Isomorphic pressures and the behavioral intention to reduce or cease with the consumption of animal agriculture products: a survey experiment

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ABSTRACT

This study explores the relationship between institutional isomorphism and behavioral intentions. Specifically, the aim is to analyze whether isomorphic pressures exert a positive influence on students’ behavioral intention to reduce or ideally cease their overall consumption of animal agriculture products. Animal agriculture products should be understood as meat, poultry, fish, milk, cheese, yoghurt, eggs, and all other products that are derived from animals. A survey experiment was sent to Public and Business Administration students from Erasmus University Rotterdam, Utrecht University and Ghent University. Based on 419 responses, results suggest that for the behavioral intention of reducing their consumption of the above-mentioned products, students are influenced by both mimetic pressures and a combination of coercive, mimetic and normative pressures, the latter having the strongest significant effect. For the behavioral intention of ceasing their consumption, students are solely influenced by a combination of coercive, mimetic and normative pressures. The main practical implication of this research is the following: action to counteract the corrosive effects of animal agriculture on the environment needs to be taken not only at the policy-making level, but also at the social and professional levels. Policy-making alone will most likely not be effective enough in changing this damaging trend; but will be enhanced by engaging individuals as well as education and professional institutions.
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#GoVegan, or at least try to: for the environment and your health likewise!
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INTRODUCTION

The Paris Agreement that was signed in 2015 was historical: against all expectations, 197 countries succeeded at reaching an agreement to mitigate global greenhouse gases. For the first time, international policy makers all seemed to recognize the dangers of climate change. One of the commitments of the agreement is to make financing flows consistent with a pathway towards low greenhouse gas (GHG) emissions. Policymakers mostly focus on GHG emissions in sectors like the energy or transportation sector (Oppenlander, 2013). However, although the energy sector is indeed one of the leading causes of climate change, there is another unaccounted for industry that has been categorized as a leading cause of climate change: animal agriculture (Oppenlander, 2013). What is meant by animal agriculture is the production, transportation and consumption of cows, pigs, chicken, sheep, fish and any product that is derived from the latter. Moreover, according to the United Nations Food and Agriculture Organization (UN FAO, 2006) animal agriculture was the number one economic industry in GHG emissions. In a widely-cited report published in 2006, the UN FAO directly links animal agriculture to climate change: according to researchers, 18 percent of GHG emissions correspond to livestock. Nonetheless, according to Goodland & Anhang (2009) this percentage is much higher: by including additional uncounted or misallocated GHG’s such as livestock respiration and land use, they found that animal agriculture can be tantamount to 51 percent of annual worldwide GHG emissions.

Even at the Doha Development Round’s Tenth Ministerial Conference in Nairobi in 2015, where the negative effects of agricultural trade were part of the discussion, the detrimental effect of animal agriculture on the environment was entirely disregarded. It is therefore not surprising that policymakers are mostly focused on the energy and transportation sector, but seldom propose any changes in the animal agriculture to make it more sustainable. In order to have an effective and balanced policy strategy, one would argue that animal agriculture emissions need to be mitigated as well. Especially when statements, such as the one made by Rogelj et al (2016) about the Paris Agreement needing a boost, are taken into consideration.
Mitigating the generally understated effects of livestock on the climate could be exactly the boost that the agreement needs.

However, the international characteristic of the Paris Agreement, of other agreements such as the Kyoto Protocol and its predecessors, and of international negotiations, depicts the flaw in the international arena in terms of taking action and assuming responsibility for certain causes of environmental deterioration. I deem it of essence to delve into the individual characteristics of global environmental issues instead, specifically for this case the role that animal agriculture plays in the global depletion of the environment due to its significant emission of greenhouse gases. Animal agriculture consumption is fueled by the agriculture industry, but mostly by individuals’ preferences, their attitudes, behaviors or more generally by their choices. This is to say that behavior as expressed by food choices could be quite indicative of individuals’ potential to change their behavior and to ideally put a stop to their consumption of animal agriculture products.

The scope of this thesis is thus based on the analysis of the micro-level, to be represented by behavioral intention - or intent - for the purposes of this research. It also falls within the meso- and macro-levels of public administration theory as represented by the application of the organizational theory of institutional isomorphism. This research’s focus on behavioral intentions relates to the recently developed field of behavioral public administration, which draws from the underlying psychology and behavior of individuals and groups (Grimmelikhuijsen et al., 2016). Behavior is of extreme importance for certain types of areas of research, such as is the case for the ambitions of this thesis.

Measuring behavioral intentions can be a useful indicator and predictor of actual behavior because despite not measuring actual behavior, intentions tend to represent behavior (Ki & Childers Hon, 2007; Perloff, 2003). Perloff (2003) explained behavioral intentions as “the intention to perform a particular behavior, a plan to put behavior into effect” (Ki & Childers Hon, 2007). Moreover, behavioral intentions stand in between attitudes and behavior (Ki & Childers Hon, 2007), as postulated by the theory of planned behavior (Ajzen, 1991). It can thus be said that behavioral intentions are stronger and more reliable predictors of actual behavior.
than attitudes, yet are significantly distinct from behavior as after behavioral intentions are measured the individuals have to act upon them in order to transform them into behavior.

Behavioral intentions will be measured within the theoretical perspective of what is referred to as institutional isomorphism. Isomorphism is a concept under new institutional theory, and describes the process of a given unit in a given environment that begins resembling other units in the same environment (DiMaggio and Powell, 1983; Decramer et al., 2012; Hawley, 1968). This process is due to institutional factors such as rules, roles, beliefs, that pave the way towards homogenization which is mostly encouraged when there is a lack of legitimacy and uncertainty (DiMaggio and Powell, 1983; Decramer et al., 2012). This process occurs through three type of pressures: coercive, mimetic and normative pressures. Coercive isomorphism results from political influence, such as the state or similar powerful organizations, and from the problem of legitimacy; mimetic isomorphism has to do with common or standard responses to uncertainty based on imitation and modelling; and normative isomorphism occurs through formal educational and professional networks, or in other words, professionalization (DiMaggio and Powell, 1983; Decramer et al., 2012). As these three pressures each focus on different determinants of behavior, measuring behavioral intent by incorporating the pressures provides a framework for this thesis that will draw from institutional theory focused on behavior as explained by societal and institutional factors. The independent variables of this thesis thus are coercive pressures, mimetic pressures, normative pressures, and a combination of all three pressures; whereas the dependent variable is students’ behavioral intention to reduce and / or cease with their consumption of animal agriculture products. A survey experiment was conducted with 419 students from Erasmus University Rotterdam, Utrecht University, and Ghent University to test the hypotheses.

**AIM THESIS**

The aim of this thesis, especially in terms of behavior, is to explore behavioral intentions in relation to the consumption of animal agriculture products, specifically the effect isomorphic pressures might exert in influencing students’ behavioral intention to reduce – or potentially cease with – their consumption of animal agriculture products. Animal agriculture products can be understood as products that originate from animals, such as – but not limited to – meat, poultry, fish, dairy products, and eggs.
The research approach is based on a survey experiment due to the opportunity it offers for respondents to be presented with vignettes that will stimulate their immersion in a hypothetical scenario. The survey experiment will then be distributed to students from Erasmus University Rotterdam, Utrecht University and Ghent University via e-mail and in person on the universities’ premises. A linear regression analysis will subsequently be carried out to analyze the data obtained from the survey experiment.

**Research Question**

In light of the above, the *research question* this thesis will answer is the following:

**Do isomorphic pressures, separately or in combination, have a positive impact on students’ behavioral intention to reduce or cease with their consumption of animal agriculture products?**

In order to answer the research question, it is essential that the following *theoretical sub-questions* are answered:

1. What are isomorphic pressures according to the literature?
2. What are behavioral intentions according to the literature?
3. What is the theoretical relation between isomorphic pressures and behavioral intentions?

Moreover, the following *empirical sub-questions* will also be addressed:

4. What shape do isomorphic pressures take concerning the consumption of animal agriculture products?
5. What are behavioral intentions concerning the consumption of animal agriculture products?
6. Is the theoretical relation between isomorphic pressures and behavioral intentions confirmed in the specific case of students’ overall consumption of animal agriculture products?

Questions 1 and 2 will be answered in in Chapter I (Literature Review), question 3 will be answered in Chapter II (Theoretical Framework), questions 4 and 5 will be answered in Chapter
III (Research Design and Methodology), and question 6 will be answered in Chapter IV (Analysis and Results) and Chapter V (Discussion).

**Societal Relevance**

Animal agriculture has been proven to be highly linked to climate change by a significant number of scholars (Scarborough et al., 2013; Audsley et al., 2009; Thornton, Herrero & Ericksen, 2011; Shindell et al, 2009; United Nations Food Agriculture Organization, 2006; Oppenlander, 2013; Tilman & Clark, 2014; Solomon et al., 2007; Solomon et al., 2009; Pimentel et al, 2004; Chapagain & Hoekstra, 2003; Hoekstra & Wiedmann, 2014; Mekonnen & Hoekstra, 2012). The animal agriculture industry is a threat to our planet and society in terms of global environmental depletion and public health. Looking at the influence certain type of pressures might have on individuals’ food choices could provide insightful information for individuals themselves, policymakers and other professionals. Whether isomorphic pressures, either individually or in combination, have an effect on individuals’ behavioral intention to reduce or cease with their consumption of animal products, can be part of marking the first steps towards effectively tackling the corrosive effects that the animal agriculture industry causes. Whether the solution should be sought from a coercive pressure level, mimetic pressure level, normative pressure level, or from all three levels, could aid in narrowing down the role that our society, but most importantly individuals themselves have to play in order to positively impact the totality of our environmental surroundings.

**Theoretical Relevance**

As will be highlighted throughout this thesis, New Institutional Theory successfully explains and predicts the behavior of organizations within a specific institutional environment. Isomorphism looks at their behavior to become homogenous with one another when faced with uncertainty and when striving for legitimacy. This homogeneity is caused by coercive, mimetic and normative pressures (DiMaggio & Powell, 1983, 1991). Due to the theory and concept’s use throughout the literature, yet lack of application at the micro-level type of behavior, this research adds to the theoretical body of literature and applies the theory to a new level. In fact, it also adds to the body of behavioral public administration, as the latter focuses on micro-level behavior studies using macro and meso-level theories (Grimmelikhuijsen et al., 2016, 2017).
The latter also implies the research design of this study, namely that of a survey experiment. Using a survey experiment added the dimension of causal inference to this thesis, which is crucial in contributing with an additional (survey) experiment; this furthermore removes issues of endogeneity. This is especially necessary when accepting or rejecting the hypotheses that were tested. This research has proved that institutional isomorphism does not only play a role at the macro and meso levels, but also at the micro level of individuals. It shows that isomorphism could be of use when it comes to influencing individuals’ behavioral intention to reduce or even altogether cease with their consumption of animal agriculture products.

The following chapters will elaborate on the existing body of literature concerning New Institutional Theory and Institutional Isomorphism, as well as behavioral intentions; the theoretical underpinnings and hypotheses of this thesis; the research design and methodology that was followed; the analysis and results of the linear regression analyses on the data collected by the survey experiment; a discussion and explanation of the limitations of this study; and a conclusion.
CHAPTER I: LITERATURE REVIEW

The following section will build upon the existing literature on New Institutional Theory and behavioral intentions. Before narrowing in on New Institutionalism, its origins and foundations are set out. Moreover, behavioral intentions will be clearly defined and an overview of how these have been operationalized in previous studies will be presented. The following questions will be answered in this chapter:

1. What are isomorphic pressures according to the literature?
2. What are behavioral intentions according to the literature?

A THEORY ON INSTITUTIONS

Social phenomena are analyzed by a myriad of theoretical frameworks, one of them thus being institutional theory which mostly focuses on organizational phenomena (Lawrence & Shadnam, 2008). Institutional theory posits that rules, practices, and structures that condition action are what constitutes institutions as such; institutions are endemic to societies, and direct these (Lawrence & Shadnam, 2008). Depending on the type of institutionalism that is employed, institutions will operate within the context of conditioning action in terms of decreasing costs, reducing risk, and increasing their level of legitimacy (Lawrence & Shadnam, 2008). Analyzing institutions in general provides an essential insight into identifying the specific social contexts these are found in, which is important because these contexts will provide the cognitive frameworks for individuals to recur to, which will thus result in the constraint or enabling of action (Lawrence & Shadnam, 2008). This theoretical framework which has become such a foundation within the social sciences, followed a process of development and resurgence. From Max Weber and Emile Durkheim, who were among the first to attempt to establish a theory on what institutions are and how action and structure are affected by these institutions (Lawrence & Shadnam, 2008), to a resurgence in the 1970s which was aimed at understanding the effects of institutional contexts on the structures of organizations (Lawrence & Shadnam, 2008; Meyer & Rowan, 1977).
For Weber (1930, 1946, 1947), action was social in terms of how the actor, or individual, attaches a subjective meaning to it - attaching meaning thus is what creates social action (Lawrence & Shadnam, 2008). Beliefs or cultural systems, which according to Weber can be depicted as institutions, are what provides a set of meanings that allow for the interpretation of actions (Lawrence & Shadnam, 2008). In slight contrast, Durkheim defined institutions as symbolic systems composed of knowledge, belief, moral authority, or in other words meaning (Lawrence & Shadnam, 2008). In his interpretation, institutions arise from human interaction and are experienced by people as objective and externally (Lawrence & Shadnam, 2008). Moreover, the 1970s resurgence led to the understanding of, for instance, institutionalization (Lawrence & Shadnam, 2008), and how organizational structures and functioning are influenced by their environment.

