

# Right Preference Theory and Nudge-Acceptability

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By

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**Abstract:** Libertarian paternalism is a standpoint that aims to synthesize decision-making influence and the preservation of autonomy. However, critics (White 2013) state that this intention is both epistemologically unattainable (because policymakers do not have the appropriate knowledge about people's preferences) and ethically objectionable (because policymakers have to use their own preferences as the foundation for policy recommendations). In the study at hand I refute both of the aforementioned objections. The former objection is refuted by philosophical arguments, while the latter is refuted by empirical investigation. I conduct survey research and use a paired-sample t-test and multiple regression analysis. The main findings of the study show that libertarian paternalism 1) is not an epistemologically problematic standpoint because policymakers have access to people's *right* preferences and 2) is not an ethically objectionable standpoint because people themselves are ready to accept influence on their autonomous choice depending on the area in which the influence occurs.

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*To my mother*

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## Introduction<sup>1</sup>

During the second half of the 20<sup>th</sup> century, libertarian political philosophy gave its last word on the issue of freedom of choice: Ayn Rand (1961), Murray N. Rothbard (1973), and Robert Nozick (1974) argued that the state is not allowed to influence the decision-making processes of its citizens because the act of interference violates their autonomy. The main challenge for this viewpoint came from libertarian paternalists who claimed that it is possible to have both decision-making influence and autonomy (Thaler and Sunstein 2003). This is possible by the use of *nudging* as a technique for influencing behavior while preserving freedom of choice (Thaler and Sunstein 2003, 1159). Nevertheless, critics (White 2013) has pointed out that libertarian paternalism suffers from two major flaws. The first one is epistemic: new nudge-based policies cannot improve people's well-being because policymakers have no access to people's true preferences and interests. The second one is ethical: since people's true preferences and interests are inaccessible to policymakers, they base policy recommendations on their own preferences, thus violating people's autonomy (White 2013, 83). In my MA thesis I will refute both of the aforementioned arguments.

In order to deal with the first argument, I will develop *right preference theory*, which shows that libertarian paternalism does not have to be founded on the notion of true preferences, but on the notion of right preferences. In order to deal with the second argument, I will conduct a survey. I will begin from the fact that theoretical considerations about autonomy have not been accompanied by empirical investigation.<sup>2</sup> Put differently, while

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<sup>1</sup>This topic is the result of my two-semester long research on the idea of acceptability of nudge-based interventions. I have used quantitative approach in the paper titled: *The Acceptability of Decision-Making Influence* (Course: Quantitative Methods: Analyzing People) and qualitative approach in the paper titled: *The Value of Autonomy* (written in co-authorship with Zsofia Victoria Suba) (Courses: Qualitative Interviewing and Qualitative Data Analysis).

<sup>2</sup> The only exception known to me is a research on the acceptability of government intervention into citizens' behavior conducted by Branson *et al.* (2012). However, while this research emphasizes the relationship between government and acceptability and encompasses four policy areas ("smoking, eating unhealthy foods, saving for

there is a century-old philosophical debate on the issue of autonomy, there has been no attempt to ask citizens themselves—whose autonomy has been at issue for all these centuries—how much they value their autonomy. The goal of the empirical part of my research is to fill that gap. Hence, under the assumption that it very well might be that the philosophical debate on the autonomy-violating nature of nudges is less relevant in everyday life than it is perceived in academic circles, my MA thesis aims to answer the question of *whether people's readiness to accept autonomy-violating influence on their decision-making process depends on the difference in the decision-making context and what decision-making logic underlies this readiness*. If nudge-acceptability is context-dependent, it would support the applicability of nudges and make the accusation for autonomy-violation somewhat empty, considering that the people themselves do not value autonomy to the extent that philosophers are trying to protect it.

The goal of this study is two-fold: it aims 1) to establish an alternative theoretical justification for libertarian paternalism and 2) to investigate the foundation of nudge-acceptability. The contribution of such investigation consists in showing 1) that libertarian paternalism—in general, and nudge-based policies in particular—are grounded in strong normative arguments and 2) that the public is ready to give its permission for using these policies for well-being-improving purposes.

As Amos Tversky and Daniel Kahneman used rational choice theory as the source of their null hypothesis (2003, 1449), I use libertarian political philosophy as the source of mine. In this respect, in the first chapter I will explain what the main premises the libertarian approach is founded on are. The central purpose of this chapter is to answer the question of what arguments underlie libertarian resistance to state intervention into citizens' decision-

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retirement, and living in an environmentally sustainable way" (p.3)), my research includes eight additional policy areas, aiming to emphasize an area in which the influence occurs.

making processes. Afterwards, I will present the theoretical extension of the libertarian approach, reflected in a standpoint called *libertarian paternalism*, in order to show how libertarian political philosophy could be “upgraded” so to be able to encompass not only concerns about individual autonomy, but also about decision-making influence. That is going to be the topic of the second chapter. This topic will bring us to the one of the most relevant critiques of libertarian paternalism, written by Mark D. White. His objections will be presented in the third chapter. Refutation of White’s arguments will be the central part of this thesis and it will be presented in the fourth and the fifth chapters. My counter-critique will be grounded in a synthesis of philosophical arguments and empirical research.



## Chapter 1: The Libertarian Argument<sup>3</sup>

Libertarian philosophers have drawn a most radical conclusion from the thesis that human beings are autonomous persons, arguing that the state is not allowed to influence the decision-making processes of its citizens. In this chapter, I will discuss the premises this attitude is founded on, focusing my attention on the work of Murray N. Rothbard, the author who set the politico-philosophical foundations for the libertarian standpoint.

In his book, *For a New Liberty: The Libertarian Manifesto*, Rothbard begins from the central concept of libertarianism, the “*non-aggression axiom*” (1973, 27). This axiom states “that no man or group of men may aggress against the person or property of anyone else” (p.27). Even though an axiom is usually understood as a starting premise which has to be accepted without further questioning, this does not imply that in Rothbard’s version the central concept of his theoretical approach is groundless. On the contrary, he explains that there are different foundations for this axiom in the libertarian theoretical tradition. In our analysis we are going to focus on the *natural right* viewpoint.

As the very name suggests, natural rights are the rights that we possess naturally, due to the fact that we are human beings. Founding justification for liberty on natural rights theory, Rothbard explains, is closely associated with the concept of natural law (p.32); and related to that idea, Rothbard writes a paragraph which can be designated as a *paragraph-manifesto* (p.33):

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<sup>3</sup> An earlier version of this argument has been developed in the paper titled: *Free Market and (De)Humanization* (Course: Crises in Capitalism, Capitalism in Crises; the date of submission: 23 December 2014) and in a different context can also be found in the paper titled: *The Value of Autonomy* (Hereafter: TVA) (Written in co-authorship with Zsofia Victoria Suba) (Qualitative Data Analysis; the date of submission: 10 April 2015).

Natural law theory rests on the insight that we live in a world of more than one—in fact, a vast number—of entities, and that each entity has distinct and specific properties, a distinct “nature” which can be investigated by man’s reason, by his sense perception and mental faculties. (---) [T]he nature of man is such that each individual person must, in order to act, choose his own ends and employ his own means in order to attain them. Possessing no automatic instincts, each man must learn about himself and the world, use his mind to select values, learn about cause and effect, and act purposively to maintain himself and advance his life. Since men can think, feel, evaluate, and act only as individuals, it becomes vitally necessary for each man’s survival and prosperity that he be free to learn, choose, develop his faculties, and act upon his knowledge and values. This is the necessary path of human nature; to interfere with and cripple this process by using violence goes profoundly against what is necessary by man’s nature for his life and prosperity. Violent interference with a man’s learning and choices is therefore profoundly “antihuman”; it violates the natural law of man’s needs.

Namely, Rothbard explains that the essence of *the natural law theory* that underlies *the natural right theory* that supports the *non-aggression axiom* is as follows: in order to exist, each individual person has to act, which means to set goals and find the means for their achievement; in order to set goals and find means for their achievement, each individual person has to think; finally, since man can live, act and think only as an individual person, s/he has to be free. Therefore, in order to *be*, s/he has to *act*; in order to act, s/he has to *think*; in order to be, act and think, s/he has to be *free*. To violate this process, means to degrade human beings to an anti-human level.

Freedom abstractly understood in such a personal-level way, in the social context becomes concrete freedom denoted by the notion of *right*. To be a free person in society means to possess inter-subjectively and institutionally recognized rights. Rothbard considers every natural right in its essence to be the property right and, among these rights, the first and the most important is the “*right to self-ownership*” (p.34). Controversial as it sounds, this right is concerned with “the absolute right of each man... to ‘own’ his or her own body; that is, to control that body free of coercive interference” (p.34). Rothbard opts for the right to self-ownership as the basic one because he maintains that the alternatives are simply unsustainable (p.34). In the words of a libertarian writer David Boaz, the only alternatives that left are either “someone—a king or a master race—could own others” or “everyone owns everyone,” which leads to “a full-fledged communist system” (1997, 62). In other words,

libertarian writers hold that the first alternative to self-ownership would imply that only the ones who own, but not the ones who are owned, have a right to their immanently human character; the second alternative would imply that each person has a right to own another person, but not him or herself—which they find absurd. Therefore, the argument implies, the only right that is in accordance with the dignity of human beings is the right to self-ownership (Rothbard 1973, pp.34-35; cf. Boaz 1997, 62).

The second basic libertarian natural right is the *right to world-ownership*. In order to understand how it follows from the first one, we are going to make a short thoughtful excursion into the Hegelian approach. Hegel states that—for the abstract notion of free will to become a concrete phenomenon it has to actualize itself in the form of private property: “when I as a free will am in possession of something, I get a tangible existence, and in this way first became an actual will. (...) Since property makes objective my personal individual will, it is rightly described as a private possession” (2001:§§45-46). Rothbard does the same thing in his inference: human existence in this world requires one to “grapple with the material objects of the world” (p.37), which implies that human nature itself requires the extension of the internal personality to the objects of the external world, namely, that *human nature requires the institution of private property*. Related with that idea, let us remember the famous quotation of John Locke (2005:§5) in which he explains how

every man has a *property* in his own *person*. This nobody has any right to but himself. The *labour* of his body and the *work* of his hands, we may say, are properly his. Whatsoever, then, he removes out of the state that nature hath provided and left it in, he hath mixed his labour with it, and joined it to something that is his own, and thereby makes it his property.

In the libertarian translation this would mean that—when Michelangelo, entitled to own himself, takes the stone and creates a gorgeous statue of David out of it, in this act he has “mixed his labor,” (Locke 2005:§5) namely his skill, passion, talent, vision, his work—with the external world, he has intervened in the natural order of things and changed them, he has reshaped the given shape of things, he has left his own trace on them, he has re-created them,

and *that fact* gives him the right to own it. As Will Kymlicka expresses the logic behind the libertarian argument, “[i]f I own myself, then I own my talents. And if I own my talents, then I own whatever I produce with my self-owned talents” (2002, 105). In other words, if I have the right to self-ownership, I have the right to world-ownership as well.

Finally, the third basic libertarian right is the “*right to exchange*” (Rothbard 1973, 85). The idea behind it is as follows: “if a man owns anything, he then has the right to *give away* or *exchange* these property titles to someone else, after which point the other person also has absolute property title” (p.48).<sup>4</sup> Therefore, Rothbard holds that being human means possessing a certain kind of human nature, and that this nature *for* and *by* its very existence requires three imperatives: 1) the right to own yourself; 2) the right to own the world you live in; and 3) the right to exchange your property with whom you freely choose to do so.

This brings us to the question in which sense the whole theoretical path we have just taken establishes the idea that the state is not allowed to influence the decision-making processes of its citizens. As it has been shown, Rothbard begins from the *natural law* that underlies *natural rights* that support the *non-aggression axiom* that forbids “the initiation of the use or threat of physical violence against the person or property of anyone else” (p.27). Since the state violates this axiom by imposing taxes (p.396) and monopolizing decision-making processes in society (p.84), it is deemed as an aggressor and dismissed as illegitimate. And since human rights, therefore, could be recognized and respected only in a private sphere, the state as a public sphere is considered illegitimate, and any kind of intervention stemming from it is regarded as a violator of citizens’ autonomy.

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<sup>4</sup> Emphasis original.

