

Ego Depletion, Indoctrination, and Moral Responsibility

Abdullah Almutairi

*Educational Policies Department, College of Education, King Saud University, Saudi Arabia
E-mail, aalmotairi@ksu.edu.sa*

KEYWORDS Autonomy. Recess Time. Self-Control. Situationism. Standards-based Schooling

ABSTRACT In this paper the researcher argues that ego depletion renders students susceptible to indoctrination. When students are conditioned to a certain way of education that depletes their egos, they become susceptible to indoctrination. That is, they lack the resources needed to resist persuasion and to critical thinking. The researcher proceeds by defining “ego depletion” and its relationship to self-control. Then, the researcher presents empirical evidence that shows the link between ego depletion and the susceptibility to indoctrination. Finally, the researcher discusses how our understanding of ego depletion changes the way we conceptualize indoctrination. This paper provides an argument for a situational understanding of indoctrination. Then, the researcher considers the consequences of such understanding on indoctrination and moral responsibility.

INTRODUCTION

Self-control and Ego Depletion

In this section, the researcher aims to provide empirical data that demonstrates that the practice of self-control leads to ego depletion. The term ego depletion refers to “a state in which one’s self-regulatory resources are diminished, and this diminishment is proposed to occur because acts of self-regulation and volition draw upon a single, limited, intrapsychic resource” (Baumeister et al. 1998). Such a description that previous exercise of will power causes a temporary limit in the self’s ability or willingness to engage in volitional action has been supported by a wide variety of studies (Cholbi 2014). In one classic study conducted by Roy Baumeister and others, participants (67 college students, 31 male, 36 female) were placed in a laboratory room where chocolate chip cookies had been baked. The room was filled with the delicious aroma of fresh chocolate and baking. Two foods were offered in the room: chocolate chip cookies augmented by some candies and radishes. Participants were divided into three groups. The first group was asked to eat at least two or three radishes but no cookies, the second group was asked to eat at least two or three cookies or a handful of the small candies but no radishes, and the third group did not participate in this part of the experiment. After 20 minutes all participants were asked to work on a test of prob-

lem solving. Unbeknownst to the participants the problem was unsolvable. The subjects were told that they could work on the puzzle for up to 30 minutes, but they should feel free to quit before that time if they wished. The researchers found that the first group that had been instructed to eat radishes but not cookies quit sooner than the other groups. Moreover, they showed greater frustration and desire to quit the problem-solving task. They quit after about eight minutes on average, compared to approximately nineteen minutes for those who ate the cookies. Also, they reported that they had felt a stronger desire to stop working on the problem-solving task than had participants in the other two conditions. The researchers concluded that it took the first group self-control to resist the temptation to eat the cookies and self-control to make oneself persist at a frustrating task (to solve an unsolvable problem). They concluded that what they found illustrates with “that some vital resource would be depleted by an initial act of self-regulation, leading to subsequent decrements” (p. 1256).

Another experiment was conducted by the same research team to address whether the same resource that was depleted by not eating chocolate chip cookies would also be depleted by an act of choice. Participants (39 undergraduate students, 25 male, 14 female) were asked to make a counter-attitudinal speech (favoring a large tuition increase, to which most students were opposed) under high-or-low-choice conditions.

They were asked to make an audiotape recording of a persuasive speech regarding projected tuition increases for the following academic year. Participants were shown two folders the first being pro-tuition raise and the second being anti-tuition raise. The first group was assigned to record the pro-tuition speech, the second group was given freedom to choose between the two speeches, and the third group did not participate in this part of the experiment. Then, all of the participants completed the same problem-solving task as in the first experiment. The researchers found that participants who agreed to make a counter-attitudinal speech under high choice showed a subsequent drop in their persistence on a difficult, frustrating task compared to both participants who made the same speech under both low choice and no-speech control. Thus, "taking responsibility for a counter-attitudinal behavior seems to have consumed a resource of the self, leaving the self with less of that resource available to prolong persistence at the unsolvable puzzles" (p. 1257).

After testing the effect of resisting temptation and making responsible choices on self-control, the research team conducted a third experiment to examine the relationship between self-control and affect regulation. Participants (30 undergraduate students, 11 male and 19 female) were asked to watch an emotionally evocative videotape and stifle any emotional reaction they might experience. To guarantee that the effects were due to self-regulation rather than to a particular emotional response, the research team used both humorous and distressing stimuli. Participants were divided into two groups. Those in the first group were asked to suppress their emotions while watching the clip while those in second other group were allowed to let their emotions flow freely. The subjects were then asked to solve anagram puzzles. The results showed that participants in the suppress-emotion condition performed significantly worse than participants in the no-regulation condition in terms of numbers on anagrams correctly solved. The researchers concluded that "some valuable resources of the self was actually depleted by the initial acts of volition" (p. 1259). The above results have been supported by over 100 experiments (Inzlicht and Scheichel 2012).

