

## Religious values and development in Brazil.

### • Questions of research

This work tries to verify the convergence/divergence of the behaviors and attitudes toward the socio-economic development<sup>1</sup>, expressed by the believers who belong to the Catholics Church compared with the believers who are members of the Evangelical Pentecostal denominations, through the case of study of Brazil.

The same relation is analyzed with respect to the people who are not member of any religious groups in comparison with the individuals that belongs to a religious movement inside the Catholics and Evangelical Pentecostal world.

### • Epistemological foundations

This work is based on the following axioms at the epistemological level:

- All scientific productions are related to a “state of arts” which confer legitimacy to a new work inside the academic field<sup>2</sup> (*ex nihilo nihil fit*)
- All scientific works are the product of the cultural context (environment) and the *creative act* of the author.
- A scientific work is always a *partial, relative* and *unique* perspective about a phenomenon (either social or natural<sup>3</sup>).

It is a *partial perspective* since the analysis is made through the rules that are valid in the scientific system, which may not be recognized as valid in other systems (i.e. religious system) that use their own criteria to observe a specific phenomenon

It is a *specific perspective* since the analysis can adopt a particular theoretical model, inside the scientific system to interpret a phenomenon;

it is a *unique perspective*, since the work depends on the *creative act* of the researcher.

For these reasons I assume valid the affirmation: “*all that is said is said by an observer*”<sup>4</sup>.

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<sup>1</sup> I adopt the concept of development *latu sensu* as summarized by Ronald Inglehart and Christian Welzel. According these authors, development means “human development”; its main characteristic is the constitution of a social system that emphasizes human freedom and self-expression of the individual. This process is related to the phenomenon of modernization in the socio-economic field, while it is linked to the self-expression’s values in the cultural field and to the expansion of civil and political liberties in the institutional sphere

At the same time, in the perspective of autopoietic systems, here adopted, the development *strictu sensu*, is the communicative medium of the economic system

Cfr. R. Inglehart, C. Wezel, *Modernization, Cultural Change and Democracy. The Human Development Sequence*. Cambridge University Press, New York, 2010

Cfr. . Luhmann R. De Giorgi, *Teoria della società*, FrancoAngeli, Milano, 1992

<sup>2</sup> A work that pretend to recognized as “scientific” have to respect the rules established inside the field in order to be accepted as a part of the system.

See: P. Bourdieu, *A economia das trocas simbólicas*, Editora Perspectiva, São Paulo, 2015

<sup>3</sup> About the relative charter of the natural sciences, see:

T. S. Kuhn, *La struttura delle rivoluzioni scientifiche*, Torino 1969

S. Amsterdamski, *Scienza*, voce della *Enciclopedia*, Einaudi, Torino,1981, vol. XII, p.533, cit. in E. G. Parini, *Scienza e Tecnologia*, in *Studiare la società. Questioni, Concetti, Teorie*, Carocci Editore, Roma, 2007, p. 23

<sup>4</sup> Cfr. H. R. Maturana, F.J. Varela, *Autopoiesi e cognizione. La realizzazione del vivente*, Marsilio Editori, Venezia, 2012

- **Theoretical perspective**

The key of lecture to analyze the impact of the religious doctrinal corpus on the behavior of the believer, is based on the sociological approach of the autopoietic system theory.

Briefly, the central concept around which the theory of social systems as developed by the Niklas Luhmann<sup>5</sup> is built is the idea of *autopoiesis*, originally developed by the two Chilean biologists, Humberto Maturana and Francisco Varela. Autopoiesis (Greek: *autos* = self, *poiein* = to produce) means self-(re)production. Autopoietic systems thus are systems that reproduce themselves from within themselves, as for example a plant reproduces its own cells with its own cells. Luhmann argued that the basic idea of autopoiesis applied not only to biological but also to a large number of non-biological systems. He thus appropriated the originally biological concept, modified it and applied it to the social domain. Similarly to biological systems, social systems were thus conceptualized as systems that reproduced their own elements on the basis of its own elements<sup>6</sup>.

Two are the main features that involve this work:

- The individual is a –closed system. This means that their cognitive process is not influenced by the environment in causal terms (*input – output* process); but instead the external factors triggers the cognitive process that it is determined by own structural organizations of the relations among its components, which reproduce the organizational structure (autopoiesis) keeping the system in equilibrium (homeostasis)<sup>7</sup>
- Social systems are closed systems<sup>8</sup>. Each social system is characterized by a specific communicative structure, which maintains its own organization (autopoiesis). A social system does not exist as an objective entity, but it is defined by the criteria of the observer.

In the case of this work, the religious system is defined as a phenomenon identified by reference to the transcendent and the supernatural. It is this which distinguishes religion from other social phenomena such as ideological movements (eg communism and nationalism) and any other entity that can respond to the ultimate human needs<sup>9</sup>.

If we consider religion as a closed system, theoretically the system may be treated as an independent variable

Since both the individual and the religion are closed systems, they can relate through *structural coupling*<sup>10</sup>.

As explained above, environmental events can indirectly influence internal processes in an autopoietic system but the outcomes (and whether any processes are triggered at all) are determined by the structures of the system.. A system is said to be structurally coupled to its environment (or

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<sup>5</sup> N. Luhmann R. De Giorgi, *Teoria della società*

<sup>6</sup> Cfr. D. Seidl, *Luhmann's theory of autopoietic social systems*, Ludwig-Maximilians-Universität München School of Management, Munich, Vol.2, 2004

<sup>7</sup> Cfr. H. R. Maturana, F.J. Varela, *Autopoiesi e cognizione*

<sup>8</sup> N. Luhmann R. De Giorgi, *Teoria della società*

<sup>9</sup> Cfr. . Rosanna, *Secolarizzazione o Trasfunzionalizzazione della religione? Rapporto critico su una discussione attuale in sociologia della religione*, Pas-Verlag, Zurich, 1973

<sup>10</sup> Cfr. H. R. Maturana, F.J. Varela, *Autopoiesi e cognizione*  
Cfr. N. Luhmann R. De Giorgi, *Teoria della società*

other systems in its environment) if its structures are in some way or other ‘adjusted’ to the structures of the environment (or systems in the environment).