In continuation, an overview will be provided of the distinct types of institutionalisms, as well as what is meant with the term institutions. Weber and Durkheim’s interpretation serve as a basis to keep in mind when reading about institutionalism. The following section will thus clarify what new institutionalism encompasses as well as what is meant by it, and the section after that will address new institutionalism’s origins and foundations – where Weber’s (1968) more recent work will also be alluded to.

1.1 What is institutionalism?

Institutionalism offers a unique approach to the study of social, economic and political phenomena despite the ambiguity of the term ‘institutionalism’ (DiMaggio & Powell, 1991). As definitions and variations are abundant, DiMaggio and Powell (1991) narrow in on what they refer to as new institutionalism as associated with sociology – or in other words, new sociological institutionalism. As opposed to previous attempts to explain and describe social change that focused merely on the aggregate of individual choice, new institutionalism presents the theoretical view that social context and institutional arrangements underpin social change and social choices within the overarching field of organizational analysis (DiMaggio & Powell, 1991). The reason why this is the case becomes apparent by having an overview of how certain social science disciplines – economics, organization theory, political science and public choice,

**Economics**

Departing from the classic assumptions of microeconomic theory, institutional economics argues that individuals aim at maximizing their behavior adjusted to their preference orderings, but have to deal with cognitive limits, incomplete information, and difficulties in monitoring and enforcing agreements (DiMaggio & Powell, 1991). Institutions exist, within this economical context, when they are able to offer more benefits than the transaction costs it takes to create and maintain them (DiMaggio & Powell, 1991). Institutional economics thus attempts to provide understanding on how transaction attributes such as asset specificity, uncertainty, and frequency allow for specific economic institutions to be created and established (DiMaggio & Powell, 1991). For instance, North (1988) states that economic institutions tackle uncertainty due to their provision of reliable and efficient frameworks for economic exchange (DiMaggio & Powell, 1991).

However, divergence exists within new institutional economics, such as the different understanding of transaction costs (Williamson, 1985; North, 1984), of the optimality of institutions in light of their response to social needs (Williamson, 1985) and of the weight given to the state and ideology (North, 1988; DiMaggio & Powell, 1991).

**Politics**

There are two strands of political science institutionalism, namely positive theory – which focuses on domestic political institutions, and regime theory which focuses on international relations. The former regards the way in which institutions affect political outcomes within the context of political decision-making. Institutions provide stability to the political arena, such a viewpoint being in parallel with the previously mentioned economic view of transaction costs. Institutions minimize the transaction costs of politics and thus serve as agreements of cooperation to enhance political stability (DiMaggio & Powell, 1991).
The latter strand is found within international relations, which concerns itself with the conditions under which international cooperation develops in relation to the influence of institutions (DiMaggio & Powell, 1991; Keohane, 1984, 1988). Institutions in this strand are regarded as both formal international organizations, as well as international regimes that provide global stability in distinct fields (DiMaggio & Powell, 1991). Two approaches, however, conflict with each other: namely the rational-actor approach and the sociological approach. The former posits that institutions would arise if the benefits of international agreements and cooperation would surpass the overall costs; the latter suggest that neither rationality nor efficiency are always present in international institutions (Keohane, 1988). This thus has lead towards the more sociological approach which posits that not only are institutions shaped by the preferences and power of those establishing them, but they also shape these (Keohane, 1988; DiMaggio & Powell, 1991).

**Differences**

Employing the economic and political approaches and views to institutionalism and institutions, especially in contrast with the views of organization theory and sociology, variances and dissimilarities of what defines institutions can be traced. Political science views institutions through a rational choice lens, by which institutions are understood as rules, procedures, arrangements, what is and what is not allowed (Shepsle, 1986; Ostrom, 1986; DiMaggio & Powell, 1991). Economics drawing from history suggests that institutions provide a stable framework offered to individuals, whereas the economics of organization understands that institutions provide a structure and arrangement to decrease transaction costs (DiMaggio & Powell, 1991). In contrast with the above rational choice based views, international relations draw from sociology. Regimes and institutions are thus understood differently, namely as being defined by customs, obligations, practices (DiMaggio & Powell, 1991). The disciplines employing the rational choice and game theory lens, such as economics and politics, see institutions as products of human design and trace their origins to identifiable and logical steps (DiMaggio & Powell, 1991). The disciplines borrowing from sociology, such as regime and organization theory, understand institutions as designs created by humans yet this does not imply or assume that said design is consciously built (DiMaggio & Powell, 1991).
The sociological approach to institutions, and thus to new institutionalism, is more encompassing than the rational approach of other disciplines, as it includes all aspects of society (DiMaggio & Powell, 1991). With this in mind, new institutionalism in organization theory analyses one sub-branch of sociology, namely the one dealing with “organizational structures and processes that are industrywide, national or international scope” (DiMaggio & Powell, 1991:9). DiMaggio & Powell, (1991), Meyer and Rowan (1977) and Tolbert and Zucker (1983) argue that organized life should not only be explained or understood by individuals interested in maximizing their benefits and minimizing their costs, but also by the presence and reproduction of practices. In fact, the practices and arrangements found in the labor market, schools, states and other institutions (DiMaggio & Powell, 1991; Meyer & Rowan, 1977) constitute a key ingredient to new institutionalism.

In summary, the field of economic institutionalism is based on rational choice and posits that coordination mechanisms solve collective action problems by providing a set of rules and norms to structure behavior (Powell & Bromley, 2015). Historical institutionalism suggests that temporal processes through path dependence and divergence have created and shaped institutions (Powell & Bromley, 2015). Sociological or new institutionalism acknowledges the importance and influence of the broader social structure, yet offers a cultural lens through which to view institutions (Powell & Bromley, 2015).

1.2 Origins of New Institutionalism: Old vs. New

The study of institutions and organizations can be traced back to the work of Max Weber (1968), his more recent work being aimed at understanding the formation and establishment of bureaucracies (Meyer & Rowan, 1977; DiMaggio & Powell, 1983). As Meyer and Rowan (1977) and DiMaggio and Powell (1983) state, Weber claimed that bureaucracies emerged from “competition among capitalist firms in the marketplace; competition among states, increasing rulers' need to control their staff and citizenry; and bourgeois demands for equal protection under the law. Of these three, the most important was the competitive marketplace” (DiMaggio and Powell, 1983, p.144). Weber understood bureaucracies as the organizational manifestation of rationality, depicted as being highly efficient and powerful in controlling individuals, and described as being irreversible and constituting a so-called iron cage that was responsible for institutionalization (Weber, 1968; DiMaggio & Powell, 1983).
Weber’s view of institutionalization followed a rational view and model, and the process was highly dependent on economics. However, institutionalization was also explained and defined by looking at the formal institutions of government and the state, usually referred to as ‘old’ institutionalism. Old institutionalism was founded by Selznick (1949, 1957), analyzed group conflict and organizational strategy, was of strictly political nature. It showed skepticism towards the rational-actor model of organization, and viewed institutionalization as a state-dependent process that constrained organizational rationality (DiMaggio & Powell, 1991). Institutionalization took place when the organizations were infused and straddled by values, allowing for the organization to take on a life of its own (Selznick, 1957; Powell & Bromley, 2015; DiMaggio & Powell, 1991).

New Institutionalism stems from old institutionalism, and despite agreeing that institutionalization constrains organizational rationality, they differ in how they define those constraints. In order to understand Old and New Institutionalism, it is essential to understand how they differ, although similarities between both are still found. The following section will provide an overview of the main differences based on the similarities, as explained by DiMaggio and Powell (1991).

**Differences and Origins**

One of the first differences underscored by DiMaggio and Powell (1991) is the amount of focus that is given by old and new institutionalism to conflicts of interest within and between organizations: for the former it is at the center, and for the old it is at the periphery. The old institutionalism relied on a political analysis, whereas the new relied on an institutional analysis, thus also explaining this difference. As was stated above, old institutionalism saw institutionalization as a process that constrained organizational rationality; new institutionalism agrees with this (DiMaggio & Powell, 1991). Yet they differ in the sources of constraint: the old identifies the conflict of vested interests as being caused by political tradeoffs and alliances, whereas the new emphasizes the relationship between stability, legitimacy and power (DiMaggio & Powell, 1991; Tolbert & Zucker, 1983).
Another key difference concerns the structural emphasis proposed by both types of institutionalism. Selznick (1949), representing the old institutionalism, placed this emphasis on the informal structure of an organization – such as “influence patterns, coalitions and cliques, particularistic elements in recruitment or promotion” (DiMaggio & Powell, 1991, p. 13). In contrast, new institutionalism emphasizes the symbolic role of the formal structure, thus focusing on “interorganizational influences, conformity, and the persuasiveness of cultural accounts, rather than to the functions they are intended to perform” (DiMaggio & Powell, 1991, p. 13).

An additional difference concerns how the organizational environment is conceptualized: old institutionalism suggests that the organization is embedded in the local community, whereas new institutionalism suggests that it is embedded in a non-local environment such as a field, sector or society (DiMaggio & Powell, 1991). In the latter institutionalism environments “penetrate” the organization, which consequently grants it a more significant role than in the former institutionalism (DiMaggio & Powell, 199, p. 13).

Furthermore, old and new institutionalism differ in terms of the explanation of organizational dynamics. For the former, the dynamics have to do with change as brought about by the evolution of the relationship between the organization and its local environment (Selznick, 1957; DiMaggio & Powell, 1991); and for the latter, organizational dynamics have to do with the homogeneity of organizations and a high degree of persistence as opposed to change (DiMaggio & Powell, 1991).

One of the most essential differences between both institutionalisms regards what exactly it is that undergoes the process of institutionalization. Old institutionalism claims that organizations were the ones being institutionalized, and they were simultaneously the place (or loci) where this process occurred (DiMaggio & Powell, 1991). New institutionalism, however, does not regard organizations as the units that are institutionalized – rather, organizations forms, structural components and rules are the ones institutionalized (DiMaggio & Powell, 1991). Moreover, new institutionalists place the occurrence of institutionalization at the sectoral or
societal levels, which thus is tantamount to an interorganizational occurrence (Meyer & Rowan, 1977; DiMaggio & Powell, 1991).

One of the similarities between both institutionalisms is their rejection of the view that organizational behavior can be simply understood as the sum of individual actions (DiMaggio & Powell, 1991). However, the reasons as to why they reject this differ significantly. For Selznick and his academic predecessors, this rejection was based on the belief that organizations are extremely adamant to efforts to direct and control them, and as such it cannot be stated that individual actions lead towards organizational rationality (DiMaggio & Powell, 1991). For neoinstitutionalists, this explanation has more to do with the nature of human behavior, which is characterized by being unreflective, routine-like, and taken-for-granted (DiMaggio & Powell, 1991).

Nonetheless, the most essential difference between the two institutionalisms is grounded in their respective “conceptions of the cultural, or cognitive, bases of institutionalized behavior” (DiMaggio & Powell, 1991, p.14). Old institutionalism listed the key forms of cognition as being values, norms, and attitudes: according to Selznick (1957, p.17) only when organizations would be “infused with value”, would they become institutionalized (DiMaggio & Powell, 1991). Furthermore, the preferences of those involved in the organization were shaped by norms, new employees would be socialized which in turn allowed for an internationalization of said values (DiMaggio & Powell, 1991). New institutionalism listed classifications, routines, scripts, and schema as being the key forms of cognition. Instead of regarding norms and values as that which shape organizations, neoinstitutionalists view taken-for-granted scripts, rules, and classifications as what shapes and make organizations (Meyer & Rowan, 1977; DiMaggio & Powell, 1991).

Old institutionalism shares parallels with the Parsonian general theory of action (Parsons and Shils, 1951; DiMaggio & Powell, 1991), which largely focuses on internalization, the possibility to infuse value into elements and aspects, and commitment – just as old institutionalism does (DiMaggio & Powell, 1991). For Parsons and Shils (1951), institutionalization occurs when individuals adhere to social expectations within the context of
culture and moral patterns; this is all possible due to the collectivity of individuals attaching value to meeting such expectations in terms of conduct and behavior as based on the obtained feeling of gratification. (DiMaggio & Powell, 1991). However, DiMaggio and Powell (1991) clearly state that although interesting, Parsons work differs in how institutionalism developed because he, for instance, focused more on the evaluative aspect rather than on the cognitive/cultural aspect; and his propositions heavily relied on the rationality of the agent.