The aim of this section was to establish the relationship between self-control and ego depletion through empirical evidence. Self-control (resisting temptation, making reasonable choices, and suppressing emotions) causes ego depletion. For the purpose of this study the claim does not have to be a necessity claim (that is, self-control necessarily causes ego depletion). Rather, since the discussion is about public policy, that is, indoctrination in education, it is sufficient to weaken the claim to state: self-control most likely causes ego depletion. Moreover, this study could stay agnostic about the nature of ego depletion (resource vs. process models) and about the nature of the resources or energy that self-control consumes for those who use the resource model of ego depletion.

Objectives

The goal of this paper is to show that ego depletion renders students susceptible to indoctrination. That is, when students are conditioned to a certain way of education that depletes their egos, they become susceptible to indoctrination. That is because they lack the resources needed to resist persuasion and to critical thinking. The way to reach this goal is by defining "ego depletion" and its relationship to self-control. Then, the researcher presents empirical evidence that shows the link between ego depletion and the susceptibility to indoctrination. Finally, the researcher discusses how our understanding of ego depletion changes the way we conceptualize indoctrination.

METHODOLOGY

The method used in this paper is a philosophical analysis. This method is based on analyzing arguments and concepts and connecting them with their theoretical and practical implications. This method works by studying arguments through showing their premises and conclusions combined with analyzing the logic that connects those premises with their conclusions. This method aims to clarify ideas and arguments in order to reach new results that have theoretical and practical implications. Now we move the discussion to establish the relationship between ego depletion and indoctrination by showing further empirical evidence.

RESULTS

Ego Depletion and Indoctrination

The main claim of this section is that ego depletion facilitates indoctrination. This paper does not aim to bring about a new definition of indoctrination in this section. Rather, the aim is to make the case that ego depletion affects a necessary ability that most definitions of indoctrination adopt as a necessary condition for indoctrination. That is, ego depleted people are most likely to *accept arguments without resistance* or lack the recourses needed for *critical thinking and open-mindedness*. According to Copp (2016) there are two families of definitions of indoctrination. First, the *ideology view* where indoctrination means teaching objectionable materials such as partisan, ideological or biased points of view. The second family is the *critical thinking view* where indoctrination means to “treat certain beliefs as immune from critical review and protect them from the potential undermining effect of counter-evidence or argument” (p. 152). The relationship between accepting an argument without resistance and the lack of critical thinking is clear, after all critical thinking means analyzing and assessing arguments (Bowell and Kemp 2002). On the other hand, the relationship between teaching ideologies and biased views and the effect of ego depletion needs more analysis. What is wrong with ideologies to be associated with indoctrination. Generally, at least in the liberal context ideologies are taken to be “ideas whose purpose is not epistemic, but political”. That is, “an ideology exists to confirm a certain political viewpoint, serve the interests of certain people, or to perform a functional role in relation to social, economic, political and legal institutions” (Sypnowich 2014). This definition shows that indoctrination as teaching ideologies or biased views should be an example of the critical thinking view. That is, the problem with ideologies is that they limit their members’ ability to assess and analyze reasons. It is clear that ideologies and biased views are examples of content that can indoctrinate people in. Definitions of indoctrination will be discussed in more details in later in this paper. What is essential for this section is to show that assessing and analyzing argument is a neces-

sary ability for critical thinking and that ego depletion limits that ability.

Now, we need to show the empirical evidence that ego depletion limits our ability to analyze and assess arguments and persuasions. What was provided so far is that ego-depleted experimental subject did quit the second task. One might argue that the quit the second task as refusing to continue rather than as worn down and acquiescent. Studies show that self-regulating failure (which happens when individuals are ego depleted) can increase acquiescence where people tend to “give in” to easier courses of action (Baumeister and Heatherton 1996). Wheeler et al. (2006) conducted a study “to test the effects of a self-regulation construct, ego-depletion, on individuals’ ability to resist counter-attitudinal messages” (p. 150). In this study participants (68 students, 24 males, 40 females, 4 declined to state) were assigned to ego depleting conditions. In the first part, they were asked to cross out every ‘e’ they could locate in a written passage. The second part, participants in the low-depletion condition repeated the first part, and participants in the high-depletion condition circle letters again but were instructed to cross out each ‘e’ in the text, except when another vowel followed the ‘e’ in the same word (for example, “read”) or when a vowel was one letter removed from the “e” in either direction (for example, “vowel”). Then, participants were told that the university was considering implementing mandatory comprehensive examination in the upcoming academic year and wanted to know the students’ first reaction toward the idea. Some participants read weak arguments such as: the exam would help students compare their scores with students at other universities. Other participants read strong arguments, such as: the exam would improve undergraduate education. Participants then reported their attitudes toward the proposal. The results showed that ego-depleted participants tended to report more positive attitudes toward the proposal than did non-ego-depleted. Depleted and non-depleted individuals were equally persuaded by strong arguments, but depleted individuals were significantly more persuaded by the weak arguments than non-depleted individuals. Moreover, depleted students generated significantly more favorable thoughts in response to weak argu-

ments than did non-depleted individuals. These results were duplicated by Burkley (2008) with more interesting results. To test whether the previous results could be explained by cognitive fatigue, Burkley demonstrated two tasks, both requiring exertion but, only one involving self-regulation exertion. Thus, he used a thought suppression task for the depleted condition and a math task for the control condition. The results showed that only the task requiring self-control lessened resistance to persuasion.