In the case of the religious system, there is *structural coupling* with the individuals (psychic systems), only in the communicative *medium* of the faith<sup>11</sup>.

In this way, the individual religiosity and the religious system, remain separate and autonomous, becoming sources of perturbations for each other’s during the structural coupling that it is made possible through the communicative medium of faith.

The perturbative impact of the religion on the individual systems that are structural coupled with it, can be explained using a model that emphasizes the associations between phenomena instead of analysis of the causal relationships between them. An associative model better reflects the closed character of systems, that cannot receive direct influences from their environment.

The idea that the system of religious beliefs influences *to some extent* the economic behavior of the individual was expressed in Max Weber’s *The Protestant Ethics and the spirit of Capitalism*. The author states the thesis by which the *spirit of modern capitalism* was originated by the Protestant ethic, the Calvinist one to be more precise, by showing itself as a form of worldly elevation that it is expressed in the conceptual transformation of the Protestant notion of *Beruf – will* and *work* at the same time – into a conscious consideration of the professional work as a moral duty: capitalistic spirit, so, rises when the rationalization of the earthly way of living with an heavenly aim loses its transcendental reference, by giving the birth to a middle-class *ethos*.

This is not a cause and effect relationship, but rather an elective affiliation, or an association, between the ethical elements present in Calvinism and the right mindset of the modern capitalist entrepreneur.

In summary, the Weberian effort tends to show the relationship between Calvinism and modern capitalism in terms of internal affinity between purely religious traits and capitalist activity. Moving from the assumption of the autonomy of religious revelation respect to socio-economic conditions, the Calvinist religion acts as an independent variable for the development of a morality congruent with capitalism, referring to *ethos* produced by faith in the individuals rather than sermons and compendiums theological.

Thus, the religious system influence the behavior of the believers, in so far as they apply their cognitive systems to perturbations of that system; thus religious values are not just assimilated by the believers, but they are rationally reworked and applied consciously to the behavioral choices (assiological rationality)<sup>12</sup>. There is not a direct influence of the religious system on the psychics systems (causal relations), but a stimulus from it to trigger an autonomous cognitive process in the believers (i.e. not *input output* process but associative relations).

Using religion as independent variable, it is possible to observe how it affects the behavior of the believers in relations to specific socio-economic aspects.

This *modus operandi* puts the individual, as an agent, at the core of the decisional process, creating a theoretical model where the behavior of the agent is determined not only by the objective situation, but also by those *cultural goggles* that he *rationally* uses to interpret the reality and establish priorities<sup>13</sup>.

Therefore the main feature of this model argues that the economic agent mirrors the objective situation within his own decisional process, filtered through his cultural goggles (depending on its own system of values) that are critically worn and that can be modified by the changes of the objective situations, according to the structural modifications provided by the individuals cognitive system to creating a concrete behavior that aims to realize the goals that have been fixed before

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<sup>11</sup> Cfr. Ibid. N. Luhmann, *Funzione della religione*, (a cura di) S. Belardinelli, Editrice Morcelliana, Brescia, 199

<sup>12</sup> R. Boudon, *Essais sur la théorie générale de la rationalité*, Presses Universitaires de France, Paris, 2007

<sup>13</sup> Cfr. Matteo Marini, *The tradition of Modernity*, The Journal of Socio-Economics, 2013 vol.47.

(rationality of behavior) can be able to influence the reproduction or transformation of the very first objective situation, according to the structural capability of the social system to bring in its structures the perturbations of individual systems. This system of “perturbative associations” allows us to represent the “religious variable” in the process of the decisional structuring of the economic subject, by inserting it into the more general frame of “social mentality”. This allows us to observe how the religious faith is rationally processed in the “hierarchical organization of values” of the subject, by influencing his cognitive system made of beliefs and attitudes<sup>14</sup>.

I adopted the theoretical model of economic growth proposed by the Argentinian scholar Mariano Grondona – based on the distinction between mental attitudes functional to the development and those that inhibit.

This model was used by economist Matteo Marini who demonstrates how the correlation between Grondona’s cultural factors on one hand and wealth and good government indicators on the other still exists even if it is exposed to tests of multiple correlation or, in other words, taking into account other explanatory material and institutional factors<sup>15</sup>.

The factors that positively influenced wealth and governmental structures in the work to a statistically significant degree and that are going to be used in this work are<sup>16</sup>:

- ❖ Work felt as self-realization;
  - ❖ A moderate inclination to risk;
  - ❖ A generalized trust toward others;
  - ❖ Perception of a correct functioning of the rule of law;
  - ❖ Inclination to a free competition;
  - ❖ Family education inspired by responsible autonomy and creativity;
  - ❖ Propensity to privatization;
  - ❖ Confidence to be able to influence one’s own future;
  - ❖ Propensity to association;
- I added the following “good habits”:
- ❖ Open mindedness: gender equality and homosexuality;
  - ❖ Matter of bioethics: abortion;
  - ❖ Secularization in political vision.

These cultural factors work as comparative elements to observe the effects of the theological vision diffused by the religions here considered – Evangelic Protestantism in the form of the Pentecostal and Neo-Pentecostal beliefs and Catholicism and its Charismatic Renewal Movement– upon the decisional process of believers<sup>17</sup>.

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<sup>14</sup> According to Rokeach, belief or conviction represent the basic unit of every cognitive system. Where a cognitive system is a “group of beliefs (...) that allows the subject to respond preferentially to (...) an object, a situation or to keep the same attitude going on”. Namely every kind of opinion that works as an explicative and interpretative medium of what is true or false, good or evil, nice or ugly, etc. in metaphysical sphere, in physical world and in social reality. Some convictions are very important in the cognitive system of acting subject by considering the characteristic of values:

«The ideal ways of our behaviour and the ideal goals of life:

1. Behavioural ways in which we reach specific goals (instrumental values);
2. Goals to which the existence has to tend; (terminal values)»

M. Rokeach , *Beliefs, Attitudes and Values, A theory of organization and change*. San Francisco: Jossey-Bass. 1968 pagg.202-225 citato in M. Marini (a cura di) *Le Risorse Immateriali*, Rubettino, Soveria Mannelli (CZ), 2002

<sup>15</sup> Cfr. M. B.. Marini, *the tradition of modernity* The Journal of Socio-Economics, 2013 vol.47.

