in influencing the outcomes in the physical world (Bernstein & Wilson, 2016; Kim, 1993). The problems of causal determination and mental causation arise from the dualistic approach towards the

interaction between the mind and the physical world (O'Connor, 2000, 2001; Maoz & Sinnott-Armstrong, 2022; Mudrik & Maoz, 2015; Swinburne, 2013). By considering mind as a distinct, independent, and separate factor from the physical world, such dualism creates the fundamental question about how these two distinctive and independent factors (i.e., mind and the physical world) can interact and intermingle with each other (Sinnott-Armstrong, 2021).

There are two main perspectives regarding the problem of free will, including the compatibilist and incompatibilist perspectives (van Miltenburg & Ometto, 2020). The compatibilist perspective argues that free action can exist even if casual determination holds. That is, an individual is still able to act freely even if the world is causally governed by certain predetermined laws of nature. The incompatibilist perspective, in contrast, posits that free will is not compatible with causal determination and can exist only if causal determination is defied (Clarke, 1995, 2010; O'Connor, 1995, 2001).

As previous scholars have argued, the compatibilist approach has several limitations (Duus-Otterström, 2011; Kane, 2012b). First of all, it mainly focuses on the issue of freedom in general rather than the freedom of will. In fact, the main question posed in many compatibilist arguments is related to whether “freedom” in general rather than freedom of will is compatible with causal determinism (Kane, 2012b). There are many types of freedom that are compatible with determinism and therefore, are not directly relevant to the issue of free will (Maoz & Sinnott-Armstrong, 2022). Some examples are freedom from coercion, addiction, compulsion, and political oppression which exist under determined conditions and are not related to the problem of free will (Kane, 2012b).

Second, freedom in compatibilist view is mostly interpreted as the freedom of action rather than freedom of will (Galeazzi & Rendsvig, 2022; List, 2014; Wertenbroch et al., 2008). Free will relates to the freedom of choice and decision making (Batthyany, 2009; Donagan, 1987; Holton & Will, 2006; Libet, 1999; Pereboom, 2022). Since the focus in free will problem is about the freedom of will (i.e., an internal desire and volition) and whether it actually exists in its ontological form, the compatibilist perspective does not directly address this problem. In fact, focusing on the freedom of action oversimplifies the problem of free will (Kane, 2012b). This is partly due to the fact that freedom of action deals with what a person can do at one specific point in time.

Freedom of will, however, is different from freedom of action. For example, under certain conditions, the individuals might seem to act freely, but their choice architectures (i.e., sets) are previously manipulated so that they are implicitly forced to choose a certain option or reach a specific outcome (Schmidt & Engelen, 2020). Nudging techniques are examples of creating such controlled conditions where individuals are free to choose, but their choices occur in a predetermined and restricted way (Bucher et al., 2016; Marchiori et al., 2017; Schmidt & Engelen, 2020; Thaler & Sunstein, 2009).

In addition, freedom of will has a broader scope compared to freedom of performance (i.e., action). It goes beyond a cross-sectional evaluation of one's action. Rather, it includes long-term “self-forming actions” where the individual builds his/her own capacity in the form of intentions, characters, and motivations that give rise

to action (Kane, 2012b, p. 539). In this sense, the individual's will develops over time dialectically and as a result of the interaction and tension between the person and the environment. That is, the individual might act in a seemingly controlled and restricted way in certain conditions, but such conditions are created by the will (i.e., in the form of motivations, beliefs, and characters) that the individual has developed over time. For example, a drug addict might seem to be forced to consume drug. However, his/her action is the result of the free choices that had been previously made by this person and have led him/her to the current condition.

Fourth, in many of the scenarios used in the compatibilist perspective such as the Frankfurt style ones (Clardy, 2012; Frankfurt, 1969, 2018; Haji & McKenna, 2004), the outcome is in the form of a categorical (zero/one or yes/no) variable (Murray & Lombrozo, 2017; Widerker, 1995). However, the real-world outcomes (e.g., performance) are often continuous and the results might vary on a continuum depending on the interaction between the individual's will, external mechanisms and the context within which they have occurred. In other words, in many cases, the individual's decisions and actions cannot be simply dichotomized into right or wrong. Thus, the results are not clear-cut zero-one conditions and a wide variety of outcomes might occur which should be cautiously judged about whether they are right or wrong.

In total, free will concentrates on one's ability to make free choices and decisions over the long run (Kane, 2012b). This type of freedom differs from other types of freedom, such as freedom of action and cannot be compatible with causal determination. Considering these arguments and in line with incompatibilist approach, it can be concluded that causal determination precludes the causal efficacy of mental factors and therefore, defies the existence and effect of free will as one type of mental factor in the physical world (Anscombe, 1971; Clarke, 1995; O'Connor, 1995; van Miltenburg, 2022; Wright, 2022).