## Chapter 2: Beyond the Libertarian Argument: Libertarian Paternalism

The most revolutionizing objection to libertarian philosophy has come from the standpoint called *libertarian paternalism*, “an approach that preserves freedom of choice but that encourages both private and public institutions to steer people in directions that will promote their welfare” (Thaler and Sunstein 2003, 1201). I regard the objection as a revolutionizing one because it has led to the disentanglement of a century-old intellectual puzzle associated with the tense relationship between the individual and the state. This standpoint seems to be “the-best-of-both-worlds-solution”: on the one hand, it has managed to preserve the principle of individual freedom (stemming from the liberal and libertarian traditions), and to synthesize it with the intention to affect citizens’ behavior (stemming from the paternalistic tradition) with the purpose of making them better off. In that sense, *libertarian paternalism offers a citizen the right to choose, while offering the state an opportunity to suggest what ought to be chosen*.

In a methodological sense, this new policy-making approach is based on the idea of a *nudge*, defined as “any aspect of the choice architecture that alters people’s behavior in a predictable way without forbidding any options or significantly changing their economic incentives” (Thaler and Sunstein 2008, 6). In a philosophical sense, the approach is based on the idea that dogmatic points of view should be brought into question. In this respect, behavioral economist Richard Thaler and law scholar Cass Sunstein<sup>5</sup> have developed a fruitful critique of “the dogmatic anti-paternalism” (2003, 1163) which is “based on a combination of a false assumption and two misconceptions” (2003, 1163).

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<sup>5</sup> Hereafter: T&S

As for the false assumption, it states that people should be allowed to make their own decisions either because they are able to estimate what is “in their best interest” (2003, 1163) or because they can do it better than anybody else (2003, 1163). However, as T&S’s argument goes, the quality of people’s choices is a several-layer-issue where “contexts in which they have experience and good information” cannot be equated with “contexts in which they are inexperienced and ignorant” (2003, 1163). Situating this point in a wider interpretative frame, it means that—even though people are “equipped” with the cognitive apparatus that makes them capable of making rational decisions, and even though this capability represents the basis for the requirement that their autonomous choice ought to be respected, rational capability still does not preclude people from the possibility of making a mistake; and given that the quality of people’s choices could be improved, T&S suggest that an external policy intervention aiming to make people better off is justifiable (p.1163).

As for the first misconception, it states that “there are viable alternatives to paternalism” (p.1164). In opposition to this opinion, the authors show that the context in which people make their decisions has to be arranged in a certain manner and someone has to decide what that context will look like: in the private sphere, they argue, an agent has to choose the way a certain product will be presented to a customer; in the public sphere, an agent has to choose the legal rules within which citizens will be obligated to act. In both cases, they claim, it is impossible not to arrange the context somehow. Hence, since “there is no such thing as ‘neutral’ design” (T&S 2008, 3), the authors conclude that certain “form of paternalism is inevitable” (T&S 2003, 1165).

As for the second misconception, it states “that paternalism always involves coercion” (T&S 2003, 1165). However, it is not clear, the authors suggest, how the libertarian approach to paternalism could be understood as coercive: “[w]ould anyone object to putting the fruit and salad before the desserts at an elementary school cafeteria if the result were to increase

the consumption ratio of apples to Twinkies?” (p.1166). In other words, T&S consider paternalism inevitable and opt for its most non-coercive form.

Thus, the justification for libertarian paternalism established by T&S stems from showing that *the quality of people's choices could be improved by enacting nonetheless inevitable paternalistically grounded non-coercive policies*. It is important to notice that these arguments bring policy-making into connection with the way the human brain functions, with the way human cognitive mechanisms are structured, with the way human rational capabilities are “bounded”.<sup>6</sup> As Dolan *et al.* (2010) state,<sup>7</sup> “our behavior is guided not by the perfect logic of a super-computer that can analyze the cost-benefits of every action. Instead, it is led by our very human, sociable, emotional and sometimes fallible brain” (p.13). This insight, according to which human thinking is systematically biased, has its roots in the psychological research of Amos Tversky and Daniel Kahneman (1974). These authors argue “that people rely on a limited number of heuristic principles which reduce the complex tasks of assessing probabilities and predicting values to simpler judgmental operations” (p. 1124). As T&S notice, the heuristics that Tversky and Kahneman deal with in their article may play a very important role in the overall cognitive orientation of a person, but they may also cause systematic biases (2008, 23). The most important conclusion that recent psychologists have drawn from this research, T&S explain, is that these systematic biases “emerge from the interplay between the Automatic System and the Reflective System” (2008, 23).

Building on the converging psychological understanding of the way human brain functions (e.g., Chaiken and Trope 1999), T&S (2008, 20) present the key characteristics of the two cognitive systems:

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<sup>6</sup> The term „bounded rationality“ has been coined by Herbert A. Simon (1957).

<sup>7</sup> An earlier version of the following argumentative line has been firstly presented in the paper titled: *Behavioral Insights and Comparative Politics* (Course: Comparative Political Research; the date of submission: 25 February 2015).

**Automatic System**

Uncontrolled  
Effortless  
Associative  
Fast  
Unconscious  
Skilled

**Reflective System**

Controlled  
Effortful  
Deductive  
Slow  
Self-aware  
Rule-following

The important implication of this “*dual-process theory*” (Chaiken and Trope 1999) consists in pointing out that 1) people are prone to basing their decisions on the former, but not on the latter system, and that 2) policy making should be organized in accordance with that fact. As John *et al.* (2013) state, “policy-makers may be successful in nudging citizens into civic behavior if they take into account the cognitive architecture of choice that faces citizens and work with, rather than against, the grain of biases, hunches and heuristics” (p.11).

The report written by the group of authors gathered within the Institute for Government in the United Kingdom (Dolan *et al.* 2010) follow the same argumentative line. These authors also begin from a dual-process theory, distinguishing between 1) reflective and 2) automatic cognitive systems. This distinction then underlies two different approaches to changing behavior: 1) “the rational or cognitive model” and 2) “the context model” (p.14). They argue that while the former assumes that people are rational agents who rank preferences and behave strategically, the latter emphasizes the context in which people make their (sometimes irrational) decisions (p.14). This distinction is then embedded in two kinds of policy interventions: 1) “traditional” (p.14) and 2) “MINDSPACE” (p.18). While the former is composed of “legislation, regulation or taxation,” (p.4) the latter consists of “nine of the most robust (non-coercive) influences on our behavior, captured in a simple mnemonic—MINDSPACE—which can be used as a quick checklist when making policy” (p.8). These influences are presented in the following table:



<b>Messenger</b>	we are heavily influenced by who communicates information
<b>Incentives</b>	our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses
<b>Norms</b>	we are strongly influenced by what others do
<b>Defaults</b>	we “go with the flow” of pre-set options
<b>Salience</b>	our attention is drawn to what is novel and seems relevant to us
<b>Priming</b>	our acts are often influenced by sub-conscious cues
<b>Affect</b>	our emotional associations can powerfully shape our actions
<b>Commitments</b>	we seek to be consistent with our public promises, and reciprocate acts
<b>Ego</b>	we act in ways that make us feel better about ourselves

Table 1: *Influences on people's behavior.* (Source: Dolan *et al.* 2010, 18).

For the topic we are dealing with, the presented list is important because it shows that—since human behavior is susceptible to different influences, some sort of paternalism is “impossible to avoid” (T&S 2008, 2); and since “there is no way to avoid effects on behavior and choices” (T&S 2003, 1182), an advocate of the libertarian standpoint should not avoid these effects but, rather, “preserve freedom of choice” (T&S 2003, 1182).

## Chapter 3: Objections

So far it has been shown that 1) libertarian political philosophers oppose the idea that the state should be engaged in influencing citizens' decisions because the act of interference violates citizens' autonomy; that 2) libertarian paternalism can preserve both the possibility of the state-influence and citizens' autonomy; that 3) people's susceptibility to various behavioral influences makes paternalism unavoidable; but that 4) hardcore libertarians can, notwithstanding this, preserve their autonomous choice. However, that libertarian paternalism allegedly suffers from serious flaws has been claimed by Mark D. White. He argues (2013, 83) that

even if regulators sincerely want to help people with paternalistic laws and policies, they should realize that it is impossible to know other people's interests well enough to do this. This is both a practical problem—how can regulators nudge people in their own interests if they do not and cannot know what those interests are—and an ethical problem, deriving from the right of all persons to develop and pursue their own interests (provided this doesn't interfere with anybody else doing the same).

In this chapter I will present the author's arguments in favor of the practical problem. Namely, White's objections to libertarian paternalism (LP) follow an already established argumentative line which I will call the *knowledge-problem objection*. Four years before White published his book, economists Mario Rizzo and Glen Whitman had argued that policymakers had no "access to the knowledge needed to implement welfare-improving paternalist policies" (2009, 105). These authors explain that a supporting pillar of this statement is the Hayekian *knowledge problem*, the thesis that intervention of the state into the economy is problematic because "the knowledge of the circumstances of which we must make use never exists in a concentrated or integrated form but solely as the dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess" (Hayek 1945, 3). From R&W's arguments it follows that in the context of LP, the

Hayekian point means that, since welfare-improving policies<sup>8</sup> (in order to “justify” their welfare-improving designation) require knowledge about individuals’ true preferences, knowledge that, as it is claimed, cannot be obtained, it follows that these policies cannot be justified. White’s point is the same, but he predominantly uses the concept of true interests, instead of true preferences. Thus he claims that “policymakers have no way to know whether a particular choice made by a person is good or bad—only that person can make that judgment because only that person knows his or her true interests and motivations for that choice” (2013, XIII).<sup>9</sup>

To make matters worse, the arguments go, from the epistemological fact that policymakers have no access to citizens’ true preferences it follows that they present their own preferences as those of citizens. Thus R&W state that policymakers “cannot implement people’s ‘true preferences,’ but they can implement what they believe are the ‘right’ ones” (2009, 161), while White states that “the regulators are substituting their judgment regarding another person’s best interests for the person’s own” (2013, 73). In this respect, it can be claimed that LP suffers not only from the Hayekian “knowledge problem,” but also from the problem of “value substitution,” (White 2013, 70) namely, the one of substituting citizens true preferences for the ones of policy designers (White 2013, 70). Let us call this the *value-substitution objection*.

One way of dealing with these objections is to develop an idea of *true* preferences as *rational* preferences. White realizes this possibility and quotes economist John Harsanyi, who states that “a person’s true preferences are the preference he *would* have if he had all the

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<sup>8</sup> I will use this Rizzo and Whitman’s notion throughout this paper.

<sup>9</sup> We will not go deeper into White’s very fruitful discussion about how a person’s “interests cannot be reduced to preferences alone, but rather are based on preferences, the person’s individual well-being, the well-being of others, personal principles, societal ideals and whatever else that matters to the person...” (pp.13-14). Also, we will not problematize the potential difference between the way White uses the concept of true interest, as opposed to the way R&W use the concept of true preferences. The important part here is that all these authors use a *knowledge-problem objection* in order to show that LP is practically unsustainable standpoint.

relevant factual information, always reasoned with the greatest possible care, and were in the state of mind most conducive to rational choice” (p.77). However, White argues that we are not capable of drawing any logically correct inference out of the question of what something would look like if it was not the way it is: “Counterfactuals are notoriously difficult to determine or evaluate because they are literally ‘against facts’ or reality” (p.77).

## Chapter 4: Philosophically Grounded Counter-Objections

### 4.1 Right Preference Theory<sup>10</sup>

White argues that LP is a practically unsustainable standpoint because it erroneously assumes that people's true preferences—that paternalistic policies are supposed to be based on—are accessible to policymakers. Careful thinking, however, reveals completely different logic which new paternalistic policies could be based on: instead of trying to understand what individuals' *true preferences* are, libertarian paternalism could be based on a notion of *right preferences*. I define right preferences as an *evidence-based way of either being better off or making the context one lives in better*. In other words, right preferences are ones that acting on which the scientific research has shown might improve either people's lives or the context in which their lives occur. The concept of right preferences both includes and expands the previously mentioned concept of rational preferences: the former—since the right preferences stem from rational reasoning on the basis of relevant information; the latter—since the right preferences posit that this process (of rational reasoning on the basis of relevant information) should have the form of scientific research.