<sup>16</sup> Cfr. M. B.. Marini, *the tradition of modernity* The Journal of Socio-Economics, 2013 vol.47

<sup>17</sup> Values will be investigated as they have been absorbed and re-elaborated by population, rather than taking into account theological differences or simple shared principles that have no effective impact on decisional process of the subject because external to his/her cultural *habitus*.

In order to measure the impact on the agency's ability, the twelve aforementioned factors will be summed up in two aggregate indexes that reflect the distinction made by Fukuyama<sup>18</sup> between individual and social virtues, namely "Attitude to Self-Realization" and "Attitude to Ethic Responsibility".

The first indicator shows the inclination of the person towards creativity, entrepreneurialism, autonomy linked to freedom of choice and, more generally, to the consciousness of controlling his own destiny, as the Latin aphorism states "*Homo faber fortunae suae*", that is visible in individual virtues such as inclination to work, to risk, rationality, etc<sup>19</sup>.

The second indicator describes the individual attitude towards the social responsibility that belongs to an "enlarged community", that goes beyond the faith-based relationships of familyist type up to involve the *generalized other* intended as: "*a subject to whom we reserve the same respect that we give ourselves and our closest relatives (...)*"<sup>20</sup>. In other words the most important feature of social capital deriving from universalistic sociability such as mutual trust, honesty, reliability, cooperation, and sense of duty that allow for a culture of responsibility<sup>21</sup>.

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<sup>18</sup> Cfr. F. Fukuyama, *Fiducia*, Rizzoli, Milano, 1996

<sup>19</sup> The index of self-realization as described here agrees with what expressed by Ronald Inglehart in *Modernization Cultural Change and Democracy*, by whom in late modernity and in particular post-industrial societies, the achievement of (relative) high levels of material wealth, by guarantying existential certainty, give birth to goals, aspirations and requests that go beyond immediate surviving necessities; besides this we have an economic reality that gives more importance to the cognitive abilities of human capital and an advanced (technological) system of plural information that makes easier the autonomous acquisition of news. Everything improves the emersion of self-expression values. Cfr. "*Creativity, imagination and intellectual independence become central*". (Inglehart -2005 - pag. 29)

Lawrence Harrison, when describes an universal progressive mentality, talks about the consciousness of people to be the chief active characters of their own destiny, if in fact: "*(...) people thinks that can influence their own destiny, so very probably will focus on their own destiny, will look at the world as a game with a positive end, will give importance to education, will believe in the ethics of the work, will save money, will be entrepreneur of himself and so on.*" (L. Harrison, *The Central Liberal Truth* in M. B. Marini, *le buone abitudini. L'approccio culturale alle problematiche dello sviluppo*. Donzelli, Roma, 2016 – pag. 70); these are the elements at the base of the *Attitude of Self-Realization*, and central for the individual virtues described by Fukuyama, involved in a wider tendency of social individualization as studied by Franco Garelli, that is reflected into a relation with religion even more personal and subjective (Garelli,1996 - Ingleart 2005), accompanied by a pluralization of the religious supply.

<sup>20</sup> Cfr. MC.Clelland D.C., *The achieving society*, Van Nostrand, Princeton, NJ, 1961, citato in Matteo Marini, *Luci ed ombre nel concetto di capitale sociale*, in *Mezzogiorno e Politiche di Sviluppo*, Achille Flora (a cura di), Edizioni Scientifiche Italiane Napoli, 2002, pagg. 45-58

<sup>21</sup>When defining the index of *ethical responsibility*, I'm not only talking about the already mentioned Marini's observations upon social capital (Cfr.: Marini, *La debolezza del concetto di capitale sociale come determinante di sviluppo economico*, in *Istituzioni, capitale sociale e sviluppo locale*, Domenico Cersosimo (a cura di), Rubbettino, Soveria Mannelli (CZ), 2001, pagg. 155-169) and about the Fukuyama's concept of collective virtues, but also to the Lewis Harrison's theories about the constitution of a progressive mentality, that contemplates the assumption of maxims: "*Do to others what you want others will do to you*" and its opposite: "*Don't do to others what you won't others would do to you*", summed up in the so-called *Regola Aurea*; now "*If the Regola aurea really matters, so very probably those people will live by a rigorous ethical code, will worship smallest virtues, will obey to law, will identify himself with the wider society, will accumulate social capital and so on.*" (L. Harrison, *The Central Liberal Truth* in M. B. Marini, *Le buone abitudini. L'approccio culturale alle problematiche dello sviluppo* – pag. 70). Added to these is the idea of the phenomenon of moral tension, that late modernity linked to individual autonomy brings with it (Inglehart- 2005); this produces within the person the needing to tie his own existence to strong ideals, that leads to look for themselves in unconventional spiritual experiences and of regenerating communities (Garelli – 1996), by constituting a shared sense of morality (within the religious group to whom they belong), measurable through the above mentioned indicator.

## Table of indicators

Attitude to Self-Realization Individual Virtues	Attitude to Ethic Responsibility Social Virtues
Work felt as self-realization	A generalized trust toward others
A moderate inclination to risk	Perception of a correct functioning of the rule of law
Inclination to free competition	Family education inspired by responsible autonomy and creativity
Confidence to be able to influence one's own future	Propensity to association
Propensity to privatization	Open-mindedness: homosexuality
Matter of bioethics: abortion	Secularization in socio-political vision

### • Characterization of the groups

- No-religious group  
This group is composed by individuals that declare to not have any religious affiliations. This does not necessarily means that they do not have a sense of religiosity, but it shows the absence of the *structural coupling* with the communicative structures of the religious systems.
- Group of Catholics practicing (not charismatic)  
This group is composed by the Roman Catholics who declare to go regularly to the church (at least once per week) and that are not members of the Renewal Catholic Charismatic Movement and its community of prayers. However, they could be members of others groups inside the Catholics Church.
- Group of Catholics charismatic  
This group is formed by the Roman Catholics that declare to be members of the Renewal Catholic Charismatic Movement and its community of prayers.
- Classic Evangelical Pentecostalism group  
This group is made by the believers who belongs to a Pentecostal denomination (inside the Evangelical – Protestant world), which do not put great emphasis to the “Positive confession”<sup>22</sup> and the “dominion theology”<sup>23</sup> in relation to Neo-Pentecostal denominations<sup>24</sup>.