Although the core foundation of new institutionalism was provided by old institutionalism, and building upon it in a challenging manner, new institutionalism in organizational theory largely builds upon the contributions of the Carnegie school to organization theory (DiMaggio & Powell, 1991). What is referred to as the Carnegie school contributions in this context, are the contributions by Herbert Simon and James March (Simon, 1945; March & Simon, 1958; Cyert & March, 1963) as DiMaggio and Powell (1991) state. Specifically, they were the ones responsible for introducing cognitive science to organization theory, setting the foundations regarding: uncertainty, organizational routines, the process of organization of attention linked to decision-making; decision-making linked to preference ambiguity, etcetera (DiMaggio & Powell, 1991). DiMaggio and Powell (1991) underscore what new institutionalism has been able to take away from said contributions: when it comes to habit, it should not be seen as solely a passive element in behavior (DiMaggio & Powell, 1991). It should rather be seen as a way in which individuals place attention to specific aspects of a given situation, as opposed to an alternative way or choice that could be made (Simon, 1945); and decision-making is a much more complex process than was previously thought, based on rule following more than on relativizing and weighing the different decisions with one another based on their consequences (March & Simon, 1958; DiMaggio & Powell, 1991). DiMaggio and Powell (1991) furthermore shed light on parallels between organizational analysis as advanced by the Carnegie school, and old and new institutionalism: a normative approach is replaced by a cognitive – or cultural – approach, the latter being based on routine, premises, and rule following.

Following this shift from normative to cognitive, DiMaggio and Powell (1991) make due reference to the work of Harold Garfinkel during the 1960s, which later became known as ethnomethodology. Garfinkel’s work addressed the nature of practical knowledge as well as the influence and effects of cognition in face-to-face interaction, the latter namely being the
source of social order (as opposed to social roles and shared patterns of evaluation) (DiMaggio & Powell, 1991). How Garfinkel conceived of cognition largely differs from Parsons’ conception in that it shifts it from “a rational, discursive, quasi-scientific process to one that operates largely beneath the level of consciousness, a routine and conventional “practical reason” governed by “rules” that are recognized only when they are breached.” (DiMaggio & Powell, 1991, p.20). Moreover, even though Garfinkel alludes to norms, these norms are at the cognitive level in that they guide individuals’ actions and behavior and substantiate their justification (DiMaggio & Powell, 1991). New institutionalism has more parallels with Garfinkel’s work are rules, the latter resembling the “‘scripts’ or ‘production systems’ of cognitive psychology” (DiMaggio & Powell, 1991, p.20) which new institutionalism is also characterized by.

DiMaggio and Powell (1991) introduce an additional line of thinking that emerged in the 1960s as well, namely phenomenology. The main proponents of this are Berger and Luckmann (1966), which although share similarities with Parsons’ institutionalized roles, focus on cognition rather than on evaluation (DiMaggio & Powell, 1991). Institutions are conceived by them as bodies that have been cognitively constructed and control human conduct (DiMaggio & Powell, 1991; Berger & Luckmann, 1966)

This shift toward cognitive and cultural explanations, the rejection of rational-actor models, an interest in institutions as independent variables, and “an interest in properties of supraindividual units of analysis that cannot be reduced to aggregations or direct consequences of individuals’ attributes or motives” characterizes new institutionalism (DiMaggio & Powell, 1991, p.8).

1.3 Establishing New Institutionalism

The founders of new institutionalism – Meyer and Rowan (1977) – borrowed, extended, and adapted the micro sociological grounds provided by ethnomethodology and phenomenology, specifically (DiMaggio & Powell, 1991). This can be noticed by looking at Meyer and Rowan’s treatment of ‘accounts’, as well as at their definition of ‘institutionalized rules’ namely being
Instead of focusing on the internal workings of the institutionalization process of organizations, new institutionalism looks at the external workings: the institutional environment (Meyer & Rowan, 1977). The latter can influence the development of formal structures present in an organization which, if innovative enough, subsequently legitimizes the organization’s technical efficiency (Powell & Bromley, 2015). This influence is due to the presence of the social reality as expressed by public opinion, views, general knowledge, laws, social prestige, and the like (Meyer & Rowan, 1977). Regarding legitimacy, institutionalization is propelled within the context of seeking legitimization, where each organization will want to implement the given structure so as to align with the rest, and thus be seen as legitimate and socially acceptable (this can happen even if the structural form does not improve efficiency (Powell, 2007; Powell & Bromley, 2015).

Meyer and Rowan (1977) refer to the role of the social elements named above as powerful institutional rules “which function as highly rationalized myths that are binding on particular organizations” (p. 343). Organizations create these myths that are derived and based on modern society. These myths can be identified within the formal structure of an organization as, for instance, professions or technologies: the former is institutionalized due to education and social ideologies; and the latter are institutionalized based on their level of innovativeness and aid in meeting the envisaged ends of the organization (Meyer & Rowan, 1977). These myths, based on the societal context, are highly necessary for an organization to legitimate and thus propel itself, for if these elements are not taken into account and incorporated, organizations risk being perceived as illegitimate (Meyer & Rowan, 1977).

As such, Meyer and Rowan (1977) gear towards the proposition that organizations tend to be isomorphic with their environments, but in the sense that they are a strong – if not identical – reflection of the respective societal context they are present in. This isomorphism with their institutional environment has three effects: i) the decoupling of structural subunits; ii) the creation of rituals of confidence and good faith; and iii) the avoidance of inspection and
effective evaluation (Meyer & Rowan, 1977). Decoupling occurs because despite organizations having to adhere to the myths, they still have to perform in terms of practical activity; these two may at times experience a degree of contradiction (Meyer & Rowan, 1977). Good faith and confidence are stimulated in order to maximize the organization’s long-term effectiveness, especially since latter may be affected by the decoupling (Meyer & Rowan, 1977). The avoidance of inspection and evaluation occurs due to the potential lack of certainty that the socially accepted organizational formal structure is fully effective and functions as it should, yet it is still adopted by the organization in order for the latter to maintain legitimacy and survival in the institutional environment (Meyer & Rowan, 1977).

Meyer and Rowan’s (1977) work in the area of organization theory resulted in the first part of the wave of new institutionalism. They introduced the view of the interaction between organizations and their institutional environments in how modern societies largely indirectly dictate the functioning and structure of said organizations in order for these to attain legitimacy and rationality. The institutional environment is thus composed of both functional as well as symbolic aspects in relation to organizations’ formal structure (Lawrence & Shadnam, 2008). Having an overview of their work is beneficial in the understanding of the work the preceded theirs, namely the one by DiMaggio and Powell (1983), which constituted the second part of the powerful wave that established new institutionalism. In their work, the institutional processes that stimulate organizations to become isomorphic amongst one another were analyzed (Lawrence & Shadnam, 2008). Understanding DiMaggio and Powell’s (1983) insightful work is crucial, for this thesis employs their concept of institutional isomorphism and analyzes its influence on the behavioral intention of students to reduce, or fully cease with, their consumption of animal agriculture products.

1.4 Institutional Isomorphism: A Concept of New Institutionalism

In light of the explanations and descriptions the were provided on new institutionalism, a brief way of grasping what it encompasses could be to view institutionalism as a theoretical perspective which postulates that the dynamics of the organizational environment are determined and shaped by cultural norms, roles, symbols, rituals, assumptions, and beliefs that dictate the desired and accepted behavior within the given organization (Decramer et al., 2012;
DiMaggio and Powell, 1991). In other words, new institutional theory states that organizations adapt from within in order to conform to the expectations of the prime actors in their environment (Ashworth et al., 2009).

Within this, and the previous profounder, understanding of new institutionalism, DiMaggio and Powell (1983, 1991) decided to incorporate a specific type of process that would still accurately depict the institutionalist perspective. This process is what is referred to as isomorphism, which is defined as a ‘constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions.’ (p.148, DiMaggio and Powell, 1983; Decramer et al., 2012; Hawley, 1968). The rules, norms, roles, assumption and beliefs - otherwise referred to as institutional factors (Decramer et al., 2012) - can influence and most importantly shape regularized organizational behavior geared towards homogenization (Decramer et al., 2012; DiMaggio and Powell, 1991; Greenwood and Hinings, 1996; Meyer and Rowan, 1997).

The institutional isomorphism model predisposes of the presence of institutional pressures, the latter being based on having to conform to accepted standards of practice, or on coercive pressures imposed by institutional forces (Decramer et al., 2012). The responses are voluntary for the former and involuntary for the latter. This type of perspective along with its components, pushes organizations towards a tendency based on becoming isomorphic with the given components (DiMaggio and Powell, 1991; Decramer et al., 2012; Meyer and Rowan, 1977). There are three types of isomorphic pressures, otherwise referred to as types of isomorphism: coercive, mimetic, and normative, respectively. Coercive isomorphism results from political influence, such as the state or similar powerful organizations, and from the problem of legitimacy; mimetic isomorphism has to do with common or standard responses to uncertainty based on imitation and modelling; and normative isomorphism occurs through formal educational and professional networks, or in other words, professionalization (DiMaggio and Powell, 1983; Decramer et al., 2012). The three pressures are not mutually exclusive, thus the possibility exists for them to intermingle in an empirical setting; however, they tend to stem from distinct conditions and may attain different outcomes along the common lines of organizational change (DiMaggio and Powell, 1983). Organizations are thus confined to a homogenizing “iron cage” (DiMaggio and Powell, 1983; p. 166 Ashworth et al., 2009).
Coercive Isomorphism

Formal and informal pressures are both comprised within coercive isomorphism, usually experienced by a given organization in light of its dependency on another organization as well as of the given cultural expectations in the society the organization is active in (DiMaggio and Powell, 1983). The pressures tend to be exerted by government, regulatory or other agencies who aim at constraining organizational variety (Ashworth et al., 2009). There are variations in terms of the degree of coerciveness of the pressure, as it can come across as a force, persuasion or invitation (DiMaggio and Powell, 1983). Examples of homogenization through direct authority relationships provided by DiMaggio and Powell (1983) range from the expansion of the central state to the centralization of capital (p.149). The political aspect of this pressure, rather than technical influence, is clearly apparent in terms of contributing to organizational change (Ashworth et al., 2009).

Mimetic Isomorphism

This type of pressure also comes about in light of uncertainty, consequently stimulating imitation or modelling (DiMaggio and Powell, 1983). Goal ambiguity, uncertainty, and poor understanding pave the way for organizations imitating other organizations, which in turn can prove to be advantageous such as providing a non-costly and straightforward solution (DiMaggio and Powell, 1983; Cyert & March, 1963). Mimetic forces encompass the emulation of specific activities, systems, or structures -including innovations, which are perceived as enhancements of legitimacy (Ashworth et al., 2009). Mimetic forces can easily explain why certain practices or structures are adopted regardless of the lack of their respective empirical evidence; such is the case for management practices (Ashworth et al., 2009).

Normative Isomorphism

The third type of isomorphism stems primarily from professionalization, in terms of professional standards and professional communities (DiMaggio and Powell, 1983; Ashworth
et al., 2009). It mostly concerns the professional standards that organizations should adhere to and uphold, as well as the techniques that are considered as being legitimate by professional bodies (Ashworth et al., 2009, p. 167). Within organizations, there may be a variety of professionals each focusing on distinct aspects, yet they are similar to their professional counterparts in other organizations (p. 151 DiMaggio and Powell, 1983). The influence of professionals, or professionalization in general, tends to be both assigned by the state yet is also created through professional activities (DiMaggio and Powell, 1983). In other words, this makes reference to the type of education and training professionals follow and the norms that are conveyed by this (Ashworth et al., 2009). DiMaggio and Powell (1983) claim that there are two aspects of professionalization that are of saliency to isomorphism: formal education and legitimation acquire through university specialists, and the growth and elaboration of professional networks that are linked to organizations allowing for swift diffusion of models (p. 151). Moreover, other aspects that fall within normative isomorphism are: filtering of personnel, based on same universities, common attributes, shared problem-solving and decision-making approaches; and anticipatory socialization of individuals within an organization, allowing familiarization with expected or desired behavior, dress-code, way of speaking, etcetera (DiMaggio and Powell, 1983).

**Combined Isomorphism**

However, as has been previously stated in this chapter, these three types of isomorphism become intermingled at times (DiMaggio and Powell, 1983). This possible intermingling may be unpredictable and might yield different results and outcomes to those obtained by the individual pressures. In fact, it is because of this prospective interaction between isomorphic pressures that it is of essence to include this in this research.