The example of nudging toward non-smoking could be used as a demonstration of this point. Namely, anti-paternalists would say that since policy designers do not know citizens' true preferences, they cannot improve their welfare by nudging them to quit smoking. This argument has certain intuitive strength because it is really not clear how a

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<sup>10</sup> I have developed the first version of this theory in the paper titled: *Why Hayekian 'Knowledge-Problem' Is Not Relevant for Libertarian Paternalism* (course: Political Theory II: Cognitive Science and Policy Making; the date of submission: April 15, 2015) and used it as a part of the argument developed in TVA. The first versions of the following three sub-chapters have also been developed in the *Why Hayekian...* paper.

policymaker could know anything about the true preferences, given that they “are not (simple) revealed by choices” (R&W 2009, 158). However, let us imagine that the findings of some hypothetical research on the effects of smoking on health have shown that persons who smoke are at a great risk of developing lung cancer. Since it is reasonable to assume that each person prefers health over sickness, it can be stated that being healthy is a person’s right preference. Then choice architecture could be used as a system of suggestions for acting on right preferences, without any need of possessing knowledge that anti-paternalists state policymakers need to possess. In other words, since science could be used to determine the *is* level, libertarian paternalism could be used to realize the *ought* level.

This means not only that right preference theory refutes the ‘knowledge-problem objection’ (by showing that the knowledge the objection states it is needed—is not needed at all), but also that the theory refutes the ‘value-substitution objection’ (by showing that policy designers have scientific research as a source of their policy suggestions, as a result of which they do not have to impose their own preferences on citizens).

However, one might argue that the statement: *people should be nudged to quit smoking because smoking is bad* is a normative statement and that the normative dimension should be left to each individual person to judge and choose in accordance with his or her own intellectual preferences.<sup>11</sup> Yet, even though this argument very precisely reveals the nub of the issue, in my view it still leaves room for another interpretative solution. Namely, the true problem does not consist in the intention of libertarian paternalists to prescribe what ought to be done; the true problem would arise if paternalism was not libertarian in nature. This non-libertarian paternalism would suggest either increasing taxes or banning smoking in public in order to send a signal of what ought to be done. As a result, people would be

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<sup>11</sup> This is how I have understood the argument Andres Moles has stated during a discussion we have had in a class.

coerced either to pay more or to completely change their smoking habits. On the other hand, policies based on a new interpretation of paternalism would also send a signal of what ought to be done, but without forcing people to accept what these policies suggest to them to be the right solution. In other words, *differentia specifica* of libertarian paternalism in this context is enabling people to choose freely which “ought-signal” to accept. Therefore, even though nudging toward non-smoking that uses evidence-based policy recommendations to intervene in people’s decision-making processes is strongly associated with normative concerns, the fact that people are still free to choose makes it justifiable.

#### 4.2 A Research-Based Notion of Well-Being

However, there is still another counter-argument which is much harder to deal with. Namely, I have stated above that instead of trying to understand what individuals’ *true preferences* are, libertarian paternalism could be based on the notion of *right preferences*, where the right preferences would be the ones that make people or the context they live in better according to scientific research. But one might argue that it is seriously questionable whether there is a scientific answer to what makes us better off. If ‘better off’ is understood as increasing people’s well-being, while knowing that well-being is a normative concept, then—the argument goes—the one who wants to defend the notion of right preferences would have to argue that there is *a scientific, non-normative account of well-being*.<sup>12</sup>

In order to deal with this argument we will have to consult the philosophical conception of Joseph Raz. This author regards well-being as an issue pertaining to “one crucial evaluation of a person's life: how good or successful is it from his point of view” (1986, 289). This implies that being better off means my own individual impression of the quality of my life. Emphasis here is on “my own”: in order to be better off, *I* have to be the

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<sup>12</sup> This argument is stated by Andres Moles.

one who believes that the quality of *my* life has been improved as a result of some action. A relevant consequence is again Hayekian in nature: any external intervention into my life with the purpose of making me better off is not justifiable because it would require *knowledge* on my own impressions, on my own preferences, namely, knowledge that is available only to me. Referring back to the example, a nudging-non-smoking initiative based on the argument that I will be better off as a result of it is unjustifiable because there is a possibility that I might have an impression of an improvement of the quality of my life as a result of smoking a cigarette.

Nevertheless, I am of the opinion that Raz's position leaves room for another understanding. As it is presented in Table 2, from his position it follows that he regards improving well-being as a two-layer phenomenon:

	Improving Well-Being	Relevant Quotation
<b>The 1<sup>st</sup> Layer</b>	Goals – satisfaction	“The value of various situations for a particular person depends to a large extent on his actual goals” (p.290).
<b>The 2<sup>nd</sup> Layer</b>	Biological-needs-and-desires satisfaction	“A person is better off when... in good health” (p.290).

Table 2: Raz's Conception of Well-Being

As for the first layer, Raz states that “[p]eople’s well being is to a considerable extent a function of their non-biologically determined goals: goals which they have but could have avoided” (p.294). As for the second layer, it follows that people’s well being is to a certain extent a function of their *biologically* determined goals, namely, the ones they could not have avoided. This is important for the topic we are dealing with for the following reason: if my well-being partly depends on the satisfaction of my biological goals (e.g., being in good health), and if nudging can be used for achieving that goal (e.g., to quit smoking), then nudging can be used for improving my well-being.



Having shown this, I have made the foundation for *a scientific, non-normative account of well-being*, which can be used as a theoretical underpinning for justifying nudge-based policy interventions. The flow of the argument would look as follows:

- 1) Scientific research can be used for the improvement of citizens' health.
- 2) Improving citizens' health means making them better off.
- 3) Making them better off means improving their well-being.
- 4) Therefore, scientific research can improve citizens' well-being.

Hence, even if, as Moles states, 'better off' is understood as increasing people's well-being, from Raz's conception it follows that well-being must not be understood only as a normative concept, but also as an "empirically determinable" phenomenon. Well-being is a compound of a normative dimension (what *I* think that *I* ought to do in order to improve *my* life) and of a biological dimension (a criterion (e.g., health) that I could use in order to "estimate" my well-being). Therefore, even though Moles is completely right when stating that well-being is a normative concept, I have shown that Raz's approach does include a non-normative dimension as well, which establishes the grounds for claiming that the notion of right preferences is justified.

#### ***4.3 Reading Nozick in Order to Refute Going beyond Nudging***

There is still another very important question that Moles has asked: If not smoking is the right preference, then why would we stop at nudging? Why would we not make it illegal? This question is crucial. It is crucial because it does not ask only about nudging, but also about people's right to choose their own conception of the good and about being capable of living in accordance with it, about treating people with respect, about considering them as ends-in-themselves, about recognizing their autonomy, it, finally, asks whether people should be free to choose a life of their own, therefore, *it asks about freedom*. So, why should people

be free to act on their “wrong” preferences, even though it can be shown what the “right” preferences are?

In order to answer this question, I will use the conceptual apparatus of Nozickian political philosophy. The central point of Nozickian libertarianism is the notion of *rights* as “*side constraints*” (1974, 30). Nozick explains that “[s]ide constraints upon action reflect the underlying Kantian principle that individuals are ends and not merely means; they may not be sacrificed or used for the achieving of other ends without their consent. Individuals are inviolable” (1974, 30–31). Now the question arises as to how this Kantian principle represents a conceptual barrier to banning acting on wrong preferences. Even though in approaching this issue, Nozick considers some of the traditional answers on why constraints, such as the aforementioned principle, should be respected (e.g., because people are 1) rational agents; 2) moral agents; or 3) beings that possess free will (p.48)), he complements this conception by stating that the main reason why these traditional answers matter “is connected with that elusive and difficult notion: the meaning of life” (p.50). Among all interpreters of Nozickian theory, this part is best understood by Ralf M. Bader (2010, 24) who explains that

persons are beings who can shape their lives according to a conception or plan that they themselves have framed. They thereby possess the capacity to impart meaning to their lives and it is because of this that they are inviolable, that they should be treated as ends and not as mere means. By respecting their rights, we respect and adequately respond to the fact that people have the capacity to shape their lives and strive for meaning.

Situating it in the context of our discussion, this argument means that people should be left to act on their preferences—even when they are wrong—because they are capable of determining the character of their own life according to their own notion of what that life should look like and be a compound of.

However, one might argue that this brings us back to the first question: If people are capable of shaping their lives, why should we nudge them in the first place? My answer is: because we are capable of determining what is *right*. In other words, Nozick’s argument is

sound, but it only “goes halfway”: it shows that people’s choices should be respected because people are beings capable of making a plan in order to live meaningful lives. But Nozick has not noticed that the fact that people are capable of having a plan does not imply that the state could not legitimately influence that plan. In other words, Nozick’s argumentation presupposes that *subjective* origins of a life plan do not leave enough conceptual space for *objective* grounds on the basis of which this plan could be brought into question. Referring back to the example again, Nozick would say that the fact that smoking contributes to the process of imparting meaning to my own life (subjective component) prevents the state from interference with my choice. But I have shown that scientific research (objective component) can be used as evidence-based grounds for making people better off. Therefore, since there are objective grounds that the state could use to determine what is right, nudging is legitimate; and since people still possess a life-shaping-ability, going beyond nudging is illegitimate.

#### 4.4 Why ‘The One-Size-Fits-All Problem’ Is Not a Problem At All<sup>13</sup>

The last topic I will be dealing with in the context of this discussion is R&W’s statement that—since different individuals are susceptible to different sorts of bias, a policymaker has to “account for heterogeneity,” (p.106) namely, s/he “needs to know what fraction of the population falls into each category of bias” (p.157). The “needs to know” part is added because policy measures allegedly cannot be isolated so as to affect only the target group: “a fat tax, for instance, would apply to all buyers of food” (p.153) and will lead to “problems of over-inclusion and under-inclusion” (p.153). This erroneous conclusion has been made because R&W have missed the very essence of the subject they would like to write about: the new paternalism they want to object to is *libertarian* paternalism; the

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<sup>13</sup> “The One-Size-Fits-All Problem” is the title in R&W’s article (2009, 153).

*libertarian* part implies not using the taxation system in order to influence people's behavior. The objection based on fat tax, therefore, completely misses the point: a policymaker is not obliged to account for heterogeneity in this sense.

Additionally, I am of the opinion that the thesis on heterogeneity is unproductive in another sense as well. Let us imagine that (as R&W wish) only certain individuals are susceptible to, for example, a herd-following bias and that a policy designer has chosen to “use” this bias in order to help people quit smoking by arranging the decision-making context so as to send the message that smoking is not “in vogue” anymore.<sup>14</sup> The aforementioned argument implies that since only some but not all individuals are susceptible to this kind of bias, the policy should not be established because it will pertain to all and not only to these individuals. But it is not clear how individuals that are not susceptible to a herd-following bias can be worse off by being exposed to nudge-based policies, especially given that these policies are “cheap and easy to avoid” (T&S 2008, 6). Assuming that only certain individuals are susceptible to this bias, let us imagine that a policy designer establishes a policy: 1) in the case of individuals who are susceptible to this bias and who are smokers, a policy-measure-goal would be achieved; 2) in the case of individuals who are not susceptible to this bias and who are non-smokers, the policy-measure would go unnoticed; 3) in the case of individuals who are susceptible to this bias but are non-smokers, the policy-measure would go unnoticed as well; finally, 4) in the case of individuals who are not susceptible to this bias but are smokers, the policy-measure-goal would not be achieved. Therefore, since nudge-based policies affect only those citizens they are directed to, and since it is easy not to be affected by them at all, no one *is* or *can be* worse off.

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<sup>14</sup> A herd-following bias can be understood as a „doing what others do“ (T&S 2008, 55) tendency.

#### *4.5 Right Preference Theory and Various Nudge-Types*

As it has been shown, libertarian paternalism can be based not on the concept of true but on the one of right preferences. This concept implies an evidence-based way of being better off. Furthermore, regardless of the fact that making people better off means improving their well-being, which allegedly can be done only against the background of strong normative premises, I have shown that empirical scientific research can be used in order to determine what makes people better off, meaning that human well-being has received its new evidence-based foundation. Besides that, right preference theory includes the context people live in—showing that not only personal but also social and environmental contexts can be improved on evidence-based grounds. Additionally, I have shown that—since there are objective grounds that policy designers could use to determine what is right, nudging is legitimate; however, since people still possess life-shaping-abilities, going beyond nudging is illegitimate. Finally, from this discussion it follows that—owing to the manner in which nudge-based policy interventions are structured—they make no people worse-off. The main implication is that neither R&W, nor White is right when stating that libertarian paternalism is a practically unenforceable standpoint. More precisely, inasmuch as these authors claim that citizens' true preferences and interests are inaccessible to policy designers, they are right. Nevertheless, since nudge-based policy recommendations can be based on the concept of right preferences, which is accessible to policy designers, these anti-paternalistic-oriented authors are wrong.