<sup>22</sup>It represent the belief that the faithful possess the power to control his life, turning it in the direction of good or evil, through what he decrees aloud voice.

Cfr. W. Kramer, *Possessing Faith. Commodification, Religious Subjectivity, and collectivity in a Brazilian neo-pentecostal church*, PhD thesis, University of Chicago, Chicago, 2001

<sup>23</sup> The material world is seen as a place in which are manifested the effects of war between good and evil; in this state, the worshiper perceives himself as an active part of the war on the side of Christ against the infernal powers, believing himself capable to alter physical reality by means of the bond of faith with the divine forces.

Cfr. Cfr. R. Mariano, *Neopentecostai. Sociologia do novo pentecostalismo no Brasil*. Edições Loyola Jesuítas, Ipiranga (SP), 2014

Cfr. P. D. Siepierski, *Pós-Pentecostalismo e Política no Brasil*, Estudos Teológicos, vol.37, n°1, p.47-61, 1997

<sup>24</sup> It is really hard today discern between the various Evangelical Pentecostal denominations in Brazil; due to an unclear theological differentiations between them, so we have different types of classifications (see: E. Giumbelli, *A vontade do saber: Terminologias e Classificações sobre o Protestantismo Brasileiro*, in *Religião e Sociedade*, vol.21, número 1, ano 2001, pag.87-109; R. Mariano, A. da Silva Moreira, *Expansão, diversificação e Trasdormação do*

- Neo-Pentecostal group

This group is composed the believers who belongs to a Pentecostal denomination (inside the Evangelical – Protestant world), which put more emphasis to the “Positive confession” and the “dominion theology” than the Classical Pentecostal denominations.

These five groups are organized in a topologic model based on three different criteria:

- Institutional criteria
- Criteria of socio-cultural expression
- Socio-religious criteria

The first criteria focus on religious family, specifically it distinguishes between Catholic organizations and Protestant Evangelicalism and at the same time, between religious organizations and non-religious group

The second criteria make a distinction between religious groups that are more active in relation to the system-environment in which they spread (*virulent attitude*), compared to the denominations that maintain a more passive attitude (*temperate attitude*) towards the other religious organizations present in the system

The third criteria gathers together the organizations that are different socio-religious manifestations of the principle of *Pentecostality*<sup>25</sup>; according to Campos<sup>26</sup>, this principle represents the central intuition (*arché*) that start from the primordial experience of Acts 2 and following, through which its manifestations (*pentecostalism*) are legitimate and identified

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*Pentecostalismo no Brasil*, in *O Pentecostalismo Globalizado*, A. da Silva Moreira, P. L. Trombetta (org.), Editora da PUC Goiás, Goiânia, 2015; R. Almeida, *A expansão pentecostal: circulação e flexibilidade*. In: *As religiões no Brasil: continuidades e rupturas*, F. Teixeira, R. Menezes (organizzatori), Vozes, Petrópolis, 2013).

In my opinion, the two characteristics above mentioned can represent a discriminant criteria

<sup>25</sup> The Pew Forum Center in the report *Religion in Latin America. Widespread Change in a Historically Catholic Region*, published on 13 November 2014, give the following definition

- Pentecostals: Christians who belong to a denomination or independent church that emphasizes the gifts of the Holy Spirit, including the belief that speaking in tongues is necessary evidence of the baptism of the Holy Spirit. Pentecostals belong either to one of the historical denominations that originated in the religious revivals of the early 20th century, such as the Assemblies of God and the Church of God in Christ, or to newer, largely independent churches, sometimes labeled as neo-Pentecostal churches.
- Charismatics: Christians who engage in spiritual practices that are considered gifts of the Holy Spirit, such as speaking in tongues and divine healing, but are not members of a Pentecostal denomination. Most charismatics belong to Catholic, Orthodox, mainline Protestant or evangelical Protestant denominations.

Cfr. <http://www.pewforum.org/files/2014/11/Religion-in-Latin-America-11-12-PM-full-PDF.pdf>

<sup>26</sup> Cfr. B. Campos, *Pentecostalismo y cultura*. In: GUTIÉRREZ, Tomás. *Protestantismo y cultura em América Latina*. Quito: CLAI, 1994, pag. 55-56

Cfr. B. Campos *Da Reforma Protestante à pentecostalidade da Igreja*, Editora Sinodal, Clai ediciones, São Leopoldo, 2002

**Figure 1**

Type of religion Attitude	Catholic Church	Protestant evangelicalism	Without religious affiliation
Temperate	Catholic practicing non-charismatic	Classic Pentecostalism	Control group
Virulent <sup>27</sup>	Catholic Charismatic	Neo-Pentecostalism	

**NB:** the shaded areas represent the groups that are socio-religious manifestation of the principle of *Pentecostality*.

In relation to the topologic model, we have tested four hypothesis to observe if there is convergence or divergence in terms of attitudes expressed by the believers of the different categorical groups toward a progressive mentality with respect to socio-economic development and more if there are differences between the religious groups and the non-religious groups. The two key questions are: are there associations between the religious doctrinal corpus as well it is elaborated at the individual level and the orientations expressed by the believers with respect to the factors of development indicated above?

Second, are there significant differences between the groups in relations to a progressive mentality?