Institutional isomorphism directly analyzes organizational behavior within a specific institutional environment. The three types of pressures are found within the environment, and explain why organizations become homogenous with one another – the fact that DiMaggio and Powell (1983, 1991) established this, offers incredible insight into societal contexts, pressures, behaviors, attitudes, and patterns. Understanding behavior, including what it is influenced and triggered by, is essential – as institutional isomorphism shows. It is important to understand
that the study of organizational behavior, including institutional isomorphism, typically includes individual processes, group and social processes as well as organizational processes. This thesis focuses on individual processes and, specifically, on the behavioral intentions of individuals. Thus this structure follows the adaptation of institutional isomorphism, in the sense that the theoretical concept is being applied to individuals and not to organizations for the purposes of this research. In light of this, looking at individuals’, in this case students’, behavioral intentions to reduce their consumption of animal agriculture products in light of the three pressures they would be subjected to, is essential. It is so because by having an insight into the behavioral intentions of students, the influence that the three pressures have is identified.

In the following sections, it will become clear how this thesis has narrowed in on behavioral intentions.

2. Behavioral Public Administration

Having the basics of organizational behavior in mind, an essential point of interest can be found within the field of behavioral public administration. Behavioral public administration contends itself with the analysis of behaviors and attitudes at the micro level, which means that the focus is on psychological process within or between individuals (Grimmelikhuijsen et al., 2016). This is especially interesting because, as Grimmelikhuijsen et al., (2016) and Klein and Kozlowski (2000) state, the micro level tends to be embedded within the meso – or organizational – level, and the macro – or institutional roles – level.

Grimmelikhuijsen et al., (2016) provide examples of scholars that have measured some type of behavior within public administration, one which offers nuance to the field, and another that provides further support to it. The first example is a study by de Fine Licht (2014) that tested institutional theories on government transparency, which resulted in an increase in the citizens’ trust and legitimacy (Grimmelikhuijsen et al., 2016). De Fine Licht (2014) employed a psychological concept, that of taboo trade-offs, in order to analyze the belief that transparency directly influences trust. Adding this additional element, which resulted in a controversial area that represented the taboo, showed that when it comes to government decision-making with
respect to a controversial area, government transparency of such will stimulate a more resistant individual behavior – in terms of trust and legitimacy (Grimmelikhuijsen et al., 2016; de Fine Licht, 2014). The second example regards representative bureaucracy theory, which was tested by Riccucci, Van Ryzin and Lavena (2014) to explore whether a representative bureaucracy in terms of gender, ethnicity and race indeed promote democracy (Grimmelikhuijsen et al., 2016). After carrying out an experiment based on hypothetical scenarios, and asking questions to the participants on the evaluation of the representative bureaucracy based on trust, fairness and performance, they concluded that in this case the representative bureaucracy theory was supported (Riccucci, Van Ryzin & Lavena, 2014).

Such an approach to public administration allows for macro-level theories to be connected with their respective micro-level foundations, which subsequently permits nuance, verification or falsification of said theories (Grimmelikhuijsen et al., 2016). In parallel, this thesis will also aim to test a macro level theoretical concept in the context of behavioral intentions – thus the micro level.

2.1 Behavioral intentions

Behavioral intentions have been defined as “the degree to which a person has formulated conscious plans to perform or not perform some specified future behavior” (Warshaw & Davis, 1985 p. 214). Another similar definition is “the intention to perform a particular behavior, a plan to put behavior into effect” (Perloff, 2003, p. 92). Webb and Sheeran (2006) further describe behavioral intentions as “self-instructions to perform particular behaviors or to obtain certain outcomes (Triandis, 1980) and are usually measured by endorsement of items such as “I intend to do X!”” (p. 249). These definitions clearly indicate that behavioral intentions preclude a behavior and that given intentions determine – or can at least explain – a given behavior.

In the words of scholars, behavioral intentions define an individual’s willingness to do something in parallel with an indication as to up to what level of effort an individual would reach, in order to attain the desired outcome in terms of behavior (Webb & Sheeran, 2006; Ajzen, 1991; Webb & Sheeran, 2005; Gollwitzer, 1990).
Behavioral intentions have been used as an indicator of behavior throughout a wide array of academic research topics. Behavior tends to be very intricate to reliably measure, which is why scholars have measured behavioral intentions as it narrows in on actual behavior (Jang & Namkung, 2009; Ki & Hon, 2007; Perloff, 2003; Ajzen, 1991). Webb and Sheeran (2006) summarize how models of attitude-behavior relations, health behavior models, and goal theories conclude that intentions largely determine behavioral performance and goal attainment. Moreover, a plethora of correlational studies have illustrated a reliable association between intentions and behavior (Webb & Sheeran, 2006). Thus, looking at behavioral intentions allows for behavior to be determined (Webb & Sheeran, 2006; Abraham, Sheeran, & Johnston, 1998; Austin & Vancouver, 1996; Conner & Norman, 1996; Eagly & Chaiken, 1993; Gollwitzer & Moskowitz, 1996; Maddux, 1999). This falls in line with the meta-analysis by Webb and Sheeran (2006), which found that a medium-to-large change in intention leads to a small-to-medium change in behavior.

Behavioral intentions have been measured in distinct ways and in the context of diverse fields. For instance, in the field of sexual addiction and compulsivity Foubert, Brossi & Bannon (2013) look at the effect viewing pornography has on fraternity men’s bystander intervention, rape myth acceptance and behavioral intent to commit sexual assault. Behavioral intention is measured in terms of likelihood by the use of a specific scale for sexual aggressions, namely Malamuth’s Attraction to Sexual Aggression Scale which was well adapted for the aims of the study of Foubert et al., (2013). The study found that the independent variable, viewing pornography, increased behavioral intent to rape.

Moreover, a study by Nelson et al., (2015), in the field of health communication, analyzed how current behavior influences perceptions of realism and behavioral intent for public service announcements in terms of meal planning. A prescribed behavior was given, and the study assessed the behavioral intention of adopting it by asking about the respondent's likelihood to perform a given action. Behavioral intent was found to increase in terms of performing the featured behaviors when the public service announcements were more realistic.
In the field of communication, Bruning, Castle & Schrepfer (2009) looked at behavioral intent in the context of organization-public relationships. For the study’s aims, behavioral intent was determined in a slightly different way from the previously-mentioned studies, namely by asking what they would do under specific circumstances. The study concluded organization-public relationships were related to behavioral intent, the latter thus being an essential indicator for organizations’ strategies with the public. A similar assessment was performed by Wilson and Rodgers (2004), who measured behavioral intention by asking what the respondents would intend to do when presented to given scenarios.

Certain studies have employed scales adapted and modified from Zeithaml, Berry, and Parasuraman (1996), such as Ki and Hon (2007) in the field of public relations, and in the field of leisure, have done. Zeithaml et al. (1996) developed a 13-item battery in order to capture the largest amount possible of behavioral intentions (Lee, Petrick & Crompton, 2007). This resulted in five dimensions: loyalty to company, propensity to switch, willingness to pay more, external response to a problem, and internal response to a problem (Lee, Petrick & Crompton, 2007). Tian-Cole, Crompton, and Willson (2002) asked respondents about their likelihood to take each of the featured actions, and found that the study’s respective independent variables directly influenced respondent’s behavioral intentions. Varki and Colgate (2001) also follow Zeithaml et al.,’s (1996) approach to behavioral intentions, measuring the likelihood of a certain action in the context of price perceptions of a given bank and its services.

Wilson (2008) additionally measures intended behavior to act unethically in the work environment. After asking about the students’ likelihood to act in a certain way, the results concluded that perceived behavioral control, perceived personal outcome, and perceived social acceptance by others were the most powerful predictors of intent, whereas the subjective norms indicator was the weakest.

Wilson (2008) assembles similar factors to what Ajzen’s (1991) Theory of Planned Behavior (TPB) postulates, namely that human action is guided by different situation-specific beliefs: behavioral beliefs, normative beliefs, and control beliefs (inducing perceived behavioral control) (Bamberg, 2003). These three beliefs, when combined, form the indicator of behavioral intentions, which is what precedes behavior (Ajzen, 1991; Bamberg, 2003). Just as Bamberg (2003) employs the TBP regarding the influence of environmental concern on
environmental behaviors, Winahjoe and Sudiyanti (2014) likewise employ the TPB to measure intended unethical behavior.

What can be noticed from previous research on behavioral intentions across different fields of interest, is that the likelihood of featured actions presented is measured – despite what type of scale or framework is being used. In light of this, this research will similarly measure behavioral intentions by measuring what the likelihood of the featured behaviors within the presented vignette of being carried out by students is, and will be operationalized by employing a ten-point scale.
CHAPTER II: THEORETICAL FRAMEWORK

The following section will present the theoretical framework that provided a solid foundation for this research, as well as the relevant hypotheses that were tested and the conceptual model expressing the expected effects. This thesis draws on the theoretical framework of institutional isomorphism (Powell & DiMaggio, 1983; 1991) to propose hypotheses that will determine students’ behavioral intention to reduce or cease with their consumption of animal agriculture products. Specifically, it will be argued that coercive, mimetic and normative pressures individually as well as in combination will have a direct positive impact on students’ behavioral intention to reduce or stop with their consumption of said products. The following question will be answered in this chapter:

3. What is the theoretical relation between isomorphic pressures and behavioral intentions?

This will be paired with the micro-level explanation of why it is expected that individuals will comply or conform to the given pressures and combination of pressures. However, due to the nature of the three types of pressures, there will be a distinction made between compliance, obedience and conformity. Compliance is generally understood as when an individual’s behavior changes in response to either an explicit or implicit request from another individual (Fabrigar & Norris, 2012). The internal alignment of an individual concerning beliefs and feelings with the request is not necessary nor required for compliance to take place and be successful (Fabrigar & Norris, 2012). Obedience regards a change in behavior resulting from a direct command from an authority figure, the latter focusing on changing the behaviors of the targeted individuals (Fabrigar & Norris, 2012). For this reason, compliance and obedience relate more to coercive pressures. On the other hand, conformity is generally understood as a more passive form of influence (not intentionally exerting influence) within a group of people, meaning that it derives from observing the actions of others which can cause an adjustment in behaviors and views (Fabrigar & Norris, 2012).
other words, conformism encourages the change in thinking, feeling or acting in the light of group pressure, real or imaginary (Moghaddam, 1998; Bocchiario & Zamperini, 2012). Due to this, conformity relates more to mimetic and normative pressures.

Moreover, it is important to emphasize that the use of the institutional isomorphism as a theoretical framework at the micro-level follows from the same practice and application found within behavioral public administration (Grimmelikhuijsen et al., 2016, 2017; Olsen, 2015). Most public management and other social science disciplines’ theories describe the macro and or meso levels; however, they tend to rely on individuals’ views, feelings, behaviors and beliefs (Grimmelikhuijsen et al., 2016). It is thus of interest to analyze these micro-foundations. Institutional isomorphism looks at organizational behavior in light of uncertainty and a search for legitimacy (DiMaggio & Powell, 1983, 1991). The latter, namely behavior, uncertainty and legitimacy are aspects that are found at the micro-level as well, yet the most relevant one at the micro level is behavior. Organizations are composed of individuals and as such their behavior can be seemingly said to be linked to individual behavior. Since behavior is not an exclusive trait of organizations, applying or analyzing a theoretical concept that analyzes behavior at the micro-level should be possible, just as public administration has demonstrated. Additionally, there is an ongoing trend of linking and building approaches from the micro, meso and macro levels (Watson, 2017; Christensen et al., 2012; Hitt et al., 2007).

The following will build upon institutional isomorphism, and will present the seeming relationships between the pressures and behavioral intentions. The micro-explanation that provides understanding into why individuals would be likely to respond to the pressure(s) will be given.
INSTITUTIONAL ISOMORPHISM

Institutional isomorphism is a concept within New Institutional Theory (DiMaggio & Powell, 1991; Scott, 2008), and is interesting for the purposes of this research due to its focus on behavior, change and adaptation. New institutional theory states that organizations adapt from within in order to conform to the expectations of the prime actors in their environment (Ashworth et al., 2009; DiMaggio & Powell, 1991). In turn, institutional isomorphism stems from three type of institutional pressures: coercive (often alluding to formal and informal rules and regulations), mimetic (behavior that is modelled on the behavior of other organizations in the institutional environment), and normative (through formal education and professionalization) pressures (Powell & DiMaggio, 1991; George and Desmidt, 2014, Decramer et al., 2012). Organizations will thus become more homogenized as they strive for legitimacy within the context of uncertainty (Decramer et al., 2012; DiMaggio and Powell, 1991; Greenwood and Hinings, 1996; Meyer and Rowan, 1997).