Nevertheless, the contextualist view resolves the issue of causal determination and mental causation by considering the role of context in determining the causal efficacy of mental factors (Maslen et al., 2009; Suárez, 2014). This view posits that the causal role of mental versus physical factors depends on the context (Hitchcock, 1996; Menzies, 2003, 2007; Yablo, 2004). That is, in contexts where the underlying psychological or motivational drivers of one's behavior are critical, mental factors are causally relevant in comparison with the physical ones. As previous scholars explicate (Maslen et al., 2009), the contextualist perspective to causation is able to address several concerns that act as threats to mental causation (Hendijani, 2023). Contextualism resolves the problem of mental causation and its related problem of causal determination by adding the role of context in the causal efficacy of mental factors. Elaborating the causal role of mental factors in the physical world, contextualism implicates that mental factors, including free will can be causally efficacious in certain contexts.

In line with the contextualist approaches to mental causation, contextualist views to the problem of free will consider the influence of context in determining the causal role of free will on mental and physical outcomes (Jaster, 2020). According to these approaches, identifying the cause of a specific phenomenon is context-sensitive (Willaschek, 2010). There are several contextualist approaches to the problem of free will, including the conversational (Feldman, 2004; Hawthorne, 2001; Rieber, 2006) and

social practical (Willaschek, 2010) ones. The conversational approach considers the context of conversation as the medium through which causality is determined. For example, in an ordinary conversation, we consider that one can act freely. Whereas, in a philosophical context, we are usually skeptical about the causal role that one can have in taking an action (Jeppsson, 2016). The conversational approach is mostly a relativistic approach. It does not address the underlying problem of free will and focuses only on the conversational context within which the causality is inferred. The social practical approach, on the other hand, considers the two factors of social practices and facts as the defining elements of the context (Willaschek, 2010). According to this approach, a combination of relevant social practices and facts constitute the context within which the causality of free will can be determined. This approach focuses on examining the role of free will as the “original” or “ultimate” cause of one’s behavior. It takes a non-relativist and broad view to the causal role of free will and is consistent with the incompatibilist notion of “ultimacy” of free will (Kane, 1996, 2012b), an approach that matches with the purpose of this paper. In total, the contextualist views argue that in certain contexts whether conversational or social practical ones, one can consider free will as the cause of a specific outcome (Jeppsson, 2016). Therefore, free will can have causal efficacy depending on the context.

Free Will in the Motivation Literature

Free will plays a foundational role in human motivation (Reeve et al., 2012). Among different theories in the motivation literature, cognitive evaluation theory and self-determination theory are the most prominent theories that highlight the importance of autonomy (i.e., free will) as an underlying driver of intrinsic motivation (Patall et al., 2008; Patall, 2013). These theories take a dualistic approach to human motivation and divide motivation into intrinsic and extrinsic types. Intrinsic motivation, as defined by these theories, is the inherent interest and enjoyment that drives one to engage in an activity without the expectation of any separable external outcomes. Extrinsic motivation, on the other hand, includes the external mechanisms (e.g., financial rewards or positive feedback) that encourage one to engage in an activity (Legault, 2020; Morris et al., 2022; Ryan & Deci, 2020). According to these theories, autonomy (i.e., free will) is one of the basic needs that underlies intrinsic motivation (Ryan & Deci, 2022).

Autonomy plays a pivotal role in these theories’ dualistic view (Koestner, 2008). Accordingly, intrinsic and extrinsic motivations are often divided into autonomous and controlled motivations as two separate and distinct types of motivation with contrasting effects on different aspects of motivational and performance outcomes (Brunet et al., 2015; Wilson et al., 2012). Furthermore, many scholars have created a measure called Relative Autonomy Index (RAI) by weighting and subtracting extrinsic motivations from intrinsic ones to calculate the relative weighted score for autonomous versus controlled motivations (Ryan & Connell, 1989). Many empirical studies have found support for the positive effect of perceived autonomy on different mental and behavioral outcomes, including interest and enjoyment, persistence and

effort (Cordova & Lepper, 1996; Patall et al., 2008, 2010), perception of competence, creativity, and performance (Amabile, 1983; Iyengar & Lepper, 1999).