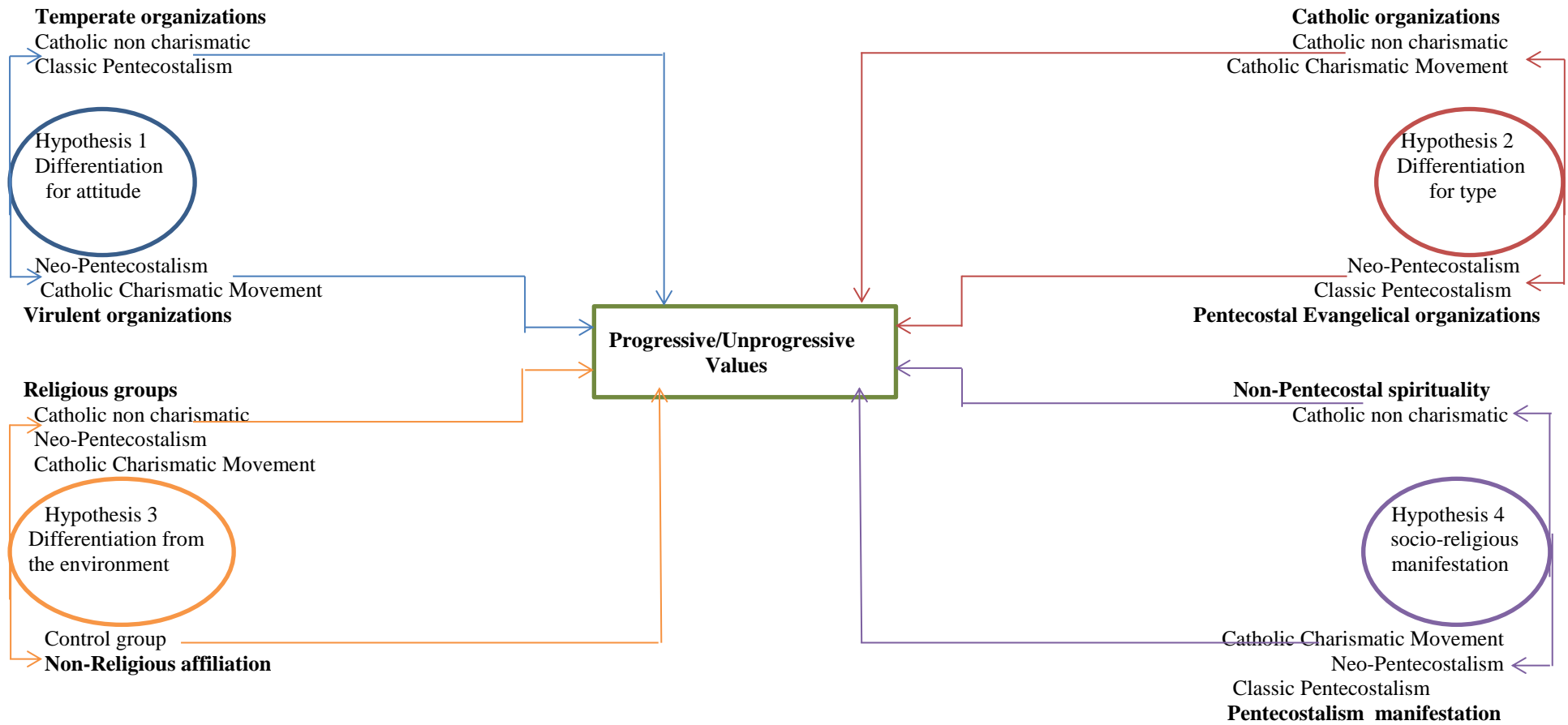
The four hypothesis tested are:

1. Differentiation by social attitude: virulent *versus* temperate organizations;
2. Differentiation by religious family: Evangelical Pentecostal *versus* Catholic organizations;
3. Differentiation from the environment: religious group *versus* individuals without religious affiliation;
4. Socio-religious differentiation: Pentecostalism *versus* non-Pentecostal spirituality

<sup>27</sup> This term seeks to emphasize the greater mordant of such groups in relation to other religious denominations (also showing their ability to influence the internal structural features of these last, especially the others pentecostalism ) and the commitment expressed within the social environment to expanding its own niche of action



**Graphical representations of the hypothesis**



• **Factors and elements**

**Attitude to Self-Realization - Individual Virtues**

F2-Work felt as self-realization	Questions	Progressive answers
F2_Q15	O mais importante sobre emprego, é aquele que dá o necessário para sobreviver (Concorda from 1 to 10 Discorda)	DISCORDA (values: 8-9-10)
F2_Q27	O trabalho duro não é importante tendo em vista que nunca se pode ter tudo na vida (Concorda from 1 to 10 Discorda)	DISCORDA (values: 8-9-10)
F2_Q37	Quando você procura um trabalho, qual das seguintes motivações daria prioridade? 1. Uma alta renda 2. Um trabalho seguro e sem riscos 3. Trabalhar com pessoas agradáveis 4. Um trabalho que lhe dá um sentimento de realização	(N°3) or (N°4)

F3-A moderate inclination to risk		
F3_Q28	Assumir riscos: (A) é excitante ou (B) provoca ansiedade?	A
F3_Q69	Devemos ter cuidados ao fazer grandes mudanças na vida (1) ou Devemos agir de forma decisiva para realizar algo(10)? (Primeira sentença – from 1 to 10 Segunda sentença)	Concorda segunda sentença (values: 6- 7-8)

F6-Inclination to free competition		
F6_Q71	A competição é positiva. Estimula as pessoas a trabalhar duro e desenvolver novas ideias (1) Ou A competição é prejudicial. Ela traz à tona o pior das pessoas (10)? (Primeira sentença – from 1 to 10 Segunda sentença)	Concorda primera sentença ( values:1-2-3)

F9-Confidence to be able to influence one's own future		
F9_Q20	Na vida cada um é responsável pelo aquilo que tem. (Concorda from 1 to 10 Discorda)	CONCORDA (values: 1-2-3)
F9_Q33	O feitiço (A) tem efeito ou (B) é ineficaz	B
F9_Q34	Quem ou o quê determina a sua condição econômica ? (A) você ou (B) o meio em que vive?	A (1)
F9_Q70	Você sente que tem liberdade de controle sobre a sua vida? Nenhuma (1) ou Total (10)	Concorda segunda sentença (values:8-9-10)

F8-Propensity to privatization		
F8_Q68	Deveria aumentar a privatização de empresas e indústrias (1) ou Deveria aumentar a nacionalização de empresas e indústrias (10)? (Primeira sentença – from 1 to 10 Segunda sentença)	Concorda primera sentença (values1-2-3)