BEHAVIORAL INTENTIONS

Behavioral intention and actual behavior are highly correlated (Ajzen & Fishbein, 1980), due to the fact that “intention is the immediate determinant of behavior, and when an appropriate measure of intention is obtained, it will provide the most accurate prediction of behavior” (p. 41). Due to this, and for the lack of studies directly linking behavioral intentions to institutional isomorphism, studies that have employed this theoretical concept to look at behavior in relation to institutional isomorphism within different fields of study will be looked at. From this relationship between institutional isomorphism and behavior, adoption intention, intentions, or the analysis of a variable that relates to behavioral intentions, the formulated hypothesis per pressure will be introduced. When applying the theoretical underpinning of institutional isomorphism to students’ behavioral intention regarding consumption of animal agriculture products, it can be expected that students will opt for reducing or ceasing with their consumption of those specific products.
Coercive pressures and behavioral intentions

Coercive isomorphism describes the process whereby organizations within a given institutional environment homogenize with one another in light of uncertainty keeping in mind that their final aim is that of achieving legitimacy (DiMaggio & Powell, 1983, 1991). The pressures tend to be exerted by government, regulatory or other agencies who aim at constraining organizational variety (Ashworth et al., 2009). Coercive pressures have been studied within the context of different fields of study. For instance, they have been studied within performance measurement in the area of public administration by Boyne et al. (2002). Boyne et al. (2002) found out that the Best Value legislative initiative in the UK coerced public organizations to formulate and implement performance information, as well as to report back on it to the central authority and achieve the desired performance standards. Moreover, a study conducted by Liu et al., (2010) within the field of operations management, found that coercive pressures are positively associated with firms’ Internet-enable Supply Chain Management systems (eSCM) adoption intention.

Furthermore, a study by Marshall et al., (2005) sought to investigate what the individual and institutional drivers of proactive environmental behavior within the context of the wine industry were. They found that managerial characteristics associated with regulatory issues including meeting existing regulations and avoiding future regulations (coercive pressure) is a highly relevant driver of proactive environmental behavior (among several other drivers).

Additionally, a study by Kim and Stanton (2012) showed that coercive pressures, as well as mimetic and normative pressures, had a significant influence on Science, Technology, Engineering, and Mathematics (STEM) fields researchers’ data sharing practices.

Teo, Wei and Benbasat (2003) also found that coercive, as well as the two other pressures, had a significant influence on organizational intention to adopt financial electronic data interchange (FEDI) which serve thus as predictors of adoption intention for interorganizational linkages.
In this research, the use of coercive pressures falls in line with the previous studies and the theoretical concept of isomorphism. Coercive isomorphism will be adapted for the purpose of this thesis; organizations will cease to be the focal actors, and will instead be replaced by individuals – specifically students of Erasmus University Rotterdam, Utrecht University and Ghent University. Looking at students in their environment will still fall in line with the definition and explanation of coercive pressures.

Based on the studies that have found evidence for a positive influence of coercive pressures on the respective measures of behavior, which further support the claims by the theoretical concept of institutional isomorphism by DiMaggio and Powell (1991), it can be seemingly expected that the coercive pressure presented in this research’s survey experiment will likewise have a positive influence on the students’ behavioral intention to reduce or cease with their consumption of animal agriculture products. This thus results in the following hypotheses:

**H1**: Coercive pressures have a positive influence on students’ behavioral intention to reduce their consumption of animal agriculture products

**H2**: Coercive pressures have a positive influence on students’ behavioral intention to cease with their consumption of animal agriculture products

**Micro-level explanation**

Compliance to coercive pressures is defined by Oliver (1991) as a conscious obedience to the incorporation of values, norms, or institutional requirements. Usually this is the case due to the position of those who have to comply and the authority establishing the compliance: the person having to comply does so because he or she might have less or little influence on the agenda (Tengland, 2012). As coercive pressures tend to originate from government or other regulatory agencies, the latter have been described as being paternalistic (Bayer et al., 2007), as it requires individuals to do something for their own good. Individuals are thus left in a weak position in relation to the position of the authority (Tengland, 2012). It has also been stated that individuals comply to these pressures because they simply accept them (also in light of their aforementioned position) (Tengland, 2012).
Mimetic pressures and behavioral intentions

Mimetic pressures describe the process of homogenization occurring through organizations modeling themselves on other organizations within the same institutional environment (DiMaggio and Powell, 1991). Mimetic forces encompass the emulation of specific activities, systems, or structures - including innovations, which are perceived as enhancements of legitimacy (Ashworth et al., 2009). Applied to students’ behavioral intention we can seemingly expect the latter to be positively influenced by the mimetic pressure that is presented in the vignette in the survey-experiment of this research. Just as coercive pressures, mimetic pressures have been incorporated into a wide array of studies which have tried to analyze its influence. For instance, several public sector studies in the public administration field have found that public organizations are influenced by the behavior of their counter agencies when it comes to choosing to adopt specific performance management processes (Berry, 1994; Berry & Wechsler, 1995; Ashworth, Boyne & Delbridge, 2009). Moreover, Villadsen (2011), when examining the structural embeddedness of political executives as an antecedent of policy isomorphism in Danish municipalities, found that the social network of political executives (mimetic pressure) was positively associated with municipal policy isomorphism. Furthermore, within the field of information systems studies, Tingling and Parent (2002) studied whether mimetic isomorphism as peer influences to the process of evaluating technologies would positively influence managers’ choice of technology, and found that it did: namely the technology that would be chosen was the one that the competitors had selected as well.

As organizations will be replaced by individuals, the potential influence of mimetic isomorphism is of particular interest. It can be applied to the social context of students specifically, or generally to their normal environment. Based on the studies that have found evidence for a positive influence of mimetic pressures on the respective measures of behavior, which further support the claims by the theoretical concept of institutional isomorphism by DiMaggio and Powell (1991), it can be seemingly expected that the mimetic pressure presented in this research’s survey experiment will likewise have a positive influence on the students’ behavioral intention to reduce or cease with their consumption of animal agriculture products. This thus results in the following hypotheses:
Micro-level explanation

At the individual behavioral level, this mimicry is mostly characterized by behavior matching of postures, facial expressions, vocal characteristics, and mannerisms (Chartrand & Bargh, 1999; Cialdini & Goldstein, 2004). Conformity to behavioral mimicry is attributed to and dependent on the individual’s (often unconscious) affinity to the person who he or she is mimicking, meaning that it is linked to building and promoting social relationships to a great extent (Chartrand & Bargh, 1999; Cialdini & Goldstein, 2004). Additionally, conforming can also take on a more conscious shape, due to individuals wanting to gain the social approval of others, to contribute to the rewarding factor of their relationships, and to also enhance their self-esteem (Cialdini & Goldstein, 2004). Moreover, social learning theory (Akers, 1977; Bandura, 1977) narrows in on how behaviors are learned through observation which then leads to the modeling of the given behavior (Kobus, 2003). Moreover, primary socialization theory (Oetting & Donnermeyer, 1998; Oetting et al., 1998) assumes that norms and behaviors are learned in the social contexts of family, school are peers/friends, of which parents and peers are primary social factors (Kobus, 2003). Moreover, this theory alludes to the relationship channels between the individual and his family, peers and professional contexts through which information about norms and behaviors is transmitted (Kobus, 2003). This thus translates into the individual adopting the norms and behaviors that are central to the group’s social identity (Kobus, 2003). Social network theory (Leinhardt, 1977; Knoke & Kuklinski, 1982) also emphasizes how individuals serve as each other’s reference points within a social system, influencing one another’s decision-making processes (Kobus, 2003).

All in all, despite not directly, personally, or publicly experiencing disapproval of others, individuals will conform to achieve their aims to secure a sense of belonging and increase their self-esteem (Cialdini & Goldstein, 2004).
Normative pressures stem from professionalization in terms of professional standards and professional communities (DiMaggio and Powell, 1983; Ashworth et al., 2009). It mostly concerns the professional standards that organizations should adhere to and uphold, as well as the techniques that are considered as being legitimate by professional bodies (Ashworth et al., 2009). Studies have incorporated normative pressures into their studies, such as the one by Blair and Janousek (2014) when looking at professional organizations within the public sector that group a set of public organizations or public-sector professions which in turn impact their members’ behavior and activities. Moreover, the same study by Liu et al., (2015) that found that coercive pressures are positively associated with firms’ Internet-enable Supply Chain Management systems (eSCM) adoption intention, found the same for normative pressures; and so did the study by Marshall et al., (2005) on the drivers of proactive environmental behavior within the context of the wine industry. Additionally, Teodoro (2014) assessed the effects of normative isomorphism on executive management in public agencies, and found that professionalism (normative pressure) influences public executive management which in turn homogenizes their behavior.

Likewise to the previous two types of isomorphism, organizations will be replaced by individuals. Normative isomorphism is interesting as it proposes that individuals, or professionals, are shaped by their education and professional environment and subsequently resemble one another in this sense. The type of education, professionalization, and the professional context students are exposed to could be quite indicative for the purpose of this research. Based on the studies that have found evidence for a positive influence of normative pressures on the respective measures of behavior, which further support the claims by the theoretical concept of institutional isomorphism by DiMaggio and Powell (1991), it can be seemingly expected that the normative pressure presented in this research’s survey experiment will likewise have a positive influence on the students’ behavioral intention to reduce or cease
with their consumption of animal agriculture products. This thus results in the following hypotheses:

**H5: Normative pressures have a positive influence on students’ behavioral intention to reduce their consumption of animal agriculture products**

**H6: Normative pressures have a positive influence on students’ behavioral intention to cease with their consumption of animal agriculture products**

**Micro-level explanation**

The understanding of normative pressures falls in parallel with what a social norm is understood as, namely as an accepted way of thinking, feeling or acting that is considered right within a particular community or group (Bocchiario & Zamperini, 2012; Turner, 1991). According to Bocchiario & Zamperini (2012), this shapes what is correct and appropriate to do as well as the perception of reality. Normative conformity usually takes place due to the goal of wanting to obtain social approval from others within a given social context or group (Cialdini & Goldstein, 2004), and/or for example from the individual to whom another individual is answerable (Quinn & Schlenker, 2002). Moreover, individuals may want to fit in by conforming with the accepted practices and beliefs that are set forth by the majority. An interesting point to keep in mind is the social experiment performed by Asch (1956), which offered insight into how in light of uncertainty and group pressures, individuals conform to what the majority of the group says or believes, even if this might be flawed.

**A combination of pressures and behavioral intentions**

However, DiMaggio and Powell (1991) stated that perhaps the best effect might be found through the intermingling of pressures. This research has thus incorporated all three pressures under one variable itself, namely that of a combination of pressures. The study by Teo, Wei and Benbasat (2003) found that all three pressures had a significant influence on organizational intention to adopt financial electronic data interchange (FEDI) which serve thus as predictors of adoption intention for interorganizational linkages. Similarly, Kim and Stanton (2012)
showed that the three pressures had a significant influence on Science, Technology, Engineering, and Mathematics (STEM) fields researchers’ data sharing practices. Additionally, Polillo and Guillén (2005) examined the impact of globalization on the state and how the latter is thus subject to the three isomorphic pressures, and results indicated that all pressures explained the adoption of central bank independence.

Therefore, in light of this, and based on the studies that have found evidence for a positive influence of a combination of pressures on the respective measures of behavior, which further support the claims by the theoretical concept of institutional isomorphism by DiMaggio and Powell (1991), it can be seemingly expected that a combination of all three pressures presented in this research’s survey experiment will likewise have a positive influence on the students’ behavioral intention to reduce or cease with their consumption of animal agriculture products. This thus results in the following hypotheses:

**H7: A COMBINATION OF COERCIVE, MIMETIC AND NORMATIVE PRESSURES HAS THE STRONGEST INFLUENCE ON STUDENTS’ BEHAVIORAL INTENTION TO REDUCE THEIR CONSUMPTION OF ANIMAL AGRICULTURE PRODUCTS**

**H8: A COMBINATION OF COERCIVE, MIMETIC AND NORMATIVE PRESSURES HAS THE STRONGEST INFLUENCE ON STUDENTS’ BEHAVIORAL INTENTION TO CEASE WITH THEIR CONSUMPTION OF ANIMAL AGRICULTURE PRODUCTS**
CONCEPTUAL MODEL

Coercive pressures

Mimetic pressures

Normative pressures

Behavioral intention
- **cease with** consumption of animal agriculture products

Behavioral intention
- **reduce** consumption of animal agriculture products

Combination
The following section will present the most important part of this entire research, namely its design and the methodology that was followed. The research method, units of analysis, the randomization procedure, the data collection procedure, the independent and dependent variables, the survey design, descriptive statistics, and reliability and validity will be thoroughly explained. The following questions will be answered in this chapter:

4. What shape do isomorphic pressures take concerning the consumption of animal agriculture products?
5. What are behavioral intentions concerning the consumption of animal agriculture products?