Another strong connection between ego-depletion and indoctrination can be found in studies that observe the effects of ego depletion that results from engaging in self-control activities on people's suggestibility levels. Otgaar et al. (2012) conducted a study to examine whether suggestibility increases when cognitive resources are depleted. A total of 44 undergraduate students were divided randomly to two groups and were told that this study is about memory performance. To measure their self-control level, they had to perform the physical self-control task (squeezing the handgrip). Specifically, they were asked to place the handgrip in their dominant hand, and a coin was placed between the handles at the moment they squeezed the handgrip. They had to squeeze the handgrip as long as they could. The experimenter started measuring time when placing the coin and stopped timing when the coin fell out. During 8 minutes, participants were instructed to solve calculations. They were divided to two groups. First, in the high level of depletion condition, participants were asked to solve difficult calculations (two digit calculations) while being distracted with auditory interfering stimuli through headphones. This task required self-control because participants had to attend to the calculations and had to override their impulses to listen to the interfering stimuli. Second, in the low level of depletion condition, participants solved easy calculations (one digit calculations) without distraction. Then, they listened to a short story about a criminal case. Then, they were asked to write down everything they could remember about the event (that is, immediate recall). After that participants were asked to squeeze the handgrip one more time. Finally, they received 20 specific questions (15 misleading questions and 5 memory questions) twice. After the

first presentation of these questions, the experimenter confronted the participants with explicit negative feedback on their performance. Following this, they received the same 20 detailed questions again. The results show a significant difference between the two groups. That is, participants in the ego-depleted group were assenting more to the misleading questions than the control group.

Another dimension of weakening students' ability to think critically and assess arguments is not be too influenced by authorities. Studies show that activities that require self-control increase people's susceptibility to authoritative narratives and interpretation. Schjoedt et al. (2013) study the cognitive effects of three common features of religious interactions: (1) demand for the expressive suppression of emotion; (2) exposure to goal-demoted and causally opaque actions; and (3) the presence of a charismatic authority all of which require a great deal of self-control. Using a cognitive resource model of executive function, the researchers argue that these three features affect the executive system in ways that limit the capacity for individual processing of religious events. Building on recent experiments, the researchers suggest that these three features increase participants' susceptibility to authoritative narratives and interpretations by preventing individuals from constructing their own accounts of the ritual event.

The results above should establish the positive relationship between ego depletion and indoctrination. That is, ego depletion facilitates indoctrination. Ego-depleted individuals are less likely to resist persuasion, have higher level of suggestibility, and more susceptible to authoritative narratives and interpretation.

A Different Way to Understand Indoctrination

In this section, the researcher tries to show the implementations that the concept of ego depletion should have on our understanding of indoctrination. Different attempts have been conducted to set criteria for defining indoctrination. Main attempts identify "as constitutive criteria the *methods* used to impart beliefs, the propositional *content* of the beliefs being imparted, or the *intention* of the party doing the impart-

ing” [italics added] (Callan and Arena 2009: 107). Understanding indoctrination within the research of ego depletion sheds different lights on each criterion. This discussion does not aim to argue one criterion over the others. Rather, it aims to emphasize the effect of the concept of ego depletion on each approach.

The *method* approach defines an act to be indoctrination if “teaching methods fail adequately to engage learner’s capacity to reason” (Callan and Arena 2009:107). This concept leads us to the following question: What makes such methods fail to engage a learner’s capacity to reason? P. J. Sheehan describes such methods as “those.... which induce beliefs in a way which bypasses the reasoning process of the person to which they are applied, or coerce his will and are systematically applied over a prolonged period” (quoted in Kleinig 1982: 58). What the discussion of ego depletion brings to this definition is that, first, the act of depleting student’s egos itself may be a method of indoctrination. Ego depletion meets the method criterion since it fails to engage learner’s capacity to reason. Ego-depleted students lack the capacity for self-regulation, which includes reasoning. It might be that educators have realized from experience that such conditions help to indoctrinate students. Second, the ego-depletion concept shows us that non-indoctrinatory methods, methods that successfully engage a learner’s capacity to reason, can also facilitate indoctrination. In other, words non-indoctrinatory methods deplete students’ egos by engaging them in self-control activities (that is, reasoning). Additionally, if students did not have enough time to restore their self-control resources, these methods facilitated indoctrination. According to the ego depletion discussion, the nature of the method itself is not the only issue that could lead to indoctrination, but so, too, could the context in which the method is implemented. In other words, implementing non-indoctrinatory methods is a necessary but insufficient condition for avoiding indoctrination. What is needed is that such methods are implemented in a way that allows students the time to restore their self-control resources.

Studies show that the resources expended by acts of self-control and volition are gradually replenished (Baumeister 2002; Masicampo et al.