F12-Matter of bioethics: abortion		
F12_Q7	Aceitaria o aborto se: o feto tiver alguma doença? (sim/não)	SIM
F12_Q8	Aceitaria o aborto se: risco de vida para a mulher? (sim/não)	SIM
F12_Q9	Aceitaria o aborto se: houver estupro? (sim/não)	SIM
F12_Q10	Aceitaria o aborto se: por decisão da mulher? (sim/não)	SIM
F12_Q11	Aceitaria o aborto se: Os pais não tiverem recursos? (sim/não)	SIM

**Attitude to Ethic Responsibility - Social Virtues**

F4-A generalized trust toward others	Questions	Progressive answers
F4_Q32	O que você acha de pessoas de uma religião diferente da sua? ( A) se fosse possível, você preferia: não ter que lidar com elas, ( B) ou isso não faz diferença	B
F4_Q35	Em geral (A) pode se confiar na maioria das pessoas ou ( B) ou deve-se ter sempre cuidado com as pessoas?	A
F4_Q41	Identifica-se com a família e amigos próximos (concordo/discordo)	CONCORDO
F4_Q42	Identifica-se com outros moradores do bairro, mesmo os de menor nível social e econômico (concordo/discordo)	CONCORDO
F4_Q43	Identifica-se fortemente com a cidade em que vive (concordo/discordo)	CONCORDO
F4_Q44	Identifica-se com o outros brasileiros, mesmo aqueles que não conhece (concordo/discordo)	CONCORDO
F4_Q45	Pode confiar nas pessoas que têm uma nacionalidade diferente da sua (concordo/discordo)	CONCORDO

F5-Perception of a correct functioning of the rule of law		
F5_Q23	Acreditam que, no Brasil, as autoridades ajudam quem eles querem. (Concorda from 1 to 10 Discorda)	DISCORDA (values:8-9-10)
F5_Q26	Pensam que no Brasil a lei protege apenas os poderosos. (Concorda from 1 to 10 Discorda)	DISCORDA (values:8-9-10)
F5_Q38	Confiança no Judiciário 1. Muita confiança 2. Bastante confiança 3. Pouca confiança 4. Nenhuma confiança	Muita confiança or Bastante confiança
F5_Q39	Confiança na Polícia 1. Muita confiança 2. Bastante confiança 3. Pouca confiança 4. Nenhuma confiança	Muita confiança or Bastante confiança
F5_Q40	Confiança nas Forças armadas 1. Muita confiança 2. Bastante confiança 3. Pouca confiança 4. Nenhuma confiança	Muita confiança or Bastante confiança

F7-Family education inspired by responsible autonomy and creativity		
Tem listads uma serie de qualidades que podem ser encorajados a ser aprendida em casa. O que, se houver, considere particularmente importante?		
F7_Q57	INDEPENDÊNCIA (mencionada/não mencionada)	MENCIONADA
F7_Q59	SENSE DE RESPONSABILIDADE (mencionada/não mencionada)	MENCIONADA
F7_Q60	IMAGINAÇÃO (mencionada/não mencionada)	MENCIONADA
F7_Q67	AUTOREALIZAÇÃO (mencionada/não mencionada)	MENCIONADA

F10-Propensity to association		
F10_Q56B	Faz part de algumas organizações voluntárias?	Pertence pelo menos à uma organização voluntária

F13-Open-mindedness: Gender equality and homosexuality	Questions	Progressive answers
F13_Q14	Acha que as mulheres têm as mesmas oportunidades que os homens no curso da vida?. (Concorda from 1 to 10 Discorda)	CONCORDA (values: 1-2-3)
F13_Q18	Acredita que os homens são superiores as mulheres? (Concorda from 1 to 10 Discorda)	DISCORDA (values:8-9-10)
F13_Q30	Homossexualidade: (A) nunca é aceitável ou (B) é sempre aceitável?	B

F11-Secularization		
F11_Q16	Acha que a igreja deve limitar-se a tratar somente de assuntos espirituais. (Concorda from 1 to 10 Discorda)	CONCORDA (values: 1-2-3)
F11_Q22	As igrejas não deveriam participar da política. (Concorda from 1 to 10 Discorda)	CONCORDA (values: 1-2-3)
F11_Q25	Se a religião e a ciência estão em conflito, a religião é sempre certa. (Concorda from 1 to 10 Discorda)	DISCORDA (values:8-9-10)

- **Analysis and results**<sup>28</sup>

- **Associations Hypothesis/factors for each element**

**Legend:**

**Association test [Pearson/ likelihood ratio test]-[\*\*\*=<0,01 / \*\*=<0,05 / \* = <0,1]**

Indicator/number of questions	Hypotesis 1		Hypotesis 2		Hypotesis 3		Hypotesis 4	
	Pearson	likelihood ratio test	Pearson	likelihood ratio test	Pearson	likelihood ratio test	Pearson	likelihood ratio test
F2-Work felt as self-realization								
F2_Q15	0,092*	0,088*	0,931	0,931	0,176	0,171	0,271	0,271
F2_Q27	0,048**	0,056*	0,572	0,578	0,000***	0,000***	0,048**	0,041**
F2_Q37	0,588	0,522	0,468	0,478	0,105	0,122	0,438	0,434
F3-A moderate inclination to risk								
F3_Q28	0,964	0,964	0,330	0,325	0,001***	0,001***	0,442	0,442
F3_Q69	0,057*	0,048**	0,678	0,679	0,022**	0,022**	0,020**	0,019**
F6-Inclination to free competition								
F6_Q71	0,233	0,224	0,812	0,811	0,546	0,549	0,486	0,487

<sup>28</sup> The results are estimates in relation to the population of sample groups