Now the question arises as to how different types of nudge fit into right preference theory. Taking into account that White's objections are directed to paternalistically oriented

nudges,<sup>15</sup> in Table 3 I will present the relationships between the theory and eight most common nudge-types that belong to this group. These are: 1) a healthy diet; 2) non-smoking; 3) non-binge-drinking; 4) framing the words in medical treatment; 5) savings for retirement; 6) safe-driving; 7) charitable giving; and 8) crime reduction. Given that I define *right preferences* as an *evidence-based way of being better off*, in order to present the relationships, I will show 1) what type of *evidence* can be obtained in support and 2) in which sense people's lives or the context in which life occurs would be *improved* as a result of nudging.

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<sup>15</sup> Paternalistic nudges are the ones that “influence the choices of affected parties in a way that will make chooser better off” (T&S 2003, 1162).

	<b>Evidence</b>	<b>Improvement</b>
<b>Healthy diet</b>	Correlation between high-calorie food and illness	Health-improvement
<b>Non-smoking</b>	Correlation between smoking and lung cancer	Health-improvement
<b>Non-binge-drinking</b>	Correlation between drinking and illness	Health-improvement
<b>Framing risks in a medical treatment</b>	Correlation between accepting a doctor's advice and satisfaction with that decision e.g. a year after	Health-improvement
<b>Savings</b>	Percent of the people who regret because of not saving	The-quality-of-life improvement <sup>16</sup>
<b>Safe-driving</b>	Correlation between speed driving and car crashes	Health (i.e. life) improvement <sup>17</sup>
<b>Charitable giving</b>	The results of giving	Context improvement <sup>18</sup>
<b>Crime reduction</b>	Percent of the people not repeating the crime as a result of nudging	Context improvement

Table 3: *Various nudge-types accordance with the right preference theory*

<sup>16</sup> One might argue that the-quality-of-life improvement (QLI) does not fit into right preference theory (RPT) because there is no evidence-based possibility to show that retirement savings will make all people better off, simply because of the fact that there might be persons who like a 'live fast – die young' lifestyle that excludes considerations regarding old age. However, I am of the opinion that QLI can be incorporated into RPT in the following way. In his influential book, *A Theory of Justice*, John Rawls develops the concept of "primary goods" as "things that every rational man is presumed to want (1999, 54). One sub-category of primary goods is "social primary goods," (1999, 79) which include "income and wealth" (1999, 79). In the context of our discussion this means that – regardless of the lifestyle one lives, one will need a certain amount of money to support that lifestyle. This philosophical justification could be enhanced with empirical findings, for example, by obtaining data which can show the percent of people whose quality of life has been significantly degraded in old age as a result of not having saved for retirement. In this manner empirical evidence would undergird the normative dimension, showing that saving for retirement is the right preference because it conditions all other possible preferences a person might have.

<sup>17</sup> Health (i.e., life) improvement fits into RPT in the following sense: the main assumption of being better off is being alive; nudging toward safe-driving can save a person's life; therefore, nudging toward safe-driving concerns citizens' right preferences.

<sup>18</sup> This can be designated as context improvement if charitable giving is interpreted as a potential crime-reduction measure (in the sense: poverty might lead to crime, so by reducing poverty, one reduces potential crime). I am aware of the fact that this is an I-centered, egoistic motivation (in the sense: I help others because they can make me worse off by degrading the social context in which I live), but RPT is not a theory about morality, so moral concerns will be left out.

## 4.6 Nudging and Autonomy-Violation

So far it has been shown that both the ‘knowledge-problem objection’ and the ‘value-substitution objection’ can be refuted by means of right preference theory. The former in the sense of showing that policymakers *do* have access to citizens’ right preferences; the latter in the sense of showing that the access to right preferences makes it unnecessary to substitute preferences of policymakers for citizens’. However, as it has been shown at the beginning of the chapter titled *Objections*, White does not object to LP only on a practical level, but on an ethical level as well. In that sense he states (p.133) that

...the value substitution inherent in libertarian paternalism is its most ethically problematic aspect. The fact that regulators do not have access to information about people’s true interests, and therefore must impose their own idea about them when designing paternalistic rules and policies, is the greatest threat to autonomy posed by libertarian paternalism. Finally, the way that nudges work—by piggybacking on the same cognitive biases and heuristics that motivated them—means that their effects on autonomy often go unnoticed, with strong implications regarding our identities and characters.

From the above quotation it can be inferred that White’s objections to the autonomy-violating dimension of choice architecture has a two-layer structure. Firstly, he states that what violates a person’s autonomy is the act of substituting values: policymakers impose their preferences on citizens. Secondly, he argues that, as a result of that, nudging not only violates autonomy, but also does so in a non-transparent way: since a person’s choices are influenced by engaging cognitive mistakes, thereby circumventing a person’s reflection, a person does not participate in his or her own decision-making process in a conscious way. This step moves us from a *practical* and brings us to an *ethical* dimension of libertarian paternalism, as well as it obligates us to deal with different types of arguments against choice architecture.

Even though I have shown that the ‘value-substitution objection’ does not occur in nudge-based policy interventions, I will pretend that I have not, because I submit that it can be shown that White’s arguments can be refuted on the same basis on which he tries to refute



nudging—on the basis of autonomy. Hence, the most important question that arises now is *why is it ethically problematic to be subjected to policies that are based on policymakers' preferences?*

Certainly, as much as this question asks for the reason why it is ethically objectionable not to be allowed to act on one's own preferences, it seems like an elementary question asked during the first class of ethics in high school. White has a strong and straightforward explanation: since individuals are autonomous beings, meaning—they possess “the right (...) to govern their own lives, setting their own agendas, goals, and interests, and being free to make choices as they choose (...)” (p.128), and since nudging infringes on these rights by substituting citizens values for policymakers' ones, it follows that nudging violates citizens' autonomy (pp.127-133).

In order to better understand White's theses, we will describe one of his brilliant examples. Namely, he asks us to imagine a person, Sally, who tries to quit smoking and he confronts two different paternalistically grounded policy measures that could be established to be Sally's ally in that battle. The first belongs to “*traditional paternalism*” (p.133)<sup>19</sup> and hence uses “health warnings and taxes” (p.134) in order to influence people's decision-making process. Thus, each time she buys cigarettes, White explains, she is confronted with information concerning health risks associated with smoking, and she is incentivized to think about how well her monthly income accords with the price of a pack of cigarettes that has been increased as a result of a policy measure that uses taxes to motivate people to quit smoking. On the other hand, the second policy measure belongs to *libertarian paternalism* and hence uses people's “cognitive flaws in decision-making” (p.134). Thus, instead of being persuaded to quit smoking by being confronted with health risks and taxes, Sally unfortunately lives in the city which has established a law that cigarette sales are allowed

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<sup>19</sup> Italics mine.

only on Wednesdays. White suggests that this measure meets the libertarian condition: no options are forbidden. Thus, the argument states that since people will not be well-organized enough to arrange their cigarette-buying-schedules in accordance with the new policy because they suffer from “weakness of will or procrastination” (p.134), their wish to quit smoking will easily come true. Additionally, the only cost imposed on persistent smokers would be a requirement to buy cigarettes on Wednesdays (p.134).

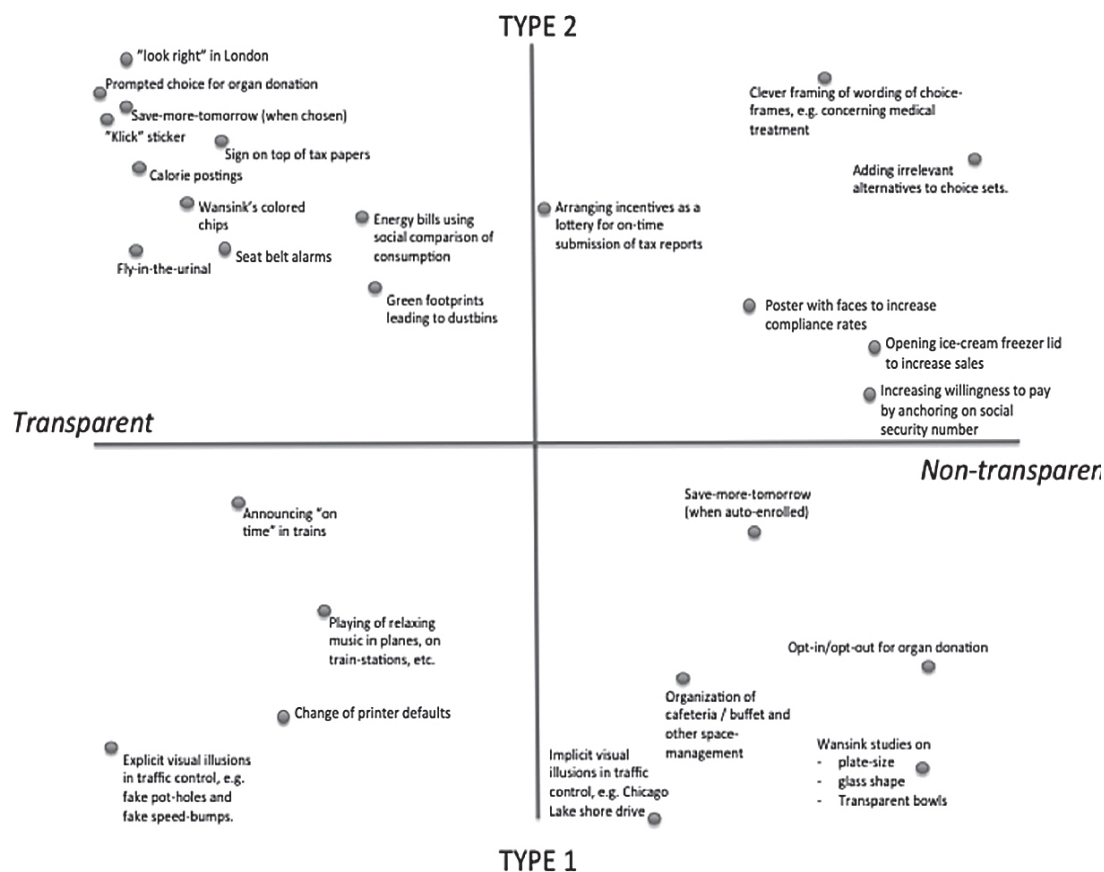
White’s point is that—while both policy measures are paternalistically grounded, the former uses rational persuasion, whereas the latter uses cognitive flaws in order to influence people’s behavior. The former is, White argues, more acceptable because the interests that underlie these policies (helping people to quit smoking) do not affect Sally’s interests because her decision-making process remains “unaffected” (p.134). The latter is, he maintains, unacceptable because the interests that underlie these policies *do* affect Sally’s interests by engaging her decision-making process in a way that is non-transparent to her. White claims that this is extremely problematic because 1) it improves Sally’s choices without improving her decision-making, which 2) violates the idea of autonomous decision-making, 3) preventing her from being a conscious maker of her own decisions, 4) making (given that her choices influence her character) her own character to be the product of someone else’s choices (p.136). Thus, the entire process is regarded as detrimental (p.136) because it is

the very opposite of autonomy: outside influences are subtly introduced into her decision-making process, which then becomes part of her character. She will not likely be aware of this influence, so she will never have the chance to reflect critically upon it and either accept it or reject it depending on how it fits into the person she wants to be.

To sum up White’s arguments, in order to be autonomous, a person has to make his or her own choices. Since nudging not only substitutes policymakers’ values for citizens’, but also “work[s] covertly” (p.135) by engaging people’s cognitive biases, thereby making people’s

internal choices to be products of the external influences people are unaware of, nudging violates people's autonomy. Put differently, the imposition of preferences by means of mistakes that people make in their decision-making, in order to influence that decision-making, violates people's autonomy and renders libertarian paternalism an ethically unacceptable standpoint.

One way to respond to this objection is to show that not all nudges, as White thinks, “work covertly” (p.135). In other words, not all nudges are manipulative in nature. Namely, that a nudge is not a monolithic phenomenon has been shown by Pelle Guldberg Hansen and Andreas Maaløe Jespersen (2013).<sup>20</sup> They argue that 1) a nudge encompasses not only choices but also behavior and that 2) it does not include manipulation in all of its forms (2013). The matrix that H&J have constructed (p.20) presents this point:<sup>21</sup>



<sup>20</sup> Hereafter: H&J

<sup>21</sup> I have developed an earlier version of the “matrix argument” in TVA.