1. **Research Method**

The aim of this research is to analyze the influence isomorphic pressures might have on students’ behavioral intentions to reduce, or fully cease with, their consumption of animal agriculture products. In other words: do coercive, mimetic, normative, or a combination of all three pressures, have a positive influence on students’ behavioral intentions to reduce or cease with their consumption of meat, poultry, fish, milk, cheese, yoghurt, eggs, all remaining products derived from animals? In order to assess the influence these pressures might have, this thesis has made use of an experimental design. More specifically, a survey experiment has been designed and carried out with students from three universities in Flanders and the Netherlands. Survey experiments allow to assess the impact of specific vignettes on dependent variables such as intentions, attitudes and behaviors (Aguinis & Bradley, 2014). The latter is a main reason for employing this design, as the dependent variable of this research focuses on behavioral intentions.
A survey experiment combines the best of both a survey and an experiment. Surveys possess the following characteristics that make them an attractive research design choice: generalizability, or in other words external validity. What makes this type of design so interesting is the fact that the characteristics of both surveys and experiments merge, allowing survey experiments to be equipped with generalizability, valid causal inference, and external and internal validity (Aguinis & Bradley, 2014). Aguinis and Bradley (2014), outline the best practices for designing and implementing experimental vignette methodology (EVM) studies. This methodology has been employed by scholars such as George, Desmidt, Nielsen & Baekgaard (2016), Nielsen and Baekgaard (2015), Charbonneau and Van Ryzin (2013), Riccucci, Van Ryzin, and Lavena (2014), and Van Ryzin, Riccucci, and Li (2016), who conducted survey experiments. Usually when looking at causal relationships, experiments create two dilemmas: prioritize internal validity over external validity, or maximize external validity but have difficulties establishing a causal relationship (Aguinis & Bradley, 2014). However, survey experiments offer a method to address these dilemmas. It presents respondents with specific scenarios to assess intentions, attitudes and behaviors, which in essence allows for the natural context to remain intact and for the independent variable(s) to be manipulated. Thus, internal and external validity are enhanced (Aguinis & Bradley, 2014).

A survey experiment makes use of randomization of subjects into (a) treatment group(s) and a control group.

A survey-experiment is beneficial whenever the independent variables need to be manipulated in such a way to depict a causal relationship, especially when a correlation between variables is hypothesized (Aguinis & Bradley, 2014). Moreover, as George et al. (2016) point out in their research, making use of a survey experiment counteracts the possible common method bias (i.e. issues related to cross-sectional, non-randomized surveys to measure independent and dependent variables). Moreover, this research design allows for the focus to be at the individual level (George et al., 2016; Margetts, 2011), which is likewise a key aspect and component of this research.

2. Units of Analysis

The group of respondents that has been analyzed by this research are students from three universities: Erasmus University Rotterdam (the Netherlands), Utrecht University (the
Netherlands), and Ghent University (Belgium), respectively. Including students from a non-Dutch university came with the added value of an international element, thus strengthening the findings and implications of this thesis.

Moreover, as the level of homogeneity between and within the respondents should be as high as possible, only students that were following certain studies qualified as respondents. The studies that served as criteria were those that fell under Administration, thus Public Administration and Business Administration, at both Bachelor and Master levels of study. Table 1 presents the specific groups per university that were targeted and included in this research.

<table>
<thead>
<tr>
<th></th>
<th>Erasmus University Rotterdam</th>
<th>Utrecht University</th>
<th>Ghent University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor students</td>
<td>3,896</td>
<td>270</td>
<td>537</td>
</tr>
<tr>
<td>Master students</td>
<td>420</td>
<td>203</td>
<td>537</td>
</tr>
</tbody>
</table>

### 3. RANDOMIZATION

In order to adhere to the good methodological practices when carrying out a survey experiment, randomization had to be sought regarding the provision of information per type of treatment. Thus, to guarantee that respondents were randomly and automatically assigned to either a control group or one of four treatment groups, a software package for survey research known as Qualtrics was used. An online randomized and even sample of respondents was able to be obtained by employing this software. Qualtrics automatically randomized the order in which control and treatments were allocated to respondents. This guarantees that an equal number of respondents will have been exposed to the control and treatment vignettes.

Each treatment group varied in terms of vignette content, the latter matching the context of the respective institutional pressure or combination of pressures. The information that all groups – treatment and control – received was identical and what varied were the added vignettes. An illustration of the survey design is presented in Figure 1.
**Figure 1: Survey Design**

<table>
<thead>
<tr>
<th>Group</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>Only general information on the relationship between climate change and animal agriculture.</td>
</tr>
<tr>
<td>T1: coercive pressure</td>
<td>General information on the relationship between climate change and animal agriculture + first vignette (V1).</td>
</tr>
<tr>
<td>T2: mimetic pressure</td>
<td>General information on the relationship between climate change and animal agriculture + second vignette (V2).</td>
</tr>
<tr>
<td>T3: normative pressure</td>
<td>General information on the relationship between climate change and animal agriculture + third vignette (V3).</td>
</tr>
<tr>
<td>T4: all pressures</td>
<td>General information on the relationship between climate change and animal agriculture + fourth vignette (V4).</td>
</tr>
</tbody>
</table>

Questions on likelihood (behavioral intention) of reducing (Q1) or ceasing with (Q2) overall consumption of animal agriculture products.
4. **Data Collection**

The survey experiment was either sent or posted on social media (specific Facebook groups) to a total of 5863 students, of which 4316 pertained to Erasmus, 473 to Utrecht and 1074 to Ghent. However, before the final version of the survey was sent, a pilot test was run on the survey in which about ten respondents participated. After making sure that no errors were being generated, the survey was finalized and sent to the targeted population (the pilot participants were excluded from the final survey).

In order to guarantee the most amount of responses within the three-week data collection timeframe, the survey experiment was combined with a fellow student’s survey experiment, so that both surveys would be presented and filled out as a two-in-one survey. The first research was set in the field of public management, more specifically in the area of New Public Management. It aimed at measuring the performance information of a hospital and its subsequent effect on citizen trust. In this manner, all – or most – of the students that responded to the other survey experiment also responded to this research’ survey experiment, and vice versa. Due to the different nature and topics of this and the other research, it was not expected for the first research to influence the type of responses of respondents to the questions of this research.

There were a total of two sections in the survey, the first corresponding to the other survey experiment, and the second corresponding to this research’s survey experiment. The survey experiments were structured into sections in order to create both psychological and thematic separations. Combined thus under one link, an e-mail in both English and Dutch was sent to all selected potential respondents, or it was posted in the respective Facebook groups. The survey was sent in the beginning of May 2017, and a reminder was sent throughout the three-week data collection period.

Of the 5863 students to whom the survey was sent, a total of 419 students fully responded to and completed the survey experiment. Of the 419 students, 163 were from Erasmus (38.9%), 143 from Utrecht (34.1%), 102 from Ghent (24.3%), and 11 from another city (2.6%) (an overall response rate of 6.9 – 7% based on the 5863 students). This established a final sample
size $n$ of 419. Specifically, there were a total of 87 students in the control group; 82 in the first treatment group (coercive); 84 in the second treatment group (mimetic); 83 in the third treatment group (normative); and 83 in the fourth treatment group (combination).

After the data was collected, and the experiment run, the statistical power was calculated. Usually this is done before the collection of data, but it can also be done post-hoc (Field, 2013). Usually, a desired power score is 0.8 or higher, meaning that the sample size used for the experiment was large enough (Field, 2013). Having used SPSS to calculate the post-hoc power of the analysis run in this research, score of 0.810 (computed using alpha = 0.05) for the first regression analyzing the likelihood for students to reduce their consumption. A score of 0.549 was obtained for the second regression analyzing the likelihood for students to cease with their consumption. The sample size thus seems to be large enough for the first dependent variable (reduce) but not large enough for the second (cease with).

5. **INDEPENDENT VARIABLES**

The three institutional pressures are categorized as independent variables in this research, as their influence on behavioral intentions has been measured. Originally, institutional or isomorphic pressures are applied to the field of organizational theory; due to this, the type of environment has been modified to that of the societal and individual context. Thus, instead of applying these pressures to organizations homogenizing between each other, it has been applied to the individual level as represented by students reducing or ceasing with their consumption of animal agriculture products in a potentially homogenous manner.

In order to operationalize the independent variables, a vignette was created for each of the three pressures, selecting the best adapted representation for each. As survey experiments are often criticized for their lack of realism (Aguinis and Bradley, 2014; Margetts, 2011), the designed survey experiment counteracted such disadvantage by adding common elements in the vignettes that respondents were familiar with in their daily lives. For the coercive pressure vignette this was their national government and a common demand from governments in general: a tax – in this case a tax, such as the one on cigarettes, on all animal agriculture products. For the mimetic pressure, the vignette included a reference to the respondents’ families and friends. Finally, for the normative pressure, the contextual setting was that of their
university – so either Erasmus -, Utrecht -, or Ghent University. Moreover, the general information on the relationship between climate change and animal agriculture that all respondents received prior to being exposed to the questions, is real and well-documented information. Consequently, it can be safely assumed that including these highly relevant aspects to the survey experiment in general, and to the vignettes specifically, sought for a high degree of realism. Below are the respective experimental vignettes per group.

5.1 Control Group

In a widely-cited report published in 2006, the United Nations directly links animal agriculture to climate change. According to research reducing our consumption of animal agriculture products (meat, poultry, fish, milk, cheese, yoghurt, eggs, all products derived from animals) would have a highly positive impact on our environment. Doing this is thus a major part of the solution for tackling climate change.

5.2 Treatment 1 Group (Coercive)

In a widely-cited report published in 2006, the United Nations directly links animal agriculture to climate change. According to research reducing our consumption of animal agriculture products (meat, poultry, fish, milk, cheese, yoghurt, eggs, all products derived from animals) would have a highly positive impact on our environment. Doing this is thus a major part of the solution for tackling climate change.

V1: Imagine that your national government wishes to do something to combat climate change by addressing the animal agriculture industry’s negative effects. The government thus decides to place a tax (such as is done with cigarettes) on products such as meat, fish, poultry, dairy products, eggs, other products deriving from animals.
5.3 Treatment 2 Group (Mimetic)

In a widely-cited report published in 2006, the United Nations directly links animal agriculture to climate change. According to research reducing our consumption of animal agriculture products (meat, poultry, fish, milk, cheese, yoghurt, eggs, all products derived from animals) would have a highly positive impact on our environment. Doing this is thus a major part of the solution for tackling climate change.

V2: Imagine that your friends and family wish to do something to combat climate change by addressing the animal agriculture industry’s negative effects. They decide to do this through their food choices by reducing their consumption of animal agriculture products such as meat, fish, poultry, dairy products, egg, other products deriving from animals.

5.4 Treatment 3 Group (Normative)

In a widely-cited report published in 2006, the United Nations directly links animal agriculture to climate change. According to research reducing our consumption of animal agriculture products (meat, poultry, fish, milk, cheese, yoghurt, eggs, all products derived from animals) would have a highly positive impact on our environment. Doing this is thus a major part of the solution for tackling climate change.

V3: Imagine that your university wishes to do something to combat climate change by addressing the animal agriculture industry’s negative effects. The university decides to do this by reducing the provision of animal agriculture products (such as meat, fish, poultry, dairy products, eggs, other products deriving from animals) in the university’s restaurants and replacing it with many alternatives.
In a widely-cited report published in 2006, the United Nations directly links animal agriculture to climate change. According to research reducing our consumption of animal agriculture products (meat, poultry, fish, milk, cheese, yoghurt, eggs, all products derived from animals) would have a highly positive impact on our environment. Doing this is thus a major part of the solution for tackling climate change.

V4: Imagine that:
- your national government wishes to do something to combat climate change by addressing the animal agriculture industry’s negative effects. The government thus decides to place a tax (such as is done with cigarettes) on products such as meat, fish, poultry, dairy products, eggs, other products deriving from animals;
- your friends and family wish to do something to combat climate change by addressing the animal agriculture industry’s negative effects. They decide to do this through their food choices by reducing their consumption of animal agriculture products such as meat, fish, poultry, dairy products, egg, other products deriving from animals; and
- your university wishes to do something to combat climate change by addressing the animal agriculture industry’s negative effects. The university decides to do this by reducing the provision of animal agriculture products (such as meat, fish, poultry, dairy products, eggs, other products deriving from animals) in the university’s restaurants and replacing it with many alternatives.

6. **Dependent Variable**

The operationalization of the dependent variable was as follows: after being presented to the vignette if in a treatment group or general information if in the control group, the respondents were asked to answer:
- (Q1) In the above-mentioned scenario, how likely would you be to **reduce** your consumption of animal agriculture products? and
- (Q2) In the above-mentioned case, how likely would you be to **stop with** your consumption of animal agriculture products?