**Legend:****Association test [Pearson/ likelihood ratio test]-[\*\*\*=<0,01 / \*\*=<0,05 / \* = <0,1]**

Indicator/number of questions	Hypotesis1		Hypotesis 2		Hypotesis 3		Hypotesis 4	
	Pearson	likelihood ratio test	Pearson	likelihood ratio test	Pearson	likelihood ratio test	Pearson	likelihood ratio test
F9-Confidence to be able to influence one's own future								
F9_Q20	0,779	0,777	0,322	0,319	0,441	0,436	0,469	0,469
F9_Q33	0,161	0,165	0,000***	0,000***	0,037**	0,041**	0,001***	0,000***
F9_Q34	0,154	0,150	0,002***	0,001***	0,080*	0,081*	0,002***	0,002***
F9_Q70	0,006***	0,006***	0,001***	0,002***	0,120	0,119	0,011**	0,010**
F8-Propensity to privatization								
F8_Q68	0,025**	0,023**	0,675	0,673	0,133	0,121	0,016**	0,016**
F12-Matter of bioethics: abortion								
F12_Q7	0,142	0,134	0,624	0,621	0,000***	0,000***	0,064*	0,065*
F12_Q8	0,261	0,258	0,995	0,995	0,000***	0,000***	0,208	0,208
F12_Q9	0,000***	0,000***	0,172	0,176	0,000***	0,000***	0,015**	0,015**
F12_Q10	0,164	0,149	0,780	0,782	0,000***	0,000***	0,404	0,406
F12_Q11	0,56	0,552	0,180	0,204	0,000***	0,000***	0,931	0,931
F4-A generalized trust toward others								
F4_Q32	0,557	0,564	0,540	0,549	0,734	0,370	0,308	0,297
F4_Q35	0,697	0,699	0,002***	0,001***	0,958	0,958	0,186	0,187
F4_Q41	0,459	0,469	0,536	0,523	0,000***	0,001***	0,747	0,745
F4_Q42	0,251	0,241	0,716	0,718	0,039**	0,044**	0,618	0,619
F4_Q43	0,799	0,799	0,222	0,228	0,004***	0,005***	0,202	0,199
F4_Q44	0,442	0,44	0,525	0,527	0,005***	0,006***	0,956	0,956
F4_Q45	0,618	0,616	0,004***	0,005***	0,213	0,219	0,077*	0,074*
F5-Perception of a correct functioning of the rule of law								
F5_Q23	0,724	0,726	0,026**	0,020**	0,220	0,197	0,568	0,570
F5_Q26	0,602	0,605	0,362	0,353	0,159	0,151	0,997	0,997
F5_Q38	0,469	0,465	0,973	0,973	0,566	0,570	0,491	0,491
F5_Q39	0,709	0,707	0,264	0,271	0,010**	0,012**	0,837	0,836
F5_Q40	0,529	0,524	0,186	0,182	0,001***	0,001***	0,328	0,330
F7-Family education inspired by responsible autonomy and creativity								
F7_Q57	0,652	0,652	0,862	0,862	0,000***	0,000***	0,834	0,834
F7_Q59	0,632	0,634	0,150	0,159	0,263	0,269	0,273	0,270
F7_Q60	0,017**	0,012**	0,196	0,178	0,001***	0,001***	0,008***	0,008***
F7_Q67	0,909	0,909	0,505	0,499	0,000***	0,000***	0,361	0,362

**Legend:**

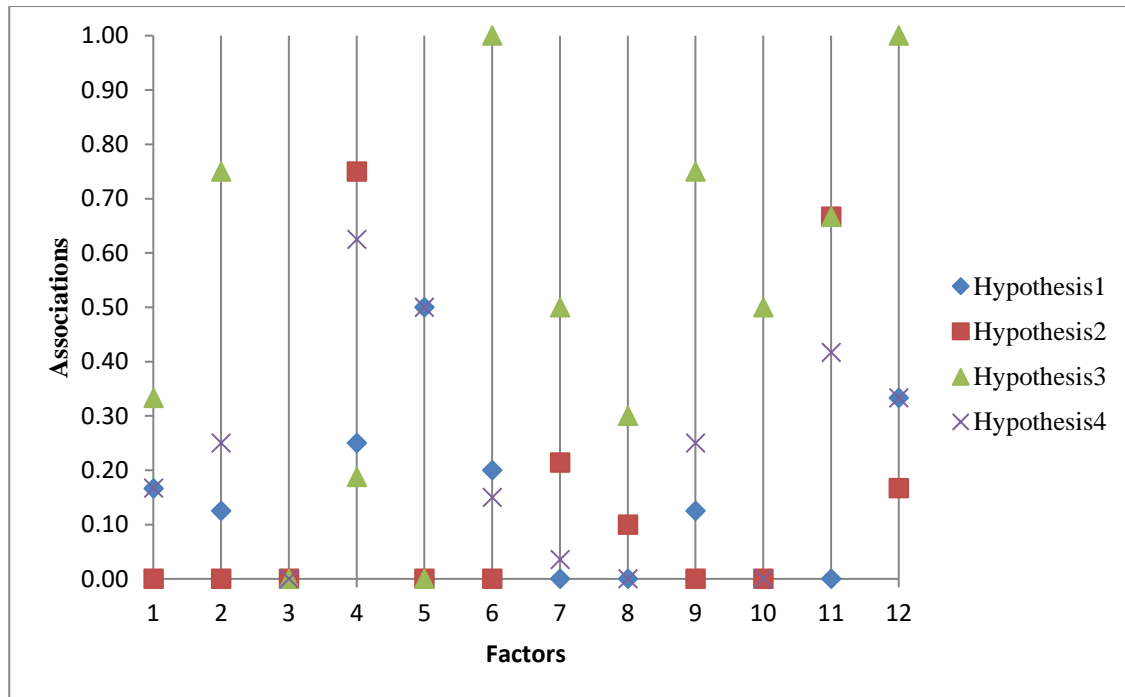
**Association test [Pearson/ likelihood ratio test]-[\*\*\*=<0,01 / \*\*=<0,05 / \* = <0,1]**

Indicator/number of questions	Hypotesis 1		Hypotesis 2		Hypotesis 3		Hypotesis 4	
	Pearson	likelihood ratio test	Pearson	likelihood ratio test	Pearson	likelihood ratio test	Pearson	likelihood ratio test
F10-Propensity to association								
F10_Q56B	0,142	0,145	0,990	0,990	0,028**	0,030**	0,611	0,611
F13-Open-mindedness: Gender equality and homosexuality								
F13_Q14	0,809	0,808	0,625	0,623	0,000***	0,000***	0,797	0,797
F13_Q18	0,794	0,791	0,000***	0,001***	0,725	0,716	0,063*	0,054*
F13_Q30	0,887	0,887	0,000***	0,000***	0,000***	0,000***	0,000***	0,000***
F11-Secularization								
F11_Q16	0,248	0,221	0,705	0,714	0,000***	0,000***	0,660	0,661
F11_Q22	0,006***	0,005***	0,185	0,188	0,000***	0,000***	0,559	0,559
F11_Q25	0,188	0,191	0,020**	0,018**	0,000***	0,000***	0,004***	0,004***

The results show significant associations between the religious variable as expressed in terms of behaviors by the individuals and factors of socio- economic development , with the only exception of the factor “inclination to free competition”. In general, the results corroborate the hypothesis of a perturbative impact of the religious systems on the decision making process of the believer.