In order to understand the complex nature of nudging, in the rest of this chapter we are going to deal with the internal logic of the distinctions this matrix is concerned with.

To begin with, H&J use the notion of manipulation in its “psychological sense” (H&J 2013, 18) understood as an intention “to change the perception, choices and behavior of others through underhanded deceptive or even abusive tactics” (H&J 2013, 18).<sup>22</sup> Furthermore, building on the difference between *reflective* and *automatic thinking*, they include the distinction between *choice* and *behavior*, as well as the conceptual apparatus of the theory of action, which distinguishes between *actions* and *causes*. The latter theory brings action into connection with intention, which itself is connected to active deliberation. The authors then argue that the whole process of deliberately intending to start a certain action refers to the phenomenon of choice, which implies that choices are based on reflective thinking (p.14). On the other hand, actions caused not by deliberation but by other events are designated causes (e.g., reflexive blinking when a ball is moving fast toward you (p.14)). These “non-voluntary actions” (p.15) are akin to the type of behavior not connected with active deliberation. The authors’ point is that *choices* have to be based on *reflective thinking*, while *behaviors* may be based on *automatic thinking* (p.15). On the basis of the aforementioned analytical construction, the authors make (p.15)

a distinction between (...) *type 1 nudges* and *type 2 nudges*. Both types of nudges aim at influencing automatic modes of thinking. But while type 2 nudges are aimed at influencing the attention and premises of—and hence the behavior anchored in—reflective thinking (i.e. choices), via influencing the automatic system, type 1 nudges are aimed at influencing the behavior maintained by automatic thinking, or consequences thereof without involving reflective thinking.

In other words, they argue that—while type 2 nudges engage both automatic and reflective cognitive systems, influencing both choices and behaviors, type 1 nudges engage only the automatic system, excluding active thinking and deliberate choice.

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<sup>22</sup> H&J attribute this psychological interpretation of manipulation to Braiker (2004).

The last important distinction is the one made on the basis of T&S's statement that nudging could be problematic "because it is invisible and thus impossible to monitor" (2008, 246). H&J use this diagnosis to distinguish between what they call *transparent* and *non-transparent nudges* (H&J 2013, 17). To be qualified as transparent, they argue, the intention behind an instance of decision-making influence has to be clear to the person being influenced; and vice-versa, to be qualified as non-transparent, the person being influenced has to be unable to "reconstruct either the intention or the means by which behavioral change is pursued" (H&J 2013, 18).

H&J's most important conclusion is the following: "an epistemic dimension of transparency" (H&J 2013, 17) answers the question of whether the one whose decision-making process is influenced is aware of the intention behind the influence (H&J 2013, 17); "a psychological sense of manipulation" (H&J 2013, 18) is understood as an intention "to change the perception, choices and behavior of others through underhanded deceptive or even abusive tactics" (H&J 2013, 18). Given that type 2 nudges influence choices, while type 1 influence behavior, and given that the intention behind nudges is clear only in the case of the transparent type, H&J conclude that *non-transparent nudges* are *manipulative* in a psychological sense: type 2 manipulates *choices*, while type 1 manipulates *behavior* (H&J, pp.23-27).

#### 4.7 The Relevance of Autonomy

White's argument concerning the manipulative nature of nudges could thus be refuted by showing that only certain types of nudges are manipulative. However, White could reply that this still does not suffice because as long as some policies are based on nudges that *have* a manipulative character, these policies violate people's autonomy. What is curious here,

however, is the main assumption which all White's autonomy-related counter-arguments are founded on (p.149):

I think that most people of any political persuasion, regardless of their views concerning the appropriate scale and scope of government, agree that their choices, insofar as they don't have any direct and wrongful effect on anybody else, are their own business.

In other words, White claims that most people will choose autonomy. Given that people's interests are reflected in people's choices, being autonomous will be in the interest of most people, White insinuates. But how does he know that? Did he not write an entire book about the inability of policy designers to acquire knowledge about preferences and interests of other people? Why is this different? Does this not count in his case? One might argue that autonomy is a certain kind of *sine qua non*: in order to understand *what people really want*, they have to be given an opportunity to *want* in the first place. Indeed, but this is exactly what I claim: White has not given an opportunity to people to want. More precisely, White accuses economists for overlooking the "question whether the goals and interests assumed in their models correspond to what real people value" (p.127), claiming that "[t]hey presume to know what people's interests are and to act to promote those interests (...)" (p.127). I claim that—if this is a mistake, he at least makes the same mistake.

## Chapter 5: Empirically Grounded Counter-Objections

### 5.1 Hypotheses

I maintain that people's preference toward autonomy-preservation has no absolute character, as White would like it to be, but that it is rather *context-dependent*. In other words, I hypothesize that *people's readiness to accept autonomy-violating influence on their decision-making process will depend on the policy area in which the influence occurs*.

My explanation for this hypothesis is the following: people's readiness to accept decision-making influence depending on the context in which the influence occurs means that in certain areas nudge-acceptability will be *consequence-dependent*, while in other ones it will be *principle-dependent*. An example of the former is a healthy diet: since the consequence of a nudge in this area is making people better off by improving their health, they will accept it regardless of autonomy-violation. An example of the latter is nudging toward voting for Obama: whether people will be inclined to interpret consequences of nudging in this area as making them better off or worse off will be conditioned on their personal political principles. Hence, people who are pro-Obama will likely accept nudging, whereas people who are counter-Obama will not. If there is a difference between consequence-dependent acceptability and principle-dependent acceptability, then people's readiness to accept decision-making influence has a context-dependent character, meaning that White is wrong. In that sense, I hypothesize not only that nudge-acceptability will be context-dependent, but also that *context-dependent acceptability will be associated with consequentialist decision-making logic*.

Finally, regarding expectations that I have from the entire model, I expect that the acceptability of nudging will be determined by certain individual factors. To name a few, I

assume that *more educated* citizens will be more averse to nudging, that the acceptability will increase *as people get older*, and that more *conservative* and *religious* citizens, who have an affirmative attitude toward *obedience to authority*, and come from *authoritarian countries*, will be more ready to accept it.

## 5.2 Research Design

In order to test these hypotheses I have conducted survey-based research whose structure looks as follows: the survey is a compound of twelve questions consisting of examples of decision-making influences, and respondents are asked to assess how likely they are to accept them. Additionally, there is a second group of twelve questions structured so as to investigate whether the respondents' acceptability logic has a consequence-dependent structure. Variables I use are:

- 1) Dependent variable: *Context-dependent acceptability of decision-making influence*
- 2) Independent variables: 2.1) *Consequence-dependent acceptability of decision-making influence*; 2.2) *Contextual difference*: 2.2.1) eating behavior; 2.2.2) smoking behavior; 2.2.3) drinking behavior; 2.2.4) framing risks in medical treatment; 2.2.5) retirement savings; 2.2.6) safe-driving; 2.2.7) charitable giving; 2.2.8) crime reduction; 2.2.9) designing bills so as to include social comparison; 2.2.10) committing not to drive cars during weekends 2.2.11) voting behavior; 2.2.12) tax compliance.<sup>23, 24</sup>

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<sup>23</sup> One line of division could be made between paternalistic nudges (the first eight) and non-paternalistic nudges (the last four). However, I will not use this distinction because I assume that people will use different logics (distinguishing between voting behavior on the hand, and all other types of nudges on the other) when accepting/rejecting decision-making influence. Nevertheless, for the sake of conceptual clarity it should be said that in White's book, he claimed that nudging violates people's autonomy 1) by substituting policymakers' preferences for the ones of citizens while 2) using cognitive flaws to "implement" that value-substitution process. From White's arguments it then follows that paternalistic nudges have an autonomy-violating character 1) because people's choices do not reflect their interests and 2) because they are not aware of that fact. However, I hold that, conceptually speaking, non-paternalistic nudges could also be considered autonomy-violating because their non-violating character partly stems from not being aware of their decision-making influence. For that reason, my survey presents non-paternalistic nudges as autonomy-violating ones as well. That White would agree with this conception can be inferred from his statement that non-paternalistic nudges "do not involve government regulators claiming to serve our true interests while necessarily imposing their own," but that "[t]here is still some manipulation based on behavioral research..." (2013, 110). Hence, given



In the questionnaire, the following instructions have been presented to respondents: “The sciences of human behavior have developed techniques for influencing people’s decisions. For example, it is possible to help people quit smoking, reduce food and alcohol consumption, care more for the environment or to change their voting behavior. However, since people are rarely aware of that influence, some critics regard this as manipulation and therefore as a violation of citizens’ autonomy. The purpose of this questionnaire is to investigate your attitude toward twelve real and hypothetical examples of various behavioral influences. After each example you will be asked to what extent you agree or disagree with the following statement:

*Even though some regard it as a violation of their autonomy, I consider such influence on people’s behavior acceptable.”*

Additionally, the respondents have been asked to express their attitude toward statements constructed so to measure consequentialistically grounded nudge-acceptability. For example, they have been asked to express their (dis)agreement with the following question: “Given that influencing people to eat healthy will improve their life, I consider such influence acceptable.”<sup>25</sup>

Besides these substantive variables, I have incorporated twelve additional variables: gender, the country a respondent was born in, period of time during which he or she has been living in the U.S., age, the level of education, income, employment status, sector which the respondent works in, the area s/he lives in, political views, religion, and finally, attitude toward authority. I have used a paired sample t-test for data analysis because I have measured

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that non-paternalistic nudges include manipulation, while manipulation violates autonomy, it follows that non-paternalistic nudges also have an autonomy-violating character.

<sup>24</sup> Among non-paternalistic nudges, Right Preference Theory explains the environment-related nudges (“improving the context”), but does not explain the politics-related nudges. I hope to address this challenge in my future work.

<sup>25</sup> A copy of the survey used can be found in Appendix A.

a single sample of individuals two times on the same dependent variable. Additionally, I have used multiple regression analysis to determine potential influence of control variables.

Variables have been coded in the following way:

- 1) Dependent variable: *Context-dependent acceptability* (represents the mean of 12 variables from the first group of 12 questions)
- 2) Independent variables:
  - 2.1) *Consequence-dependent acceptability* (represents the mean of 12 variables from the second group of 12 questions)
  - 2.2) *Obedience to authority* (continuous, measured on a five point Likert scale)
  - 2.3) *Country of origin* (dummy variable: 1=USA; 0=other)
  - 2.4) *Income* (continuous variable)
  - 2.5) *Age* (continuous variable)
  - 2.6) *Gender* (dummy: 1=male; 0=female)
  - 2.7) *Educational level* (dummy: 1=highly educated (college; BA; MA; PhD) 0=lowly educated (primary school and high school)
  - 2.8) *Living in urban area* (dummy: 1=urban; 0=suburban and rural)
  - 2.9) *Living in suburban area* (dummy: 1=suburban; 0=urban and rural)
  - 2.10) *Living in rural area* (dummy: 1=rural; 0=urban and suburban)
  - 2.11) *Conservative* (dummy: 1=conservative; 0=liberal and moderate)
  - 2.12) *Liberal* (dummy: 1=liberal; 0=conservative and moderate)
  - 2.13) *Moderate* (dummy: 1=moderate; conservative and liberal)
  - 2.14) *Republican* (dummy: 1=republican; 0=other)
  - 2.15) *Democrat* (dummy: 1=democrat; 0=other)
  - 2.16) *Independent* (dummy: 1=independent; 0=other)
  - 2.17) *None of these* (dummy: 1=none of these; 0=other)
  - 2.18) *Religion belonging* (dummy: 1= believers; 0=atheists)
  - 2.19) *Race* (dummy: 1=Caucasian; 0=other)
  - 2.20) *Employment status* (dummy: 1=employed; 0=unemployed)

### 5.3 Sample Description

The questionnaire was distributed through Amazon's Mechanical Turk platform. It encompassed a sample of  $n=229$  respondents, comprised 51% males and 49% females, mostly employed (69%) and highly educated (86%). Respondents reported an average age of 35 (min.19, max.68, median 33) and the median annual income between \$30,000 and \$40,000. Regarding the representativeness of the MTurk sample, the literature suggests that "MTurk workers make up a diverse group, including a range of ages, education levels, and socioeconomic strata, though primarily from highly industrialized societies." (Ross *et al.*, 2010). However, the authors argue that "while the MTurk population may perhaps be representative of the U.S. *internet-using population*, it cannot truly be seen to be a microcosm of the country as a whole" (Ross *et al.* 2010).<sup>26</sup> Nevertheless, since the sample taken from the so-called WEIRD population (Western Educated Industrialized Rich Democratic) threatens external validity of the study to much greater extent, I consider the MTurk sample well-suited for the study at hand.