2014). One way to restore self-control resources is to sleep and to rest. Different evidence about patterns of self-control failure reviewed by Baumeister et al. (1994) indicated that well-rested people have better self-control. The evidence shows that few self-control failures happen first thing in the morning when people have had a good night’s sleep. Quite the reverse, self-control seems to grow gradually weaker as the day goes on. For example, it is reported that “diets are broken in the evening, impulsive crimes and violent acts occur most often after midnight, addictive relapses occur later in the day, and so forth” (Baumeister 2002: 134). Another way to restore self-control recourse is positive emotions. Tice et al. (2007), directed several studies to evaluate the effects of positive affect on the depleted participants. After having participants engage in two consecutive, apparently unrelated acts of self-control, and in between the two acts, some participants received an induction of positive (watching a comedy video or giving a surprise gift) or negative mood. People who were put into a positive mood showed less evidence of ego depletion. This suggests that the good emotional state helped counteract the depleting effect of the first task.

These two ways should be adopted in schools to help students restore their self-control recourse and hence their ability to assess and analyze arguments. It might be difficult in practice to let students sleep in schools, but they should have more recess time where they can rest or play. Moreover, classes should be schedule in a way that gives students breaks between classes that require more self-control. Learning by play has its role as a method that joints ego-depleting activities with ego-restoring activities and hence renders students less susceptible to indoctrination. Studies show that whereas the self-controlling regulation of behavior depletes vitality and energy, the autonomous self-regulation of behavior does not. Moreover, a growing number of experimental and field studies suggest that vitality and energy are improved by activities that satisfy basic psychological needs for relatedness, competence, and autonomy (Ryan and Deci 2008).

The *content* approach understands indoctrination from its distinctive propositional content. One such understanding is that indoctrination is the teaching of doctrines. Another sees

indoctrination as teaching false beliefs to be true. Both have been challenged. A teacher could indoctrinate his students about an isolated event; for example, that team A is better than team B. Such a belief is not usually considered doctrine. For the second take, indoctrination could happen with true beliefs when the indoctrinated has no good reason for holding that belief. A teacher who teaches true beliefs solely on the basis of her authority as a teacher is, in effect, indoctrinating. What ego-depletion brings to the discussion, however, is that, regardless of the content being taught, indoctrination may occur. That is, even when true beliefs are taught in a non-indoctrinatory method, if students are ego-depleted, indoctrination is likely to occur. Ego-depleted students lack the power needed to make true beliefs reasonable. Reasoning, the process by which true beliefs are understood, requires resources that ego-depleted students lack. We know from ego depletion literature (for example, Baumeister et al. 1998) that ego-depletion does mean the complete lack of will power but, rather, a limited capacity for will power. Thus, depleted students still have a certain amount of power to subscribe to beliefs even though they lack the power needed to reason about such beliefs. Consequently, we could imagine a class where the instructor is teaching a true physical law—the law of gravity for example—, by providing sufficient explanations and proofs for the law. Also, she encourages students to reflect on the law by comparing it with other explanations of falling objects. However, students are ego-depleted because they were compelled to listen to a dry lecture for hours. Empirical evidence provided by ego-depletion studies tells us that these students will most likely lack the power to engage in reflection, although they might believe that gravity is a true physical law. In short, ego-depletion research encourages those who take content to be the criteria for defining indoctrination to look more carefully at the impact of the lack of students' self-control.

The *intention* approach state that intention of the indoctrinator is crucial. One formulation is that “indoctrinating someone is trying to get him believe that proposition ‘p’ is true, in such a way that nothing will shake that belief” (White 1972: 120). We can understand the intention of such a teacher in at least two ways. First, the

intention is to generate a well-supported belief that can stand to all objections. The second is that the intention is to generate a belief that is held regardless of counter-evidence. The first interpretation is problematic because it includes teachers who do their best to provide their students with evidence and effective learning strategies. The second interpretation is suitable since it emphasizes a crucial part of indoctrination: an unreasonable way of believing. However, taking into consideration the phenomenon of ego-depletion, we may ask: Can indoctrination occur without any deplorable intention? The data show that, regardless of the educator's intention, ego-depleted students are susceptible to indoctrinated. Let us imagine the case of a class in which students are ego-depleted because they listened to an unengaging lecture for two hours and while suppressing their emotions towards the speaker, and a teacher who strives to not indoctrinate her students. She gives adequate explanations for the subject matter and she reasonably discusses alternative points of view. However, based on ego-depletion research, that it is most likely that the students are not able to critically analyze the material. They lack the resources needed to engage in reasonable deliberation where self-control is essential. Recall that “counterarguing persuasive messages requires action control processes (for example, generation and application of contradictory information) similar to those involved in other self-regulation” (Wheeler et al. 2007: 150). We conclude that indoctrination can happen even when educators have no intention to do so.