Despite theoretical foundations and empirical support regarding the importance of free will on motivation and performance, theories in the motivation literature have mainly focused on the effect of perceived autonomy and free will on motivation and performance (Wertenbroch et al., 2020). In fact, these theories have not been able to resolve the problem of free will and establish its actual effect on motivation and behavior. This is mainly due to the dualistic approach that these theories take in examining the interaction between intrinsic and extrinsic motivations. According to these theories, extrinsic motivation is inherently different from intrinsic motivation and can undermine intrinsic motivation if it negatively influences perceived autonomy and free will. In addition, these theories give a higher weight to intrinsic/autonomous motivational mechanisms compared to extrinsic/controlled ones (Hendijani & Steel, 2023) and assert that certain types of extrinsic motivational mechanisms (e.g., performance-contingent monetary rewards) can demolish intrinsic motivation due to their controlling nature (Ryan & Deci, 2022). Such a dualistic approach makes the interaction between intrinsic and extrinsic motivations difficult to discern and interpret (Hendijani & Steel, 2023). Furthermore, it prompts the problem of mental causation in motivation, which relates to the causal efficacy of mental factors (e.g., intrinsic motivation) on behavior as the physical outcomes (Hendijani, 2023). The problem of mental causation, in turn, gives rise to the problem of free will, which relates to the existence and effect of actual free will in shaping one's motivation and behavior.

Motivational Congruence Theory's Perspective

Motivational congruence theory (Hendijani & Steel, 2023) goes beyond the dualistic approach to human motivation and takes a unified approach to the interaction between the two types of extrinsic and intrinsic motivations (Hendijani, 2021). This approach is consistent with the activity theory's perspective in psychology and its assertion on a bidirectional and dialectical relationship between the individual and the environment (Cong-Lem, 2022; Mammen, 2017; Mironenko & Sorokin, 2022; Roth, 2009; Vygotsky, 1997). According to this theory, the congruence between the two motivational mechanisms and the context creates an overall motivation, which, in turn, produces performance (Hendijani & Steel, 2020, 2022). The theory takes a cotextualist and dialectical stance to the interaction between intrinsic and extrinsic motivations and the context (Hendijani, 2023).

Context plays an important role in the motivational congruence theory's postulations. It is the environment where different motivational mechanisms including intrinsic and extrinsic ones interact with one another (Hendijani & Steel, 2022). It is important to disentangle the difference between the context and extrinsic motivational mechanisms. While extrinsic motivational mechanisms are applied in the context, the context is the medium in which these motivational mechanisms are exerted. It plays a critical role on the interaction between intrinsic and extrinsic motivations (Gerhart & Fang, 2014; Lehtivuori, 2023). One of the main characteristics of the contexts is whether it is controlling or autonomy-supportive. Emphasizing task value

and importance, empowering and providing supportive and constructive feedback, participating the individual in task-related and organizational decision making are some of the elements of autonomy-supportive contexts. On the other hand, high levels of work load and work demand, job pressure and stress, and frequent deadlines are elements of controlling contexts (Kuvaas et al., 2017; Oliver et al., 2008; Ryan & Deci, 2000).

The theory's contextualist approach postulates that the interaction between intrinsic and extrinsic motivational mechanisms depends on the context within which they interact: In autonomy-supportive contexts, the type of extrinsic (e.g., non-salient verbal and tangible rewards) and intrinsic (e.g., provision of autonomy and choice) motivational mechanisms that match the context produce an intrinsic overall motivation. In contrast, in controlling contexts, the type of motivational mechanisms (e.g., salient verbal and tangible rewards) that match the context create an extrinsic overall motivation. In both cases, the overall motivation either of intrinsic or extrinsic type induces action and improves performance.

In addition, the theory takes a dialectical approach towards the interaction between different motivational mechanisms and the context. The dialectical relationship relates to a bilateral, dynamic, and interdependent relationship between independent and seemingly contradictory elements (Collinson, 2014). A dialectical relationship emphasizes the fact that while the interacting elements may seem contradictory at the surface level, they are interwoven, mutually interdependent and reciprocal at the deeper level (Clark & York, 2005). Motivational congruence theory's dialectical stance posits that the two distinctive and seemingly contradictory motivational mechanisms can interact with each other in either a positive or negative way. The contradictory or complementary interaction between the two mechanisms depends on the congruence between the two motivational mechanisms and the context in which they interact.

The contextualist and dialectical position of motivational congruence theory goes beyond the dualistic view on motivational mechanisms and therefore, resolves the issue of mental causation both at the surface and deep levels (Hendijani, 2023). Consistent with the contextualist theories in philosophy (Menzies, 2007; Yablo, 2004), motivational congruence theory's approach resolves the issue of mental causation and free will by explaining the fact that the causal efficacy of intrinsic (i.e., autonomous) motivational mechanisms is contingent on the context (Hendijani, 2023). In autonomy-supportive contexts, intrinsic motivational mechanisms can produce an intrinsic overall motivation and produce behavior. Whereas, in controlling contexts, intrinsic motivational mechanisms are not be causally efficacious. Regarding the effect of free will (i.e., autonomy), when the extrinsic motivational mechanisms and the context are autonomy-supportive, free will would be causally efficacious. In contrast, when the extrinsic motivational mechanisms and the context are controlling in nature, free will would be causally ineffective.