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<sup>26</sup> Given that percent of highly educated people in the U.S. is 42% (source: "24/7 WallST"), the MTurk sample is biased in over-reporting highly educated respondents.

## 5.4 Data Analysis

Table 4 describes the acceptability of decision-making influence across 12 different contexts.

	Mean	St. deviation	Median	Skew	Kurtosis
<b>Healthy diet</b>	2.14	0.87	2	0.82	0.39
<b>Energy bills</b>	2.26	0.97	2	0.77	0.02
<b>Anti-smoking</b>	2.26	1.09	2	0.66	-0.44
<b>Pro-Obama</b>	2.71	1.18	2	0.40	-0.86
<b>Non-binge drinking</b>	2.38	1.10	2	0.73	-0.27
<b>Reduce CO<sub>2</sub> emissions</b>	2.78	1.16	3	0.28	-0.83
<b>Reduce speed driving</b>	2.21	1.06	2	0.82	-0.09
<b>Anti-crime</b>	2.01	0.92	2	0.85	0.36
<b>Tax compliance</b>	2.61	1.09	2	0.43	-0.60
<b>Medical treatment</b>	2.15	0.88	2	0.71	0.33
<b>Retirement savings</b>	2.71	1.06	2	0.46	-0.51
<b>Charitable giving</b>	2.05	0.84	2	0.97	1.32

Table 4: *Nudge-acceptability across 12 policy areas*

Aware of the heated discussion about whether data obtained using Likert items should be treated as continuous or ordinal, I have opted for the former approach. Additionally, aware of the arbitrary nature of that solution, I am offering a guide to interpretation of the mean, presented in Table 5.

1.00 – 1.80	Strongly agree
1.81 – 2.60	Agree
2.61 – 3.40	Neither agree nor disagree
3.41 – 4.20	Disagree
4.21 – 5.00	Strongly disagree

Table 5: A mean-interpretation guide<sup>27</sup>

Taken together, these tables show us that in 8 out of 12 areas (66.7%) the respondents' answers range between 2.01 and 2.38, meaning that they *agree*, namely, that *they consider decision-making influence acceptable, in spite of the fact that others regard it as a violation of their autonomy*. Furthermore, in 3 out of 12 areas (25%) their answers range between 2.71 and 2.78, meaning that they *neither agree nor disagree*. Finally, in 1 area out of 12 (8.3%) respondents' answers are at the level of a boundary value (2.61) between *agree* and *neither agree nor disagree*.

Additionally, Table 4 shows us that the median value is 2 in eleven cases, while it is 3 in only one case (reducing CO<sub>2</sub> emissions by signing up not to use cars during weekends). Finally, the table suggests that the values of skew and kurtosis are in the acceptable range for normal distribution.

In order to test the first hypothesis (*nudge-acceptability is context-dependent*), a paired-sample t-test was conducted to compare acceptability in voting behavior area (nudging voting for Obama) and acceptability in all other policy areas. This comparison required merging eleven variables into one variable and I have done that using R. Given that the acceptability-mean ranges in the *neither agree nor disagree* domain not only in the voting behavior case, but also in the one of CO<sub>2</sub> emissions and retirement savings, one might argue

<sup>27</sup> This guide stems from various internet forums in which there is ongoing discussion about how data obtained by Likert scale should be interpreted when understood as continuous. For example:  
<http://www.surveymzmo.com/survey-blog/likert-scale-what-is-it-how-to-analyze-it-and-when-to-use-it/>

that I should merge not eleven, but eight variables and compare them not only with the voting behavior case, but also with the aforementioned two. However, I am of the opinion that, for the sake of hypothesis testing, it is justifiable to opt for the former solution (comparison of 11/1). The results of the test are presented in Table 6.

t – test	df	p-value	95% conf.interv.	mean difference
5.30	2.17	2.82e – 07	0.22 – 0.49	0.35

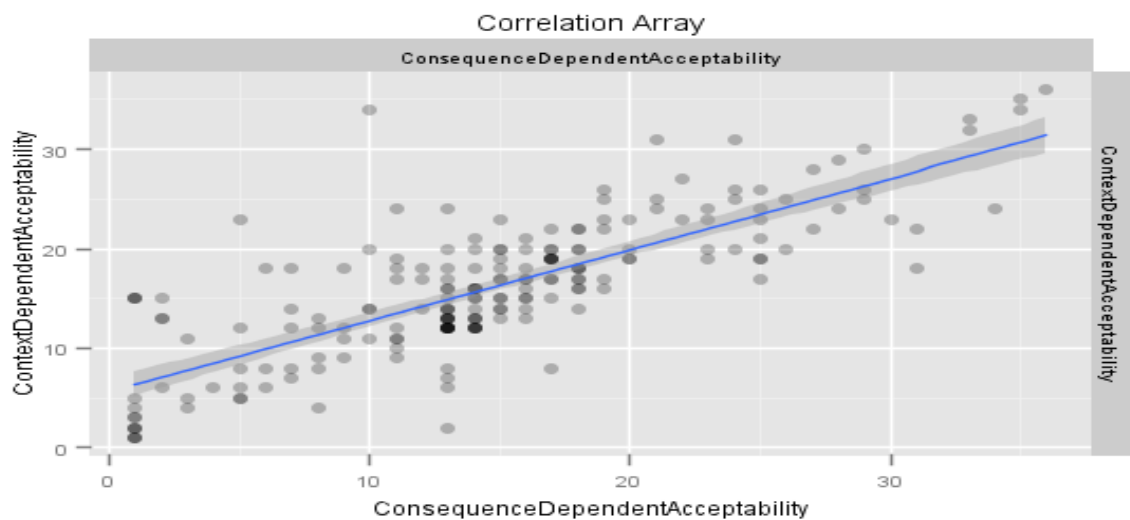
Table 6: Results of a paired-sample t-test

The test shows that there is a statistically significant difference ( $t(5.30)$ ,  $p < 0.000$ ) between people's readiness to accept nudging in voting behavior area and all other types of nudges. In other words, people are significantly more reluctant to accept application of choice architecture tools in a policy area related to politics than in all other policy *taken together*. These results enable us to reject the first null hypothesis which states that there is no difference between nudge-acceptability in different contexts.

However, against my expectations, the results presented in Table 4 show that the greatest tendency toward *neither agree nor disagree* domain occurs not only in voting behavior area (2.71), but also in the one of reducing CO<sub>2</sub> emissions (2.78) and retirement savings (2.71).

Furthermore, I did not aim only to investigate whether nudge-acceptability is context-dependent, but also whether there is a correlation between context-dependent acceptability and consequence-dependent acceptability. Put differently, I wanted to test whether people's readiness to accept nudging will be associated with consequentialist decision-making logic. The results of the test are presented in Figure 1:

$r=0.78$ ;  $N=200$ ;  $CI=0.72, 0.83$ ;  $p\text{-value}=0.0000$



This graph suggests that there is a strong ( $r=0.78$ ) and statistically significant ( $p<0.05$ ) correlation between *people's readiness to accept nudging depending on the context in which it occurs* and *their readiness to accept it because of the consequences that stem from it*. This implies 1) that people are prone to give up their autonomy to a certain extent if they are convinced that the consequences of accepting that intrusion will make either them, their fellow citizens, or the social and political context they live in better; and 2) that this inclination is strongly associated with their readiness to accept influence on their decision-making process depending on the policy area in which that influence occurs. These results suggest that the second null hypothesis can be rejected as well.

Finally, in order to investigate the elements that might have an impact on nudge-acceptability, I have conducted multiple regression analysis and created several models. The first one looks as follows:

<b>Model 1: Context-Dependent Acceptability Regression</b>	
Consequence-Dependent Acceptability	0.73 (0.05)***
Obedience to authority	-0.80 (0.32)*
Country of origin	0.75 (1.73)
Income	-0.12 (0.19)
Age	-0.05 (0.03).
Gender	-0.63 (0.67)
Educational level	-2.05 (1.03)*
Living in urban area	-0.67 (1.03)
Living in suburban area	-0.17 (1.00)
Living in rural area	NA
Conservative	-1.06 (1.42)
Liberal	-0.32 (0.90)
Moderate	NA
Republican	1.74 (1.57)
Democrat	0.33 (0.92)
None of these	1.53 (1.20)
Independent	NA
Religion belonging	0.44 (0.71)
Race	0.75 (0.81)
Employment status	-1.27 (0.79)
Multiple R-squared	0.65
Adjusted R-squared	0.61

Table 7: *Context-dependent acceptability regression*. Regression coefficient is presented along with their estimated standard errors in parenthesis; \*\*\*significant at  $p<0.001$ ; \*\*significant at  $p<0.01$ ; \*significant at  $p<0.05$ ; ‘.’ significant at  $p<0.1$ .

This model suggests that *consequence-dependent acceptability*, *obedience to authority*, *age*, and *educational level* have a significant impact on people's readiness to accept nudging. In other words, this model shows that 1) as consequence-dependent acceptability increases, context-dependent acceptability increases as well; 2) as people's readiness to obey to authority decreases, the readiness to accept nudging decreases as well; 3) as people get older, the level of their acceptability decreases; and, finally, 4) as people become more educated, they become less ready to accept decision-making influence. However, since this model seems too complex, while at the same time is a compound of too many variables with no statistically significant coefficients, I decided to run the second model, presented in Table 8:



<b>Model 2: Context-Dependent Acceptability Regression</b>	
Consequence-Dependent Acceptability	0.73 (0.05)***
Obedience to authority	-0.80 (0.32)*
Country of origin	0.70 (1.72)
Income	-0.14 (0.18)
Age	-0.04 (0.03)
Gender	-0.67 (0.67)
Educational level	-2.07 (1.03)*
Living in suburban area	0.29 (0.69)
Conservative	-0.99 (1.42)
Liberal	-0.34 (0.90)
Republican	1.82 (1.56)
Democrat	0.35 (0.91)
None of these	1.53 (1.20)
Religion belonging	0.47 (0.71)
Race	0.12 (0.80)
Employment status	-1.31 (0.78).
Multiple R-squared	0.65
Adjusted R-squared	0.61

Table 8: *Context-dependent acceptability regression*. Regression coefficient is presented along with their estimated standard errors in parenthesis; \*\*\*significant at  $p<0.001$ ; \*\*significant at  $p<0.01$ ; \*significant at  $p<0.05$ ; ‘.’ significant at  $p<0.1$ .

While the present model, as opposed to the previous one, shows that *employment status* has a significant impact on nudge-acceptability (meaning: employed citizens on average express less readiness to accept nudging than unemployed ones) ( $p<0.1$ ), it also suggests that *age* has no significant impact on nudge-acceptability. For this reason I have run the third model presented in Table 9:

<b>Model 3: Context-Dependent Acceptability Regression</b>	
Consequence-Dependent Acceptability	0.73 (0.04)***
Obedience to authority	-0.82 (0.28)**
Age	-0.03 (0.02)
Educational level	-2.16 (0.92)*
Employment status	-0.99 (0.71)
Multiple R-squared	0.64
Adjusted R-squared	0.63

Table 9: *Context-dependent acceptability regression*. Regression coefficient is presented along with their estimated standard errors in parenthesis; \*\*\*significant at  $p<0.001$ ; \*\*significant at  $p<0.01$ ; \*significant at  $p<0.05$ ; ‘.’ significant at  $p<0.1$ .

The third model points out that the impact of *obedience to authority* has become more significant (from being significant at  $p<0.05$  in the second model to  $p<0.01$  in the third model). Additionally, the difference between the values of the coefficients of multiple  $R^2$  and adjusted  $R^2$  have become lower (in the second model it was 0.04, while in the third one is 0.01) meaning that the third model—even though it is a compound of *fewer* variables than the second one—is compound of *more relevant* variables, namely the ones that have a significant effect on nudge-acceptability. However, since there are still variables in the model that show non-significant impact, I have decided to run a fourth, final model:

<b>Model 4: Context-Dependent Acceptability Regression</b>	
Consequence-Dependent Acceptability	0.73 (0.03)***
Obedience to authority	-0.82 (0.27)**
Educational level	-2.41 (0.86)**
Multiple R-squared	0.65
Adjusted R-squared	0.64

Table 10: *Context-dependent acceptability regression*. Regression coefficient is presented along with their estimated standard errors in parenthesis; \*\*\*significant at  $p<0.001$ ; \*\*significant at  $p<0.01$ ; \*significant at  $p<0.05$ ; ‘.’ significant at  $p<0.1$ .