DISCUSSION

Indoctrination: A Situational Account

Last section might raise this objection: if indoctrination can happen regardless of the content, method, and intention, then it loses its moral dimension. That is, indoctrination appears to be no one's fault and a result of natural phenomenon. After all, one might argue that ADHD (Attention-deficit/hyperactivity disorder) leads to a lack of attention and the lack of attention leads to the uncritical acceptance of ideas and therefore, children with ADHD are being indoctrinated regardless of the intention of the teacher, the

content or the method. It seems from this conclusion that indoctrinating is inevitable, not a result of a wrongdoing, and hence raise no moral objection. But, that is obviously unreasonable conclusion. To avoid such conclusion, the researcher aims in this section to show other dimensions that the discussion of ego-depletion leads us to consider when thinking of indoctrination. This paper proposes a situational account that points to other factors other than content, method and intention. According to such approach children with ADHD can be protected from indoctrination if we apply a holistic view to their needs and the educational environment beyond the three demotions of content, method, and intention. Ignoring other factors, such as ego depletion, raises a moral concern.

Thus, in this section the researcher argues that ego depletion helps us understand indoctrination as a result of situations in which ego-depleted students are most likely to be indoctrinated regardless of the methods, content, and intentions involved in teaching. Situational factors such as ego depletion play an important role and most likely lead to indoctrination even in educational experiences in which there is no intention to indoctrinate, indoctrinatory methods are not used, and doctrines are not taught. It is important to emphasize that the factors in focus here are unknown as factors or considered normatively irrelevant situational factors. Thus, the researcher argues that by moving ego depletion from being unknown /normatively irrelevant to being known /normatively relevant, we could decrease the chances of indoctrination. What the situational account of indoctrination tells us is the following: first, indoctrination could happen as a result of factors that are not considered as a usual means to indoctrinating; second, since schools are to a large extent, a controlled environment, these factors can be controlled to reduce the chances of indoctrination. The approach here is in alliance with Taylor (2017) call for a system-based approach to identifying the threat of indoctrination and the responsibilities of educators. In this approach, we move beyond the dyadic relationship between a singular indoctrinator teacher and indoctrinated students to “the role of social context from the outset. Situating the teacher-student relationship within a social system” (p. 40).

This paper presents ego depletion as an important factor of that social system.

The argument proceeds by considering the common definitions of indoctrination to show that they provide incomplete accounts to explain indoctrination. By ignoring situational factors such as ego depletion these accounts fail to present necessary and sufficient conditions of indoctrination.

The situational understanding of indoctrination makes it important to pay more attention to situational factors in the educational environment and their effect on students’ ability to reason and think critically. Ego depletion is one important factor that should be added to the well-established factors such as intentions, methods, and content. In what follows an example is presented to show how ego depletion helps us to see indoctrination differently.

Two Forms of Indoctrination

Indoctrination is usually thought of as a kind of *direct* interaction between two or more persons. Teaching is an interactive relationship between educators and students. We do not usually talk about the effect the weather has on our thinking as teaching. Teaching implies a certain kind of communicative interaction between at least two parties. As a result of this view indoctrination is understood through different forms by which that interactive communication takes place. One attempt for understanding indoctrination considers the *way* teachers use as the most accurate feature of the indoctrinatory relationships. Thus, teaching is considered indoctrination if “teaching methods fail adequately to engage learners’ capacity to reason” (Callan and Arena 2009: 107). Others see *what* is taught to be the most important sign of the effect of education and hence we could investigate it if indoctrination happened or not. According to this understanding, indoctrination is seen to be teaching “an ideology as if it were the only possible one with any claim to rationality, propositions the teacher knows are uncertain as if they are certain, and propositions which are false and known by the teacher to be false” (Snook 1972). A third attempt sees the interactive communication between an indoctrinator and an indoctrinated from the intentionality of

the indoctrinator. In other words, they ask *why*. Thus, “indoctrinating someone is trying to get him believe that proposition ‘p’ is true, in such a way that nothing will shake that belief” (White 1972: 120). These are ways to see indoctrination as an active interaction and communication between an indoctrinator and an indoctrinated. However, what ego depletion tells us is that indoctrination could occur as a result of factors over which the indoctrinator has no direct control. Here, this argument follows Cholbi (2014) who describe *ambient* manipulation. Ambient indoctrination happens “when an individual operates with a constructed environment designed to encourage her to make certain choices, even without those doing the encouraging being present” (p. 208). An example of such a constructed environment is the current standards-based schooling environment in the U.S. In such an environment, schools are under great pressure to make their students reach certain standards that policy makers implement. If they do not succeed in reaching such goals, the school faces harsh consequences. This situation encourages the phenomenon known as “teaching to the test”. In such teaching, teachers focus on how to help their students get the right answers on the test. Most tests are organized to have one right answer. The aim then is *how* to get that right answer and less time is devoted to reason about *why* that is the right answer and *if* that is the right answer. Two crucial results to our discussion of ego depletion and the non-interactive account of indoctrination should be noted: first standardized-testing policies engage students in too much testing, second, play time and physical education have less time within daily schedules. Both results lead to depleting students’ egos. Testing requires a great deal of self-regulation. A student needs to focus for a long time, think reasonably, and make choices. These activities consume much of the resources needed for self-regulation and hence leave students ego-depleted. Joining this result with the fact that students have less time for play we expect students to be ego-depleted during most of the day. In such situations, indoctrination is most likely to occur. That is, ego-depleted students are more willing to accept propositions regardless of the evidence because they lack enough resources for reasoning and critical

thinking. Price and Yates (2013) conclude that ego depletion has negative effects upon students’ creativity. 103 students were divided to two groups. The depleted group was asked to solve math problems where the other groups was giving facile problems. Then both groups were asked to spend 15 min writing anything you can think of about the number 50. Depleted students were rated as lower on overall creativity.