The respondents were subsequently given the choice to mark their likelihood in terms of a 1 to 10 scale, where 1 was not likely at all and 10 was extremely likely. The behavioral intentions of respondents to reduce, or stop with, their consumption of animal agriculture products was indicated by their degree of likelihood to do so as measured on the given scale. *Table 2* presents the descriptive statistics of this study.
### Table 2: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>REVERSE</th>
<th>STOP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Min.</td>
</tr>
<tr>
<td>Treatment 1 (coercive)</td>
<td>Control</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>T1</td>
<td>6</td>
</tr>
<tr>
<td>Treatment 2 (mimetic)</td>
<td>control</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>6</td>
</tr>
<tr>
<td>Treatment 3 (normative)</td>
<td>control</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>T3</td>
<td>6</td>
</tr>
<tr>
<td>Treatment 4 (combination)</td>
<td>control</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>T4</td>
<td>7</td>
</tr>
</tbody>
</table>

### STOP, DIET, STUDY

<table>
<thead>
<tr>
<th></th>
<th>Total N</th>
<th>STOP</th>
<th>DIET</th>
<th>STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Count</td>
<td>Count</td>
<td>Count</td>
</tr>
<tr>
<td>Treatment 1 (coercive) Control</td>
<td>337</td>
<td>272</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>T1</td>
<td>82</td>
<td>64</td>
<td>10</td>
</tr>
<tr>
<td>Treatment 2 (mimetic) control</td>
<td>335</td>
<td>268</td>
<td>29</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>84</td>
<td>68</td>
<td>6</td>
</tr>
<tr>
<td>Treatment 3 (normative) control</td>
<td>336</td>
<td>268</td>
<td>29</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>T3</td>
<td>83</td>
<td>68</td>
<td>6</td>
</tr>
<tr>
<td>Treatment 4 (combination) control</td>
<td>336</td>
<td>273</td>
<td>27</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>T4</td>
<td>83</td>
<td>63</td>
<td>8</td>
</tr>
</tbody>
</table>

### STUDY, GENDER

<table>
<thead>
<tr>
<th></th>
<th>Total N</th>
<th>STUDY</th>
<th>GENDER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male Count</td>
<td>Female Count</td>
<td>Other Count</td>
</tr>
<tr>
<td>Treatment 1 (coercive) Control</td>
<td>337</td>
<td>147</td>
<td>189</td>
</tr>
<tr>
<td></td>
<td>T1</td>
<td>82</td>
<td>35</td>
</tr>
<tr>
<td>Treatment 2 (mimetic) control</td>
<td>335</td>
<td>143</td>
<td>192</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>84</td>
<td>39</td>
</tr>
<tr>
<td>Treatment 3 (normative) control</td>
<td>336</td>
<td>153</td>
<td>182</td>
</tr>
<tr>
<td></td>
<td>T3</td>
<td>83</td>
<td>29</td>
</tr>
<tr>
<td>Treatment 4 (combination) control</td>
<td>336</td>
<td>137</td>
<td>198</td>
</tr>
<tr>
<td></td>
<td>T4</td>
<td>83</td>
<td>45</td>
</tr>
</tbody>
</table>
As can be observed on the descriptives table above, the randomization procedure between the control and treatment groups was evenly carried out. Moreover, a higher mean score is produced by the first question – which asked for the respondents’ likelihood to reduce their animal agriculture products consumption – as opposed to the second question, which asked respondents about ceasing with said consumption. It can thus be stated that on average, people are more likely to reduce their consumption of animal agriculture products than to fully cease with said consumption.

7. **Validity**

Due to the research design of this study, namely to its ability to enhance experimental realism due to how it presents respondents with well-constructed and realistic scenarios through the use of vignettes, and to how it allows for the control and manipulation of the independent variables, internal and external validity are simultaneously enhanced (Aguinis & Bradley, 2014).

Concerning internal validity, which concerns itself with a causal relationship, the main way this research has sought for this type of validity is through firstly, the use of a control group; secondly, randomly assigning the control and treatment groups to the respondents; thirdly, homogeneity was sought for between the respondents by only targeting respondents who did either Public Administration or Business Administration studies.

Specifically regarding external validity, which concerns itself with the generalizability of the study and its results, this thesis has sought for said validity in multiple ways. Firstly, a sufficiently large sample size was obtained following a randomized procedure; secondly, students from three well-established and populous universities were targeted; thirdly, the respondents belonged to both university-study levels, namely bachelor and master; additionally, the number of respondents per university exceeded 100; moreover, one of the three universities is located in a distinct country, not in the Netherlands thus but in Belgium; and finally, the formulation of the vignettes have attempted to provide a high degree of realism.

8. **Reliability**

This research sought for reliability by firstly, carrying out a pilot test of the survey. Mostly however, reliability is enhanced by the design of this research, specifically by the construct of
the survey and its brevity.

9. **Method**

The chosen statistical analysis that was carried out was that of a linear regression: one per question measuring behavioral intentions -, thus two regressions in total. The statistical software Package of SPSS was employed in order to run the regressions and analyze the data.
CHAPTER IV: ANALYSIS AND RESULTS

The following section will elaborate on the statistical analyses, namely two linear regressions analyses, that were carried out on the data obtained from the survey experiment. This allowed for either the rejection or acceptance of the formulated hypotheses. The analyses provide understanding on the influence of the independent variables (isomorphic pressures) on the dependent variable (behavioral intention). The following question will be answered in this chapter:

6. Is the theoretical relation between isomorphic pressures and behavioral intentions confirmed in the specific case of students’ overall consumption of animal agriculture products?

1. BALANCE CHECK

Before running the data through a statistical analysis, a balance check was performed. To do so, independent t-tests were carried out to analyze possible differences between the control and treatment groups regarding age, gender, type of study followed, city, and type of diet. Despite the randomization procedure, the balance test indicates that there are significant differences in dietary preference, gender and field of study throughout the control and treatment groups. Hence, it was necessary to add these variables as controls in the regression analyses (Nielsen & Baekgaard, 2015). The remaining variables of age, gender and city were all well balanced between the groups (i.e. no significant differences were found) and it was thus not necessary to include them as controls.
### 2. Linear Regression Analyses

The first regression analysis that was run analyzed students’ behavioral intention to reduce their consumption of animal agriculture products when presented with the respective treatments in the vignettes. Hypothesis 1, 3, 5 and 7 were tested in this regression.

The first regression produced the following results which are presented in Table 3. As can be seen, the coercive pressure of the government deciding to implement a tax on animal agriculture products (such as meat, fish, poultry, dairy products, eggs, other products deriving from animals) does not have a significant influence on students’ behavioral intention to reduce their consumption of said products. Neither does the normative pressure of the relevant university deciding to reduce the provision of animal agriculture products (such as meat, fish, poultry, dairy products, eggs, other products deriving from animals) in the university’s restaurants and replacing it with many alternatives. However, the mimetic pressure of friends and family reducing their consumption of said products does have a significant influence on students’ behavioral intention to reduce their own consumption. The combination of all pressures also has a positive influence on students’ behavioral intention and produces a stronger influence than that of the mimetic treatment. The control variables of diet, gender and field of study also yielded significant results on students’ behavioral intention.

The second regression analysis that was run analyzed students’ behavioral intention to cease their consumption of animal agriculture products when presented with the respective treatments in the vignettes. Hypotheses 2, 4, 6 and 8 were tested in this regression.

The second regression produced the following results which are presented in Table 3. As can be seen, the overall influence of the treatments on the behavioral intention of students to stop with said consumption is weaker than the one on the behavioral intention to reduce it. Indeed, the mimetic treatment has lost its significance impact. However, the combination treatment remains significant, although at a slightly lower level than in the first regression, and the diet and gender control variables also remain significant.
Table 3: Effect of coercive, mimetic, normative pressures and a combination of all three on students’ behavioral intention to a) reduce and b) stop their consumption of animal agriculture products

<table>
<thead>
<tr>
<th></th>
<th>REDUCE Unstandardized Coefficients</th>
<th>STOP Unstandardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>5.904***</td>
<td>.265</td>
</tr>
<tr>
<td>Coercive treatment</td>
<td>.159</td>
<td>.337</td>
</tr>
<tr>
<td>Mimetic treatment</td>
<td>.579*</td>
<td>.335</td>
</tr>
<tr>
<td>Normative treatment</td>
<td>.000</td>
<td>.335</td>
</tr>
<tr>
<td>Combination treatment</td>
<td>1.182**</td>
<td>.338</td>
</tr>
<tr>
<td>DIET=Vegetarian</td>
<td>2.457***</td>
<td>.402</td>
</tr>
<tr>
<td>DIET=Other</td>
<td>1.775***</td>
<td>.347</td>
</tr>
<tr>
<td>Gender=Male</td>
<td>-1.209***</td>
<td>.223</td>
</tr>
<tr>
<td>Study=Business Administration</td>
<td>-.621*</td>
<td>.286</td>
</tr>
<tr>
<td>Study=Other</td>
<td>-.321</td>
<td>0.319</td>
</tr>
</tbody>
</table>

Note: * p < .10, * p < .05, ** p < .01, *** p < .001

Diet Reference Category: Meat-eater
Gender Reference Category: Female
Study Reference Category: Public Administration
**H1:** Coercive pressures have a positive influence on students’ behavioral intention to reduce their consumption of animal agriculture products

Based on the above-mentioned results, H1 is rejected. Coercive pressures do not have a positive influence on students’ behavioral intention to reduce their consumption of animal agriculture products, as the coercive treatment within the regression is not significant.

**H2:** Coercive pressures have a positive influence on students’ behavioral intention to cease with their consumption of animal agriculture products

Based on the above-mentioned results, H2 is rejected. Coercive pressures do not have a positive influence on students’ behavioral intention to cease with their consumption of animal agriculture products, as the coercive treatment within the regression is not significant.

**H3:** Mimetic pressures have a positive influence on students’ behavioral intention to reduce their consumption of animal agriculture products

Based on the above-mentioned results, H3 is accepted. Mimetic pressures do have a positive influence on students’ behavioral intention to reduce their consumption of animal agriculture products, as the mimetic treatment within the regression is weakly significant.

**H4:** Mimetic pressures have a positive influence on students’ behavioral intention to cease with their consumption of animal agriculture products

Based on the above-mentioned results, H4 is rejected. Mimetic pressures do not have a positive influence on students’ behavioral intention to cease with their consumption of animal agriculture products, as the mimetic treatment within the regression is not significant.

**H5:** Normative pressures have a positive influence on students’ behavioral intention to reduce their consumption of animal agriculture products

Based on the above-mentioned results, H5 is rejected. Normative pressures do not have a positive influence on students’ behavioral intention to reduce their consumption of animal agriculture products, as the normative treatment within the regression is not significant.
**H6: Normative pressures have a positive influence on students’ behavioral intention to cease with their consumption of animal agriculture products**

Based on the above-mentioned results, H6 is rejected. Normative pressures do not have a positive influence on students’ behavioral intention to cease with their consumption of animal agriculture products, as the normative treatment within the regression is not significant.

**H7: A combination of coercive, mimetic and normative pressures has the strongest influence on students’ behavioral intention to reduce their consumption of animal agriculture products**

Based on the above-mentioned results, H7 is accepted. A combination of coercive, mimetic and normative pressures does have the strongest influence on students’ behavioral intention to reduce their consumption of animal agriculture products, as the combination treatment within the regression shows the highest significant coefficient.

**H8: A combination of coercive, mimetic and normative pressures has the strongest influence on students’ behavioral intention to cease with their consumption of animal agriculture products**

Based on the above-mentioned results, H8 is accepted. A combination of coercive, mimetic and normative pressures does have the strongest influence on students’ behavioral intention to cease with their consumption of animal agriculture products, as the combination treatment within the regression shows the strongest significant coefficient.
CHAPTER V: DISCUSSION

This thesis sought to identify what could influence individuals’ behavior to reduce or cease with their consumption of animal agriculture products. A New Institutional Theory concept, namely that of institutional isomorphism (DiMaggio & Powell, 1991), was employed to define theory-based hypotheses to then test on students’ behavioral intentions to reduce or cease with their consumption of animal agriculture products. The following section will build upon what guided this thesis, how it was done, why it was done; the answer to the research question and to its overall aim; what the theoretical implications are; and finally what the practical implications are.

1. WHAT IS INCORPORATED INTO THIS THESIS?

The environmental and potential policy issue that inspired this research is the one centered around the damaging effects of the animal agriculture industry on our environment in terms of its significant contribution to climate change (Scarborough et al., 2013; Audsley et al., 2009; Thornton, Herrero & Ericksen, 2011 Shindell et al, 2009; United Nations Food Agriculture Organization, 2006; Oppenlander, 2013; Tilman & Clark, 2014; Solomon et al., 2008; Primentel et al, 2004; Chapagain & Hoekstra, 2003; Hoekstra & Wiedmann, 2014; Mekonnen & Hoekstra, 2012). Animal agriculture products (meat, poultry, fish, milk, cheese, yoghurt, eggs, all products derived from animals) are consumed by the majority of individuals on a frequent basis, implying thus that understanding what could influence individuals’ behavior to reduce or ideally cease with the consumption of these products is the first step into devising a comprehensive approach to this environmental issue. On the basis of scientific research (United Nations FAO, 2006; Goodland & Anhang, 2009; Oppenlander, 2013), changing this (consumption) behavior to one geared towards reducing or stopping with said consumption is stated to have a positive environmental impact.
1.1. **HOW DID THIS THESIS APPROACH THE CENTRAL POLICY ISSUE?**

Having the above-mentioned as a starting base, the animal agriculture industry / consumption behavior issue was linked to and analyzed through the lens of a concept of New Institutional Theory, namely that of institutional isomorphism (DiMaggio & Powell, 1983, 1991). The latter theoretical concept advanced explanations and findings presenting the influence that certain types of pressures can exert on organizations within a given institutional setting or environment. The concept provided this thesis with specific independent variables, namely those of coercive, mimetic, normative pressures and a combination of all three pressures. This was paired with the adaptability of the concept, which provided the opportunity for the latter to be applied to individuals (within a given setting, that of universities) instead of organizations. Moreover, the three pressures were also adaptable, as the theory does not specify on these apart from explaining how and from where they originate. This thus allowed for the pressures to be adapted to the purposes of this research with regards to the sampled population (students) and their context (their respective university in the Netherlands or in Belgium). What allowed for the pressures to be properly established and tested on students’ behavior to reduce or stop with the consumption of animal agriculture products was the measure of behavior. It was decided that the best way to measure and operationalize said behavior was to look at the behavioral intentions of individuals instead of their behavior, as behavioral intentions are strong indicators and predictors of actual behavior (Jang & Namkung, 2009; Ki & Hon, 2007; Perloff, 2003; Ajzen, 1991; Webb & Sheeran, 2006; Abraham, Sheeran, & Johnston, 1998; Austin & Vancouver, 1996; Conner & Norman, 1996; Eagly & Chaiken, 1993; Gollwitzer & Moskowitz, 1996; Maddux, 1999; Shim et al., 2001; Wagner et al., 2011).