The presented model shows that people’s readiness to accept nudging in different policy areas depends on 1) *consequences that stem from it*, 2) *their attitude toward authority*, and 3) *their level education*. Regression coefficients point out that 1) as consequence-dependent acceptability increases, context-dependent acceptability increases as well; 2) as people’s readiness to obey to authority decreases, their readiness to accept nudging decreases; and, finally, 3) as people become more educated, they become less ready to accept decision-making influence. The  $R^2$  coefficient (0.65) shows that the present model fits the set of observations. The small difference between multiple  $R^2$  and adjusted  $R^2$  (Multiple  $R^2$  – Adjusted  $R^2=0.01$ ) suggests that the model consists of variables that have a substantial influence on nudge-acceptability.

The present results imply that my theoretical expectations regarding elements that might influence people's readiness to accept nudging have been just partially met. Namely, I assumed that *more educated* citizens will be more reluctant to nudging, that the acceptability will increase *as people get older*, and that more *conservative* and *religious* citizens, who have an affirmative attitude toward *obedience to authority*, and come from the *authoritarian countries*, will be more ready to accept it. Nevertheless, the model has shown that acceptability is significantly associated only with the level of education and obedience to authority.

## 5.5 Discussion

To begin with, the higher acceptability coefficient in the case of nudging toward voting for Obama, showing that people are more reluctant to accept influence in this area, does not surprise me. As I explained earlier, I assume that people's decision-making logic with respect to acceptance of various behavioral influences could be interpreted through the theoretical distinction between *consequence-dependent acceptability* and *principle-dependent acceptability*. Since the domain of politics is in this sense principle-dependent field, I expected that this policy area will divide people's attitudes expressed in the survey. However, what I did not expect was a similar acceptability-coefficient (ranging between 2.71 and 2.78 = neither agree nor disagree) in the cases of CO<sub>2</sub> emissions and retirement savings. If these coefficients are understood not only as ranging in the neither-agree-nor-disagree domain, but as the greatest tendency toward disagreement (as compared to other coefficients), then the question arises as to what might explain these attitudes.

Firstly, one has to bear in mind that in the case of CO<sub>2</sub> emissions, the respondents have been asked to express their readiness to refrain from using a car during weekends because of detrimental effects of CO<sub>2</sub> emissions on the environment. An intuitive explanation

would be that people prefer to use their cars over living in an environmentally sustainable way. Note that this could be interpreted as an example in which the consequentialist logic that we try to present here as the underlying one turns out to be against nudging: since the consequences of not using cars will in people's view affect their lives in a more relevant way than CO<sub>2</sub> emissions, they show less readiness to accept decision-making influence in the environment-related policy area. Be that as it may, even though I did not expect people to be less ready to accept influence in this policy area, the results still accord with my expectations that nudge-acceptability has a context-dependent character. Future research might explore if there is a correlation between being a driver and not being interested in environmental issues as such, or only between being a driver and not being interested in environmental issues related with driving cars. The latter would imply that nudge-rejection is associated not with the issue of nudge-acceptability within environmentally-related issues, but rather with personal preference toward driving cars.

Secondly, the retirement savings case, having a similar acceptability coefficient (2.71), shows that in this policy area people value their autonomy more than in other areas. One explanation would be that—when their personal finance is at issue—people want to be able to make autonomous choices, without external intrusion. Future research might explore reasons behind this attitude. For example, it would be interesting to understand which level of abstraction people's arguments are at, namely, whether they argue in favor of retirement-savings choice on the grounds of *autonomy* (the importance of being free to choose one's own lifestyle regardless of consequences) or rather on *financial grounds* (the importance of being capable of spending one's own money in the way one chooses regardless of consequences).

Thirdly, as I assumed, the results have shown that people's readiness to accept nudging is highly correlated with their perception of consequences that stem from it. This is

extremely important. In contrast to assumptions shared by dogmatic pro-personal-liberty oriented thinkers, the association between nudge-acceptability and the consequentialist logic leads to the conclusion that people care less about their freedom of choice and more about outcomes that might stem from influence in a given policy area. This *outcome-orientation* creates a fruitful space for behaviorally founded policy recommendations. In other words, this orientation informs policy designers about within which policy areas people value *consequences of influence* more than *premises of autonomy*.

Finally, the results have shown that, along with the consequentialist logic, nudge-acceptability also depends on people's attitudes toward authority and on their level of education. As for the former, the respondents were asked to express their (dis)agreement with the following statement: *Obedience and respect for authority are the most important virtues people should learn.*<sup>28</sup> This is important conclusion for ethically grounded policymaking: asking the public for its permission emphasizing that the essence of nudging is not reflected in the power of the state to rule over citizens' lives, but rather in creating consequences that will make them better off—will likely heighten people's readiness to accept it. As for the latter, the results suggest that the level of acceptability decreases as the level of education increases. In other words, highly educated citizens show significantly less readiness to accept violation of their autonomy than lowly educated ones. This is a somewhat expected outcome because more educated people in the U.S. have been trained to value autonomous decision-making and to be skeptical toward the intervention of the state into people's private lives. However, since people's readiness to accept nudging has been shown to be context-dependent, policymakers should frame their recommendations in accordance with that finding, rather than paying particular attention to people's level of education. Of course, this is not to say that, between two criteria, a policymaker should choose the one which is more

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<sup>28</sup> This is an adjusted formulation of the first question in the F scale: <http://www.anesi.com/fscale.htm>.

likely to give better results; rather, since the point of my research is to investigate in which policy areas people show readiness to regard influence on their decision-making process as acceptable, thereby making nudging a legitimate behavioral intervention, policymakers should frame their recommendations in accordance with publicly approved interventions.

All in all, the most important outcome of the empirical part of the presented study is the information in which policy areas people show and do not show readiness to regard behaviorally founded policy interventions as acceptable. On the one hand, people agree that nudging in the domains of 1) *healthy diet*; 2) *non-smoking*; 3) *non-binge drinking*; 4) *risky medical treatments*; 5) *safe-driving*; 6) *charitable giving*; 7) *crime reduction*; 8) *reducing energy spending*; and 9) *complying with taxes* –are acceptable influence on their behavior. On the other hand, they neither agree nor disagree that such influence is acceptable in the domains of 1) *voting behavior*; 2) *non-using cars during weekends in order to reduce CO<sub>2</sub> emissions*; and 3) *retirement savings*. Expressed in a more general manner, people value their autonomy less in the policy areas related with 1) a healthy lifestyle; 2) the environment (when these issues have no significant effects on their habits (e.g. driving cars)); 3) pro-social behavior; and 4) virtuous citizen behavior (crime reduction and tax compliance). However, they neither agree nor disagree that giving up of their autonomy to a certain extent is a valuable choice in the policy areas related with 1) politics; 2) personal finance; and 3) the schedule of using their own cars.

In order for external validity of the study to be extended, future research should encompass a bigger sample size and should have a cross-country character, not being directed predominantly at the U.S. Besides that, in order for its explanatory potential to be expanded, the future study should incorporate questions that aim to reveal whether there is a correlation between personal habits (such as smoking or drinking) and nudge-acceptability. This is important because for policy designers that intend to recommend ethically grounded policies,

it is important to understand whether nudge-acceptability varies because of its autonomy-violating character or because of its inconsistency with a personal lifestyle. Furthermore, research on people's attitudes toward choice architecture tools should be approached differently using experimental methods. Finally, future research should be more area-oriented, namely, it should separate and investigate more deeply health-, environment-, politics-related, etc. domains, and merge the outcomes of these investigations into an index of nudge-acceptability.

## Conclusion

The most intuitive statement in favor of personal liberty has been expressed in the famous opening words of *Anarchy, State, and Utopia*. Nozick claims (1974, IX) that

INDIVIDUALS have rights, and there are things no person or group may do to them (without violating these rights). So strong and far-reaching are these rights that they raise the question of what, if anything, the state and its officials may do.

Constraining the scope of state intervention by the abovementioned idea of individual rights led Nozick to conclude that “any more extensive state [than the one represented in military, police, and courts – J.P.] will violate a person’s rights not to be forced to do certain things, and is unjustified” (1974, IX). The main implication of this conception in the context of our discussion is that the state is not allowed “to prohibit activities to people for their *own* good and protection” (1974, IX). It follows that the imperative embedded in the very foundation of libertarian political philosophy is that the state should not be engaged in paternalistic actions because these actions violate individual freedom.

The great contribution to the intellectual tradition of personal liberty has been made by behavioral economist Richard Thaler and law scholar Cass Sunstein. These authors have revolutionized this tradition by showing that—contrary to what libertarian writers have argued—paternalistic actions need not be incompatible with individual freedom, on the condition that paternalistic actions are structured so as to incorporate a person’s ability to choose. To put it in a less abstract way, if citizens are “free to opt out of specified arrangements” (T&S 2003, 1161) that the state suggests them to opt in, then they are at the same time free and under paternalistic influence. In that sense, libertarian paternalism should not be interpreted as a setback in which “the new paternalism transforms, in practice, into the old” (R&W 2009, 160), but rather as progress which enables a new synthesis: *autonomy-preservation and decision-making influence*.



However, as it has been shown in this thesis, critics state that libertarian paternalism suffers from serious epistemic and ethical flaws. As for the former, it has been argued that nudge-based policy interventions are practically unsustainable because paternalistically oriented policymakers have no access to citizens' true preferences, access they would allegedly need if they want these policies to have welfare-improving character. As for the latter, it has been claimed that nudging is a non-transparent behavioral intervention that engages people's cognitive biases, thereby making people's internal choices products of external influences people are unaware of, which violates their autonomy. Taking these reasons into consideration, it follows that libertarian paternalism is both an epistemically and ethically unacceptable standpoint.

Nevertheless, the main achievement of my MA thesis consists in showing that the aforementioned arguments are unsound. Firstly, White's theses that paternalistic policies are illegitimate because they require knowledge on people's true preferences and because they substitute policymakers' preferences for the citizens' ones are refuted by right preference theory. Instead of grounding welfare-improving policies in the notion of true preferences, this theory shows that behavioral interventions could be based on the notion of right preferences. As it has been shown, this notion represents an *evidence-based way of either being better off or making the context one lives in better*. However, this theory has not only pointed out that—contrary to White's opinion—libertarian paternalism *is not* an epistemically problematic viewpoint, but it has also made a new normative framework for using choice architecture tools for improving citizens' personal, social, and environmental contexts. Secondly, White's claim that “most people... agree that their choices... are their own business” (p.149) is refuted by the results of the empirical part of this research. The research has shown that 1) people's readiness to accept autonomy-violating influence on their decision-making process depends on the difference in the decision-making context and that 2)

people's decision-making logic, when their well-being is at issue, is consequence-oriented: if outcomes of behaviorally founded policies can make them better off, people will accept them—regardless of the autonomy-violating character of these policies.

The main implication of the present research is two-pronged: theoretically speaking, political philosophy that is not related to experimental behavioral science should be tossed into the proverbial dustbin of history; empirically speaking, people's preferences toward autonomy differ from philosophical interpretations of what these preferences are and should be. In conclusion, as long as the interdisciplinary cooperation of experimental political science, cognitive psychology, and behavioral economics shows that people's decision-making processes lead to suboptimal outcomes, there will be a need for the improvement of these processes; as long as nudge-based policies represent one way to address challenges of this improvement, there will be a need to ask the public for its permission; finally, as long as the public gives its permission to establish these policies, nudging should be regarded as a legitimate intervention into the way people decide and behave.

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## Appendix A: Survey

The sciences of human behavior have developed techniques for influencing people's decisions. For example, it is possible to help people quit smoking, reduce food and alcohol consumption, care more for the environment or to change their voting behavior. However, since people are rarely aware of that influence, some critics regard this as manipulation and therefore as a violation of citizens' autonomy. The purpose of this questionnaire is to investigate your attitude toward twelve real and hypothetical examples of various behavioral influences. After each example you will be asked to what extent you agree or disagree with the following statement:

*Even though some regard it as a violation of their autonomy, I consider such influence on people's behavior acceptable.*

### Example 1:

Scientific research has shown that merely the sight of high calorie food could make people consume it. Conversely, the image of a healthy food option could entice the consumption of healthier items. It follows that people can be motivated to opt for healthier choices by reordering the way food is displayed in cafeterias (placing healthier items at eye level, first in line or under a spotlight).