It is important to notice that, in this situation, no one who is in direct communication with student’s aims to indoctrinate, teaches doctrines, or uses indoctrinatory methods. However, the whole situation makes indoctrination most likely to happen. This ambient nature of indoctrination should affect the way we understand indoctrination and the relationship between moral responsibility and indoctrination. In terms of the way to understand indoctrination is that it could happen via non-interactive communication. Situational factors (that is, too much testing, too little play time) do deplete students’ egos and render them susceptible to indoctrination. This understanding should put indoctrination in its bigger educational and social/political environment. Educationally, practices such as too much testing needed to be reevaluated in terms of the effects they have on students’ abilities to reason and think critically. Socio-politically, indoctrination in the situational understanding brings to the discussion political and social policies that might intentionally or unintentionally use educational systems to reach certain goals. For example, market-based educational reforms imply certain understandings of human beings that might favor consuming mentality over critical thinking mentalities.

Indoctrination and Moral Responsibility

Indoctrination is seen as morally problematic at least for two reasons: first, it threatens individual autonomy, second, it implies using others as a means instead of an end. In what follows, I discuss such threats emphasizing what ego depletion brings to the discussion.

Autonomy-based Objection

Indoctrination threatens individuals’ autonomy because it undermines individuals’ capacities to think freely for themselves. It is important

here to distinguish between indoctrination, conditioning, and straight-forward force. According to Wilson (1972), “if I illegitimately (whatever this may mean) persuade a child to think that God will punish him for masturbating, this is indoctrination: if I simply give him a feeling of fear and repulsion about it, this is conditioning; if I tie his hands behind his back, this is force” (p. 17). In indoctrination individuals subscribe to the belief that is indoctrinated. Their will is not entirely overridden. On the other hand, those who are conditioned or forced do not have to subscribe to what they are doing. This means at least two things: first, indoctrination threatens autonomy to a great deal but does not diminish it, second, moral responsibility, if any, is shared to a certain degree between indoctrinators and indoctrinated. In principle, the indoctrinated can resist indoctrination. However, we need to notice that educational relationships are in most cases hierarchal where one party has authority over the other. This hierarchal nature of educational relationships puts more responsibility on the party that has authority. Thus, it is intuitional to think that teachers have more responsibility for indoctrination. At the same time, the younger the students are the less responsibility they hold. Snook (1972) has argued that a teacher can be accused of indoctrination if he:

1. Intends to indoctrinate.
Or
2. Intends his pupils to hold beliefs regardless of the evidence.
Or
3. Foresees that as a result of his teaching such a result is likely or inevitable.

The situational account of indoctrination influenced by ego depletion provides extra points to the previous picture: First, the act of indoctrination might involve more than two parties. Policy makers and schedule planners might implement an education that depletes students’ egos and, hence, facilitates indoctrination. Second, in terms of teachers’ responsibility of indoctrination, it seems that teachers might not be responsible for indoctrination that results from ego depletion according to (1) and (2). That is, teachers do not intend to indoctrinate their students. They might be doing their best in terms of providing evidence and organizing opportunities for discussion and critical reflections to

avoid indoctrination; however, since their students are ego depleted by many tests and few brakes, the students subscribe to whatever propositions are offered without reasoning. Moreover, teachers can be considered morally not responsible according to (2) since they do not intend their students hold beliefs, regardless of the evidence. A history teacher might want her students to consider the evidence for and against the propositions she is providing but her ego depleted students lack the resources to do such activities. (3) is problematic. In one interpretation teachers might lack the relative knowledge of the results of their teaching and therefore, cannot be held responsible. According to standardized-based schooling, the results available are from grades which it hard to judge the way students think. Students may be indoctrinated and get good grades at the same time. Taylor (2017) argues that indoctrination is problematic because it leads to a close-minded way of acquiring knowledge. In order for teachers to have relevant results, they must have accurate ways to measure their students’ thinking. Standardized tests do not provide such knowledge because they rely heavily on so-called objective questions such as multiple-choice and true-false where limited space is available for students to show their reasoning, yet teachers have no other ways to measure their students’ thinking. And even if they can by other measures, current policies that focus on testing leave no time for such activities.

However, another interpretation proposes that teachers spend enough time with their students which allows them to know how their students acquire knowledge. A teacher who focuses most of her teaching time in encouraging students to memorize information which ego depletes them should expect indoctrination as a result of her teaching. In this interpretation, that teacher is morally responsible for indoctrinating her students. After all, teachers who are aware of the effect of ego depletion on students’ abilities to reason could avoid such results by providing fun activities that do not require much self-regulation for students to restore their resources.