Furthermore, the theory's dialectical stance resolves the issue of mental causation at the deeper level by addressing the dualism between intrinsic and extrinsic motivations (Hendijani, 2023). By explaining the dynamic and bilateral interaction and interdependence between intrinsic and extrinsic motivational mechanisms and the

context, the theory explicates how mental factors can have a casual role in interaction with the physical environment as a separable yet complementary part of it.

By resolving the issue of mental causation, the theory is able to address the long-standing problem of causal determinism and its related problem of free will. The free will problem arises from the issue of causal determination. Motivational congruence theory rules out causal determination by explaining the role of mental factors in shaping overall motivation and performance. The theory explicates that mental factors (e.g., autonomy) are actual and causally efficacious. Autonomy/free will is the building block of autonomous/intrinsic motivation. Thus, free will does exist and influence individual's overall motivation and performance.

Previous empirical studies provided support for the theory's position regarding free will and its causal efficacy (Hendijani & Steel, 2020). The results of one study indicated that when administered in an autonomy-supportive context, autonomy (i.e., free will) and extrinsic reward in the form of non-salient (i.e., non-controlling) monetary reward positively interacted with each other and improved overall intrinsic motivation and performance (Hendijani & Steel, 2020). The result of another study showed that when administered in a controlling context, autonomy had no effect on overall motivation and performance due to its lack of congruence with the context (Hendijani & Steel, 2022).

Conclusion

The problem of free will is a controversial issue in the philosophy literature (Fagiano, 2022; Kane, 1996; Pereboom, 2022). It refers to the actual existence of freedom of will and its causal influence in shaping the physical world (Kane, 2012b). The free will problem is directly linked with causal determination (Steward, 2015) and mental causation (Kim, 1993; Sinnott-Armstrong, 2021) problems. Causal determination posits that physical factors are linked with each other in a causal chain and are generated by prior physical events and the laws of nature (Earman, 1986). Thus, mental factors including free will cannot have casual efficacy in creating physical outcomes. In this sense, casual determination rules out the causal effect of mental factors (i.e., mental causation) including free will in influencing the physical phenomena (O'Connor, 1995). Thus, the existence of free will and its casual effect depends on resolving the related problems of causal determination and mental causation.

Similar to the philosophy literature, free will has raised heated debates in the motivation literature (Wertenbroch et al., 2020). Theories of motivation, including cognitive evaluation theory and self-determination theory emphasize the importance of perceived free will as one of the basic needs that underlie intrinsic motivation (Ryan & Deci, 2020, 2022). However, these theories have not been able to address actual casual efficacy of free will in creating motivation and performance.

This is mainly due to the theories' dualistic approach and their dichotomization of intrinsic and extrinsic motivations (Patall et al., 2008). Furthermore, these theories have given a higher weight to intrinsic motivation compared to extrinsic ones and postulate that certain types of extrinsic motivation can undermine intrinsic motivation by negatively influencing perceived autonomy (Hendijani & Steel, 2023).

Considering intrinsic motivation as a separate and independent type compared to extrinsic motivation gives rise to the problem of casual determination and the inability of mental factors in the form of intrinsic motivational mechanisms and free will to influence mental and physical outcomes in the form of overall motivation and behavior (Hendijani, 2023).

Motivational congruence theory resolves the issue of mental causation and its related problem of free will by taking a contextualist and dialectical position on the relationship between intrinsic and extrinsic motivational factors (Hendijani & Steel, 2023; Hendijani, 2023). The contextualist perspective resolves the problem by positing that the effect of intrinsic motivational (i.e., mental) factors such as free will and autonomy depend on the context. In some contexts, these factors are efficacious while in other contexts they are not. Therefore, adding the role of context can solve the issue of mental causation and free will at the surface.

However, the issue of mental causation suffers from a deeper challenge, which is the dualistic approach towards the relationship between mental and physical factors as two independent and separate elements. If mental factors are inherently independent from physical ones, there is no possibility that the prior can influence the latter. Motivational congruence theory resolves this fundamental issue by taking a dialectical position on the relationship between intrinsic and extrinsic motivational mechanisms (Hendijani & Steel, 2023). According to the theory, free will is a mental state which can interact with the extrinsic motivational mechanisms (e.g., reward) in a dialectical manner. Their interaction creates an overall motivation which in turn, produces performance. Hence, while the individual's free will (as a mental factor) is separate and independent from extrinsic motivation and the context, they are interdependent and can interact in a dialectical manner (Hendijani, 2023).

In total, the contextualist and dialectical approaches of the motivational congruence theory resolve the issue of mental causation at both surface and deep levels, respectively (Hendijani, 2023). Therefore, the theory is able to resolve the issue of free will as one type of mental factor which influences overall motivation and behavior. The theory's approach provides insight for addressing the problem of free will in broader areas, including psychology and philosophy.

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