*Even though some regard it as a violation of their autonomy, I consider such influence on people's behavior acceptable.*

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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### Example 2:

In one state, energy bills were designed so that they provide people with information not only about their energy consumption, but also about that of their neighbors. However, while this measure motivated customers who use more than average to *decrease* their energy consumption, it also motivated the ones who used less to *increase* their consumption. Because of this, energy bills were then printed with emoticons, and this worked better. When customers whose energy use was below average got a smiley-face with the information about their consumption and the neighborhood average, they did not increase their consumption subsequently; but including a frowny-face with the news that a customer's energy use was above average led to a reduction.

*Even though some regard it as a violation of their autonomy, I consider such influence on people's behavior acceptable.*

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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### Example 3:

New anti-smoking initiatives are focused on changing social norms because research has shown that if smoking is made "less cool," this can help people to reduce it because people's choices are strongly influenced with what they think is socially acceptable. For instance, smokers would no longer be

confronted with pictures of lung cancer on cigarette boxes, but with a complete absence of trademarks, logos, and other promotional elements from the pack.

*Even though some regard it as a violation of their autonomy, I consider such influence on people's behavior acceptable.*

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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#### Example 4:

According to research, people are more inclined to do something if they make a plan. This insight was used by a group of election campaigners during the 2012 US presidential election. The real goal was to motivate people to vote for Barack Obama. Likely supporters were called by telephone and asked if they had made a plan to vote, and if not, they were asked to make one, by specifying a time of the day when they will vote. Some were also contacted by emails with the question: *People do things when they make plans to do them; what's your plan regarding voting in the presidential election?* Finally, campaigners used a "Commit to vote" card with Obama's picture on it and asked likely supporters to sign it. By using these tools, the campaigners raised their candidate's chances to win the elections.

*Even though some regard it as a violation of their autonomy, I consider such influence on people's behavior acceptable.*

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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#### Example 5:

Research has shown that changing the context in which people make decisions could reduce binge drinking (i.e., excessive alcohol consumption in bars) significantly by altering, for instance, the dimension of the glasses, changing their shape, and serving drinks in smaller bottles. In other words, without consciously knowing it, people could be lured to make healthier choices.

*Even though some regard it as a violation of their autonomy, I consider such influence on people's behavior acceptable.*

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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#### Example 6:

The fact that people are prone to act in ways that make them feel better about themselves could be used for reducing CO<sub>2</sub> emissions. In order to substitute any positive self-image derived from using a car, alternative sources of a positive self-image should be offered, such as the opportunity to behave like a responsible citizen. This feeling of responsible conduct could be served, for instance, by refraining from using a car during weekends. Citizens' driving habits can thus be influenced by asking them to sign publicly a commitment card that pledges them not to drive cars during weekends.

*Even though some regard it as a violation of their autonomy, I consider such influence on people's behavior acceptable.*

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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#### **Example 7:**

Research has shown that drivers reduce driving speed when they encounter life-sized metal replicas of real police officers, as well as life-size cardboard cut-outs of police cars on bridges crossing highways. Besides that, it has been shown that painting white lines across the road – each line closer to the next as cars get nearer to the curve – has made drivers think that they are going faster than they really are and decreased car accidents by 36%.

*Even though some regard it as a violation of their autonomy, I consider such influence on people's behavior acceptable.*

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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#### **Example 8:**

The recognition that people are influenced by the messenger rather than just the information that he brings has been used for reducing crime. For example, gang members have been summoned to face-to-face forums as a condition of their parole. Anti-crime speeches at these forums have proven most effective when coming from people whom the gang members respected, or to whom they could easily relate – as when the mother of a dead gang member warned: “If you let yourself get killed, your mother will be standing here. She will be me.”

*Even though some regard it as a violation of their autonomy, I consider such influence on people's behavior acceptable.*

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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#### **Example 9:**

Cognitive psychology has shown that people are influenced by what other people do. As a result, messages about typical behavior (like “9 out of 10 people do this or that”) can be used for encouraging increased tax compliance. For instance, the government can combine sending tax letters reminding the recipients to pay the amount they owed with the information that “9 out of 10 people in your neighborhood pay their taxes on time”.

*Even though some regard it as a violation of their autonomy, I consider such influence on people's behavior acceptable.*

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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**Example 10:**

According to research, people's choices depend on the way a choice situation is presented. This effect has been used for influencing the choices of patients suffering from life-threatening diseases, understandably interested in odds of staying alive after having a surgery. When patients are told that "ninety in every one hundred who undergo this surgery stay alive," then they become more likely to accept a potentially life-saving surgery than if they are told that "ten in one hundred die."

*Even though some regard it as a violation of their autonomy, I consider such influence on people's behavior acceptable.*

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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**Example 11:**

Research has shown that people's decisions are influenced by what has been presented to them as the default option. This insight can be used to increase retirement savings. Instead of asking employees to actively choose a saving-scheme each year, which would risk that some forget to make a choice, employees who make no choice can be assigned the same option they made the previous year. Thus, an employee who had contributed one thousand dollars to his or her retirement plan the previous year, but forgot to make a choice for the new year, would still be assigned to the option of a one thousand-dollar contribution.

*Even though some regard it as a violation of their autonomy, I consider such influence on people's behavior acceptable.*

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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**Example 12:**

Studies in psychology have pointed out that people are less likely to be charitable if they were in a hurry. This implies that charitable giving can be encouraged by placing donation boxes not in subway stations, but in public parks, where people are less likely to be in a rush.

*Even though some regard it as a violation of their autonomy, I consider such influence on people's behavior acceptable.*

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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\* \* \*



Please tell us to what extent do you agree or disagree with the following statements:

1. Given that influencing people to eat healthy will improve their life, I consider such influence acceptable.

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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2. Given that influencing people to decrease energy consumption will improve the environment, I consider such influence acceptable.

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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3. Given that influencing people to quit smoking will improve their health, I consider such influence acceptable.

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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4. Given that influencing people to vote for the candidate they prefer most will be good for them, I consider such influence acceptable.

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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5. Given that influencing people to quit binge drinking will improve their health, I consider such influence acceptable.

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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6. Given that influencing people to reduce CO<sub>2</sub> emissions will improve the climate, I consider such influence acceptable.

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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7. Given that influencing people to drive safely will improve their life, I consider such influence acceptable.

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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8. Given that influencing people not to commit a crime again will improve their life, I consider such influence acceptable.

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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9. Given that influencing people to pay the taxes will improve the life of the community, I consider such influence acceptable.

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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10. Given that influencing people to accept medical treatment could improve their health, I consider such influence acceptable.

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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11. Given that influencing people to save for retirement will improve their life later, I consider such influence acceptable.

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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12. Given that influencing people to give to the charities will improve the lives of others, I consider such influence acceptable.

1-strongly agree	2-agree	3-neither agree nor disagree	4-disagree	5-strongly disagree
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\* \* \*

Please circle the answer of your choice at each question below, or write it in the space provided.

- What is your gender:
  - Male
  - Female
- In which country were you born? \_\_\_\_\_
- How long have you been living in the US?
  - Between 1 and 5 years
  - Between 6 and 10 years
  - Between 11 and 15 years
  - Between 16 and 20 years
  - All my life
- What is your age? \_\_\_\_\_ years
- What is the highest level of education you have completed:
  - Have not completed any school
  - Primary school
  - High school
  - Some college

- Bachelor's degree
  - Master's degree
  - Doctoral degree
  - Other \_\_\_\_\_
6. What is your household's annual income:
- None
  - Under \$10.000
  - \$10.000 – \$19.999
  - \$20.000 – \$29.999
  - \$30.000 – \$39.999
  - \$40.000 – \$49.999
  - \$50.000 – \$74.999
  - \$75.000 – \$99.999
  - \$100.000 – \$150.000
  - Over \$150.000
  - Would rather not say
7. Are you employed? \_\_\_\_\_
8. If yes, please state in which of the following sectors you work most:
- Public sector
  - Private sector
  - Not-for-profit non-governmental organizations
  - Other \_\_\_\_\_
9. Which of the following best describes the area you live in:
- Urban
  - Suburban
  - Rural
10. How would you describe your political views:
- Very conservative
  - Conservative
  - Moderate
  - Liberal
  - Very liberal
  - Would rather not say
11. What religion or denomination you belong to at present:
- Roman Catholic
  - Protestant
  - Eastern Orthodox
  - Other Christian denomination
  - Jewish
  - Islamic
  - Buddhist
  - Confucian
  - Other, namely \_\_\_\_\_
  - None

12. Do you agree that the following statement describes your personal attitude: *Obedience and respect for authority are the most important virtues people should learn?*

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

\* \* \*

Thank you for your participation

## Appendix B: Survey Examples Reference List

### Example 1:

6 Guiding Principles That Improve School Lunch Eating Behaviors, Cornell Center for Behavioral Economics in Child Nutrition Programs, ©BEN Center 2011 [http://www.cheshire-med.com/images/v2020/Healthy\\_Eating\\_Schools.pdf](http://www.cheshire-med.com/images/v2020/Healthy_Eating_Schools.pdf) (last accessed on April 19, 2015).

### Example 2:

Michael Levi's Blog, <http://environmentalpolicy.ucdavis.edu/blog/2013/09/291> (last accessed on April 19, 2015).

### Example 3:

Alemanno, A. *Nudging Smokers: The Behavioral Turn of Tobacco Risk Regulation*. European Journal of Risk Regulation, Vol. 3, (February 16, 2012). [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2006599](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2006599) (last accessed on April 19, 2015).

### Example 4:

Hollingworth, C. *Obama's Team Nudged The Voters*. 'The Marketing Society' 13 April 2013. <https://www.marketingsociety.com/the-library/obamas-team-nudged-voters> (last accessed on April 19, 2015).

### Example 5:

iNudgeyou, 6 nudges to avoid adult binge drinking at X-mas, <http://inudgeyou.com/6-nudges-for-avoiding-adult-binge-drinking-at-x-mas/> (last accessed on April 19, 2015).

### Example 6

Dolan P, Hallsworth M, Halpern D, King D, Vlaev I. (2010). *MINDSPACE: Influencing Behavior Through Public Policy*, London: Institute for Government. pp.59-61.

### Example 7:

Moskwitch, K. *The Road Design Tricks That Make Us Drive Safer*. April 17, 2014. BBC: Future. <http://www.bbc.com/future/story/20140417-road-designs-that-trick-our-minds> (last accessed on April 27, 2015).

### Example 8:

Knight (2009). *How to really hug a hoodie*. Prospect Magazine, Issue 164, 24th October. Formulation of the example: Dolan P, Hallsworth M, Halpern D, King D, Vlaev I. (2010).

*MINDSPACE: Influencing Behavior Through Public Policy*, London: Institute for Government. p.18, p.31.

Example 9:

Behavioural Insights Team Annual Update. (2010-11). The Cabinet Office Behavioral Insights Team. The formulation of the example: Egan, M. (2013.) Stirling Behavioral Science Blog: *Nudge Database*. <http://economicspsychologypolicy.blogspot.hu/2013/03/nudge-database-3441.html> p.14. (last accessed on April 27, 2015).

Example 10:

Thaller, R.H. and Sunstein, C.R. (2008). *Nudge: Improving Decisions about Health, Wealth, and Happiness*. New Haven: Yale University Press. p.36.

Example 11:

Beshears J, Choi J. J, Laibson D, Madrian B. C. (2007). *The Importance of Default Options for Retirement Savings Outcomes: Evidence from the United States*. NBER Working Paper No 12009, Revised, JEL No. D0, E21, G23.

Thaller, R.H. and Sunstein, C.R. (2008). *Nudge: Improving Decisions about Health, Wealth, and Happiness*. New Haven: Yale University Press. pp.11-12.

Example 12:

*Psyche. Musings on Human Thought and Behavior: Nudging Towards Pro-Social Behavior*. <https://karishmarajaratnam.wordpress.com/2013/10/12/nudging-towards-pro-social-behaviour/> (last accessed on April 27, 2015).

Question 12 in the demographics part is an adjusted formulation of the first question in the F scale: <http://www.anesi.com/fscale.htm>.