However, what about the following two cases: (1) Teacher A indoctrinates her students intentionally for their own good. Her rationale is

as follows: in such current educational policies focused on standardized test indoctrination is not bad for students. Memorizing is the best way to deal with such tests, she argues. (2) Teacher B does not indoctrinate her students although she knows that doing so is going to lower their grades. She spends more time engaging her students in critical thinking, which does not help them get good grades in the test. The test is not written to measure students' ability to think critically; rather, it is written to measure their information in certain areas. It seems that indoctrination is good sometimes. One possible response from the autonomy-based objection to indoctrination is that teacher A should not decide what is good for her students. Both A and B show no respect for their students when they decide for them what is good and what is bad. They are the ones who should make such judgments. This issue leads us to the nature of relationships between teachers and students that indoctrination seems to violate. This is the topic of the second problem with indoctrination.

Respect-based Objection

After considering the first moral objection to indoctrination: autonomy-based objection let us examine the second objection to recognize what ego depletion provides to the picture. William Kilpatrick, writes "indoctrination, however, is fundamentally and essentially undemocratic. It intends to anticipate choice. It inherently uses the individual as a means to an end, and this danger is present wherever any type of authoritarianism prevails" (as cited in Snook 1972: 13). Raphael Demos writes "We *mould* material things into the pattern of human ends. But we do not *mould* human beings, and do not wish to do so. That way lies indoctrination, propaganda, the worst tyranny of all because it is tyranny over the human mind" (Cited in Snook 1972: 48). Both accounts define indoctrination as an unfair relationship. One party who has the authority uses the other party to reach its own goals. The goals of the other are neglected and devalued. The situational account of indoctrination influenced by the results of ego depletion widens this picture. The individual's right to think freely, which can guarantee the individual's refusal to indoctrination is influenced by situa-

tional factors such as ego depleting activities. Moreover, this situational account helps us think of indoctrination not solely in terms of individual innate or character differences, but also in terms of situational differences. Easy-to-indoctrinate students could be understood not only in terms of their individual abilities, cultural upbringing, and attitudes, but also according to their living situations.

Granted, the argument that indoctrination disrespects human dignity is challenged from different utilitarian perspectives. First, educating young children who are immature and unable to think for themselves requires indoctrination. This may be accepted as a temporary situation. Education should aim to help these children to mature and think for themselves. This happens by engaging them in activities and discussions that aim to link their actions to their thinking (aims and goals). John Dewey argues that this way of educating fits children's psychology well. Thus, indoctrinating young children is morally acceptable if it is done with the aim to help them think for themselves. What ego depletion adds to the picture is that educating children to maturation is not simply a practice of generating certain characteristics. It is also aimed at creating certain situations that are sensitive to the resources needed for self-regulation; that is, situations that are planned to give children enough time and physical activity to restore their resources when they become ego-depleted.

The second argument for indoctrinating is that it is demanded to reach certain public values. For example, it might be argued that a respect for human rights and democracy should be indoctrinated in children so they grow up with an unshakable belief in such ideals. This, according to the proponents, is good for everyone, including these children. This argument, however, rests on a shaky empirical foundation and a dubious normative premise. The shaky empirical assumption is that indoctrinated beliefs are permanent and useful. However, empirical evidence show that indoctrinated ideas, while hard to change, are not immune to future reflections. Many people who were indoctrinated in certain religious and ideological beliefs successfully reflected, criticized, and changed such beliefs. The cost is higher though. It demands extraordinary mental and psychological efforts to

do so. Thus, indoctrinating human rights or democratic ideals does not guarantee that citizens will hold them regardless of circumstance. Also, there is an assumption that indoctrinated beliefs could be useful and face challenges. This is dubious. Saving human rights and democratic ideas in the face of social and political challenges requires that people understand their beliefs. They need to argue against arguments that deny human rights and democratic ideals. They need to have intellectual skills to be sensitive to social and political changes that may threaten their beliefs. The dubious normative premise behind this argument is this: it is acceptable to sacrifice some human rights such as a child's thoughtful autonomy, the most vulnerable and politically powerless persons in our society, in order to save and promote other human rights and social ideals.

What ego depletion brings to the scene, however, is that indoctrination for social or private interests may be done under policies that do not seem in favor of indoctrination. The current standards-based schooling in the U.S., focused on testing, could lead to an educational environment that encourages indoctrination. The main argument for this paper is that such schooling ego depletes students by forcing them to participate in many self-regulating activities such as tests, memorizing, and minimizing activities that allow them to restore their self-regulating resources (breaks and play time). Indoctrination can happen not only as a result of intentional activities, but also as a result of unintentional situational factors such as ego depletion.

CONCLUSION

The researcher argues that (1) Self-control leads to ego-depletion. (2) Ego-depletion facilitates indoctrination, and (3), in the light of (1) and (2), we should change the way we approach indoctrination in terms of methods, content, and intention. Then, the researcher introduces a situational understanding of indoctrination which helps us accommodate factors such as ego depletion. Finally, the researcher argues that ego depletion widens the picture of moral responsibility for indoctrination beyond the active and direct interaction between two parties.