Making use of vignettes within a survey experiment (following the best practices by Aguinis and Bradley (2014)), allowed for the different pressures to be conceptualized and categorized into treatment groups. The survey experiment was sent to more than a total of 5000 students from Erasmus University Rotterdam, Utrecht University and Ghent University which subsequently resulted in a total of 419 respondents. Sampling three different universities not only increased the generalizability factor but it also sought for the addition of an international characteristic to this research, making it all the more relevant. Two regression analyses were carried out on the collected data, yielding results that established i) a significant positive influence of mimetic pressures as well as a combination of all pressures on students’ behavioral intention to reduce their consumption of animal agriculture products; and ii) a significant
positive influence of a combination of all pressures on students’ behavioral intention to reduce their consumption of animal agriculture products. Coercive and normative pressures had no effect on the behavioral intention of said reduction. Regarding the behavioral intention to cease with the consumption of animal agriculture products, neither coercive, mimetic or normative pressures had an effect.

1.2. Why was this done?

The concept of institutional isomorphism was chosen for the purposes of this research because it integrated four types of approaches to addressing the issue of the effects that the consumption by individuals of the products originating from the animal agriculture industry has on the environment. The coercive pressure corresponded more towards the policy-making approach or solution to the problem; the mimetic pressure to the societal approach to it; the normative pressure to the professional and contextual approach to it; and finally the combination of the aforementioned pressures, integrating all three types of approaches into one. This was interesting because it could offer insight into what approach should be employed at the time of tackling the issue through policy, and through the societal as well as professional levels.

2. Research and overall aim

The research question guiding this thesis was the following: do isomorphic pressures, separately or in combination, have a positive impact on students’ behavioral intention to reduce or cease with their consumption of animal agriculture products?

The results obtained from the regression analyses conclude that mimetic pressures as well as a combination of all pressures have a positive impact or influence on students’ behavioral intention to reduce their consumption of animal agriculture products. In contrast, only a combination of all pressures has a positive impact or influence on students’ behavioral intention to cease with their consumption of animal agriculture products. Coercive and normative pressures have no impact or influence in neither of both cases.
The overall aim of this thesis was to explore behavioral intentions in relation to the consumption of animal agriculture products, specifically the effect isomorphic pressures might exert on influencing students’ behavioral intention to reduce – or potentially cease with – their consumption of animal agriculture products. Apart from certain limitations that are important to mention, as will be done in the following chapter, the aim of this thesis was attained through the desired research design. Results offer a comprehensive overview of the type of relation, in terms of influence or impact, the given pressures have on individuals’ behavioral intentions to reduce or stop their consumption of the specified products.

3. **Theoretical Implications**

This research tested the use of institutional isomorphism to experiment with the degree of influence the pressures could have on students’ behavioral intentions to reduce or cease with their consumption of animal agriculture products. Results indicate that New Institutional Theory, specifically the concept of institutional isomorphism (DiMaggio & Powell, 1983, 1991), can serve as a theoretical framework to influence and change individuals’ behavioral intentions to reduce or stop their consumption of meat, poultry, fish, milk, cheese, yoghurt, eggs, and all other products derived from animals. This is thus the major implication: that regardless of this theoretical framework being normally applied to analyze organizational behavior (DiMaggio & Powell, 1991; Scott, 2008), it can likewise be applied to the micro-level behavior of individuals (students) within the context of a societal setting (universities). In others words, institutional isomorphism is consequently not restricted to the macro and meso theoretical levels, as it can similarly and successfully be applied to the micro level. Furthermore, the findings that were made possible by the chosen methodology and research design imply that further experiments on individuals’ behavior or behavioral intentions to modify a specific action or doing could be carried out, thus contributing to the growing field of behavioral public administration (Grimmelikhuijsen et al., 2016, 2017).
4. PRACTICAL IMPLICATIONS

The findings of this research present certain practical implications particularly for policymakers, as well as for individuals in general and for professionals, at both national and international levels. As can be derived from the results, the best type of policy will not only be based on itself but also on societal and professional contexts, the latter namely supporting the former. A policy that solely incorporates elements of coercive pressures will yield no desired results in tackling the acerbic effects animal agriculture has on the environment, as it will have no significant positive influence on individuals’ behavioral intentions to reduce or cease with their consumption of animal agriculture products. If the starting point is to aim at influencing individuals to reduce said consumption, the role family and friends play by setting the example in showcasing the desired behavior or behavioral intention is crucial, for it will have a stronger influence separately from the other pressures. However, as the best results are produced by combining all three pressures, in both cases of reducing and ceasing with said consumption, a policy should be paired with a social and professional approach. This means that the entirety of society should be included in the process. Therefore, sensitization techniques that will increase individuals’ as well as professionals’ consciousness and awareness levels, or that will expose them more seriously to the environmental and policy issue need to be taken into account.

Additionally, the findings imply that individuals predispose of the likelihood to both reduce as well as to cease with their consumption of animal agriculture products in the case of a combined approach (when the government, social groups and professionals align together and gear towards an overarching goal). Due to the controversial nature of the issue of animal agriculture in relation to climate change, and how (part of) the main solution is for individuals to take action through their food choices (this translates into reducing or ideally ceasing with the consumption of these products), taking action to implement a policy within a combined approach could be met with more resistance. However, the findings of this research suggest that the individuals would respond to such an approach in a positive manner, meaning that they would be likely to reduce and cease with said consumption. This offers premature evidence for the response that would be obtained if such an approach were to be undertaken, and it encourages the planning of the latter.
The chosen statistical analysis for this research was that of a linear regression (OLS). In this type of analysis, a linear regression line is estimated that represents the relationship between a dependent variable and independent variable, while minimizing the sum of the squares between the estimated line and observations. The following assumptions were made while carrying out the analysis of this research: the linear regression model is linear in its parameters, there is a random sampling of observations, the conditional mean is zero, there is no multi-collinearity, there is no homoscedasticity and the error terms are normally distributed (Hayashi, 2000). This means that the analysis is consistent and unbiased under the aforementioned assumptions, which are generally made for this type of analysis (Hayashi, 2000).

However, other types of tests can be chosen and carried out for experiments, such as the average treatment effect (ATE) regression analysis (Gerber & Green, 2012). By performing an ATE analysis, one calculates the difference between two potential outcomes: the outcome where a respondent or participant is exposed to the treatment and the outcome where the respondent or participant is exposed to the control group. A ‘treatment effect’ may arise, as there might be a selection bias which causes individuals in the treatment group to be different from the non-treated due to factors that are unrelated to the treatment per se (Angrist, 2010). This treatment effect is often unobservable, because ‘units’, or in this thesis’ case respondents, are either assigned to a treatment group or control group and only (Imai et al., 2008). However, the average outcome among the treatment respondents could serve as a counterfactual for the average outcome of the control group. This is exactly what an ATE analysis adds. The ATE-approach is often used for the evaluation of government programs and policies, such as the effect of subsidies or the effect on individual choices, because in these types of analyses the units are not always randomly assigned to treatment and control groups (Angrist, 2010). However, as in this study the selection of respondents was randomly carried out, an ATE analysis is not appropriate.
Chapter VI: Limitations

Albeit the clear theoretical and practical implications projected by this research, a number of limitations need to be taken into account. This final chapter presents these limitations as well as, based on this, what future research should improve and take into account.

1. Units of Analysis

The first limitation of this study is the sample population, or the units of analysis. The main issue concerns the fact that the participants of the survey-experiments were students. This means that this is a specified population, and difficulties could be encountered when applying the results of this research to the general population of the Netherlands and Belgium. It is thus recommended that future research attempts to broaden their sample population to one that is more representative in general.

2. Vignettes

A further limitation of this study may be found within the chosen vignettes that were presented to the participants of the survey-experiment. Specifically concerning the coercive and normative pressures vignettes, it might be useful for the latter to be real information. For instance, perhaps selecting a tax imposed on all animal agriculture products by the national government was not the most appropriate choice. Creating a vignette incorporating an actual new policy of law that is in the drafting or implementation phases could yield better results. The same could be said for the normative pressure vignette. Operationalizing the three types of pressures could be done in a distinct way, which might yield different results.
3. **DATA COLLECTION**

Moreover, another limitation can be found within the data collection timeframe and procedure. Responses were collected over a period of three weeks for this study, which hampered the collection of a larger amount of responses. Thus, it is recommended that future research extends the timeframe of the data collection. This is especially relevant due to the nature of the topic and findings of this research: controversy abounds, as the results call for a profound and direct change. This change implies individuals’ food choices to drastically change, and re-education would be necessary; thus individuals are likely to resist this change and strongly oppose it. Having a larger sample size will allow for a stronger foundation of the findings.

Furthermore, it is suggested that a statistical power analysis is carried out before the collection of the data in order to determine what the necessary size of the sample size should be. This is necessary to avoid having a sample size that is not large enough, as was the case for the second dependent variable of this study.

4. **BEHAVIORAL INTENTION**

The dependent variable of this study implies a limitation, namely the fact that the actual behavior of the participants was not studied or analyzed. For best results, a longitudinal study would most appropriate, or otherwise an actual experiment. This does not exclude the use of a survey, but would imply that an experiment would have to be conducted.

All in all, a replication of the findings of this thesis is recommended before the results can be generalized to a broader population.

5. **STATISTICAL ANALYSIS & SPSS**

Finally, it could be of interest to have look into other potential types of statistical tests that could have been used for the analysis of the data. As was pointed out in the discussion section, one of these is ATE. Using a different type of test or regression could yield relatively different results, thus future research could run the data through the different types of tests.
Moreover, perhaps using a different statistical software such as STATA could be of use. Producing the desired regression diagnostics was difficult to do in SPSS, or at least was not as straightforward. Moreover, SPSS also does not directly include the option to run a statistical power analysis, although it is possible. It could be of use to have used a special program to calculate this, such as G*Power for instance.
CONCLUSION

This research and its findings were paved by exploring the linkage in terms of influence that institutional isomorphism – through the means of coercive, mimetic, normative and a combination of all three pressures – could exert on students’ behavioral intentions to reduce or cease with their consumption of animal agriculture products. The theoretical concept was highlighted and was consequently modified and adapted to fit the micro-level instead of the macro and meso levels it usually is applied to. The research question that was answered was ‘do isomorphic pressures, separately or in combination, have a positive impact on students’ behavioral intention to reduce or cease with their consumption of animal agriculture products?’ The question was answered through the means of a survey experiment. Results produced by two linear regression suggest that coercive and normative pressures have no influence on students’ behavioral intention to reduce their consumption of animal agriculture products, nor do they have an influence on students’ behavioral intention to cease with their consumption of animal agriculture products. Mimetic pressures also do not significantly affect students’ behavioral intention to cease with their consumption of animal agriculture products, but positively influence students’ behavioral intention to reduce their consumption of animal agriculture products. Finally, a combination of all three pressures had the highest influence on both students’ behavioral intention to reduce as well as cease with their consumption of animal agriculture products.

The findings illustrated that a combined approach from the policy (coercive), societal (mimetic) and professional (normative) levels is what is needed. The latter allows for the potential degree of controversy concerning the effect the animal agriculture industry has on climate change and the approach that is needed in terms of shifting our own individual behaviors concerning the food we make, to be counteracted. It is encouraged that policymaking incorporates a more comprehensive approach when determining the type of policy, including its own aspects as well as those of the approach itself, that would be implemented.
REFERENCES


Food and Agriculture Organization (2009). Livestock’s Long Shadow: Environmental Issues and Options

Goodland, R. and Anhang, J. (2009), Livestock and Climate Change: What if the Actors are Cows, Pigs and Chickens? Worldwatch, 10-19


## Targeted groups EUR

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