RECOMMENDATIONS

What ego depletion brings to the scene is that indoctrination for social or private interests may be done under policies that do not seem in favor of indoctrination. The current standards-based schooling in the U.S., focused on testing, could lead to an educational environment that encourages indoctrination. The main argument for this paper is that such schooling ego depletes students by forcing them to participate in many self-regulating activities such as tests, memorizing, and minimizing activities that allow them to restore their self-regulating resources (breaks and play time). Indoctrination can happen not only as a result of intentional activities, but also as a result of unintentional situational factors such as ego depletion. Thus, researchers and policy makers should rethink the importance of play and recess time where students can rest or play. Furthermore, classes should be schedule in a way that gives students breaks between classes that require more self-control. Learning by play has its role as a method that joints ego-depleting activities with ego-restoring activities and hence renders students less susceptible to indoctrination. As shown above, that whereas the self-controlling regulation of behavior depletes vitality and energy, the autonomous self-regulation of behavior does not.

ACKNOWLEDGMENTS

The author extends his appreciation to the Deanship of Scientific Research at King Saud University for funding this work, as well as providing the assistance in editing services.

REFERENCES

- Baumeister RF 2002. Ego depletion and self-control failure: An energy model of the self's executive function. *Self and Identity*, 1(2): 129-136.
- Baumeister RF, Heatherton TF, Tice DM 1994. *Losing Control: How and Why People Fail At Self-regulation*. San Diego, CA: Academic Press.
- Baumeister RF, Heatherton TF 1996. Self-regulation failure: An overview. *Psychological Inquiry*, 7(1): 1-15.
- Baumeister RF, Bratslavsky E, Muraven M, Tice DM 1998. Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*, 74(5): 1252.

- Bowell T, Kemp G 2002. *Critical Thinking: A Concise Guide*. London: Routledge.
- Burkley E 2008. The role of self-control in resistance to persuasion. *Personality and Social Psychology Bulletin*, 34(3): 419-431.
- Callan E, Arena D 2009. Indoctrination. In: Harvey Siegel (Ed.): *The Oxford Handbook of Philosophy of Education*. DOI: 10.1093/oxford/hb/9780195312881.003.0007
- Cholbi M 2014. The implications of ego depletion for the ethics and politics of manipulation. In: C Coons, ME Weber (Eds.): *Manipulation: Theory and Practice*. UK: Oxford University Press, pp. 201-220.
- Copp D 2016. Moral education versus indoctrination. *Theory and Research in Education*, 14(2): 149-167.
- Inzlicht M, Schmeichel BJ 2012. What is ego depletion? Toward a mechanistic revision of the resource model of self-control. *Perspectives on Psychological Science*, 7(5): 450-463.
- Kleinig J 1982. *Philosophical Issues in Education*. London: Croom Helm.
- Masicampo EJ, Martin SR, Anderson RA 2014. Understanding and overcoming self control depletion. *Social and Personality Psychology Compass*, 8(11): 638-649.
- Otgaar H, Alberts H, Cuppens L 2012. How cognitive resources alter our perception of the past: Ego depletion enhances the susceptibility to suggestion. *Applied Cognitive Psychology*, 26(1): 159-163.
- Price DA, Yates GC 2013. Impact of a brief ego depletion procedure on creative behaviour in the upper primary classroom. *Educational Psychology*, (ahead-of-print), 1-13.
- Ryan RM, Deci EL 2008. From ego depletion to vitality: Theory and findings concerning the facilitation of energy available to the self. *Social and Personality Psychology Compass*, 2(2): 702-717.
- Schjoedt U, Sørensen J, Nielbo KL, Xygalatas D, Mitkidis P, Bulbulia J 2013. Cognitive resource depletion in religious interactions. *Religion, Brain and Behavior*, 3(1): 39-55.
- Snook IA (Ed.) 1972. *Concept of Indoctrination- Philosophical Essays*. International Library of the Philosophy of Education Volume 20. UK: Routledge.
- Sypnowich C 2014. A new approach to equality. In: R Merrill, D Weinstock (Eds.): *Political Neutrality*. London: Palgrave Macmillan, pp. 178-209.
- Taylor RM 2017. Indoctrination and social context: A system based approach to identifying the threat of indoctrination and the responsibilities of educators. *Journal of Philosophy of Education*, 51(1): 38-58.
- Tice DM, Baumeister RF, Shmueli D, Muraven M 2007. Restoring the self: Positive affect helps improve self-regulation following ego depletion. *Journal of Experimental Social Psychology*, 43(3): 379-384.
- Wheeler SC, Briñol P, Hermann AD 2007. Resistance to persuasion as self-regulation: Ego-depletion and its effects on attitude change processes. *Journal of Experimental Social Psychology*, 43(1): 150-156.
- White JP 1972. Indoctrination and intentions. In: IA Snook (Ed.): *Concept of Indoctrination- Philosophical Essays*. International Library of the Philosophy of Education Volume 20. UK: Routledge, pp. 91-101.
- Wilson J 1972. Indoctrination and rationality. In: IA Snook (Ed.): *Concept of Indoctrination-Philosophical Essays*. International Library of the Philosophy of Education Volume 20. UK: Routledge, pp. 14-19.

Paper received for publication in July, 2020
Paper accepted for publication in July, 2020