**Figure 3:** presence of significant association between at least one element of factors and hypotheses

<b>Hypothesis</b> <b>Factors</b>	Hypotesis 1	Hypotesis 2	Hypotesis 3	Hypotesis 4
F2-Work felt as self-realization	✘	-	✘	✘
F3-Moderate inclination to risk	✘	-	✘	✘
F6-Inclination to free competition	-	-	-	-
F9-Confidence to be able to influence one's own future	✘	✘	✘	✘
F8-Propensity to privatization	✘	-	-	✘
F12-Matter of bioethics: abortion	✘	-	✘	✘
F4-A generalized trust toward others	-	✘	✘	✘
F5-Perception of a correct functioning of the rule of law	-	✘	✘	-
F7-Family education inspired by responsible autonomy and creativity	✘	-	✘	✘
F10-Propensity to association	-	-	✘	-
F13-Open-mindedness: Gender equality and homosexuality	-	✘	✘	✘
F11-Secularization	✘	✘	✘	✘
<b>Total</b>	<b>7</b>	<b>5</b>	<b>10</b>	<b>9</b>

**Figure 4:** graphic representation of the significant associations between hypothesis and factors<sup>29</sup>

<sup>29</sup> The graphic has only a descriptive function.

The position of the hypothesis for each factor in the graphics, derive from the numbers of elements (questions) associated for each hypothesis and from the “points” attributed for significant level of these associations (in case of a difference between the tests, Pearson and likelihood ratio test, the highest value is used as reference)

Specifically:

1,00 point = association test < 0,01

0,50 points = associations test < 0,05

0,25 points = associations test < 0,1

0,00 points = associations test > 0,1

The points are divided for the numbers of elements of a factors .

So, for example, in case a factor is composed by 2 elements and an hypothesis is associated with just one element at level < 0,01; that hypothesis receive 1,00 point divided 2 (the number of element of the factor) that is 0,50 ( $1,00/2=0,50$ ); but if the hypothesis is associated with both the elements at a level of < 0,01, it get 1,00 point ( $0,50 + 0,50$ ).

Below there are the factors with the correspondent numbers of element.

1. Work felt as self-realization - 3 elements
2. Moderate inclination to risk – 2 elements
3. Inclination to free competition – 1 element
4. Confidence to be able to influence one’s own future – 4 elements
5. Propensity to privatization – 1 element
6. Matter of bioethics: abortion – 5 elements
7. A generalized trust toward others – 7 element
8. Perception of a correct functioning of the rule of law - 5 elements
9. Family education inspired by responsible autonomy and creativity – 4 elements
10. Propensity to association – 1 elements
11. Open-mindedness: Gender equality and homosexuality – 3 elements
12. Secularization – 3 elements



Established the existence of association, it is now necessary to observe whether there are significant differences between groups referring to a progressive mentality.

- Differences between the groups with respect to the progressive answer for each element

**Legend:**

	Difference between groups with the confidence interval at 95%
	Difference between groups with the confidence interval at 90%

Indicator/number of questions	Hyp1 Temperate	Hyp1 Virulent	Hyp2 Catholic t.	Hyp2 Evang. Pen	Hyp 3 Religious	Hyp 3 No-religious	Hyp4 Pentecost.	Hyp4 No-pentecost
F2-Work felt as self-realization								
F2_Q15	47,6%	49,7%	47,6%	49,9%	48,3%	47,9%	49,1%	47,2%
F2_Q27	72,6%	65,6%	70,5%	69,8%	70,3%	30,5%	68%	73,2%
F2_Q37	76,1%	73,0%	76,9%	70,5%	75,1%	68,4%	71,7%	79,3%
F3-A moderate inclination to risk								
F3_Q28	26,0%	26,3%	27,7%	22,1%	26,1%	44,8%	24%	28,8%
F3_Q69	21,4%	10,9%	18,6%	16,3%	17,9%	14,3%	13,4%	23,8%
F6-Inclination to free competition								
F6_Q71	50,2%	56,6%	52,3%	52,4%	52,3%	47,0%	54,3%	49,9%
F9-Confidence to be able to influence one's own future								
F9_Q20	49,8%	53,8%	48,4%	57,9%	51,1%	58,0%	54,9%	46,4%
F9_Q33	79,4%	72,4%	83,9%	60,2%	77,1%	66,7%	68,6%	87,8%
F9_Q34	64,5%	73,1%	62,0%	80,7%	67,3%	57,5%	76,1%	56,4%
F9_Q70	44,5%	63,8%	53,5%	44,3%	50,9%	45,4%	54,5%	46,2%
F8-Propensity to privatization								
F8_Q68	24,0%	23,9%	23,1%	26,1%	24,0%	15,1%	25,0%	22,6%

**Legend:**

	Difference between groups with the confidence interval at 95%
	Difference between groups with the confidence interval at 90%

Indicator/number of questions	Hyp1 Temperate	Hyp1 Virulent	Hyp2 Catholic t.	Hyp2 Evang. Pen	Hyp 3 Religious	Hyp 3 No-religious	Hyp4 Pentecost.	Hyp4 No-pentecost
F12-Matter of bioethics: abortion								
F12_Q7	19,2%	12,4%	17,6%	15,3%	17,0%	78,4%	12,9%	22,0%
F12_Q8	37,3%	30,3%	34,9%	34,9%	34,9%	84,6%	31,2%	39,5%
F12_Q9	37,0%	15,9%	27,7%	35,9%	30,0%	91,4%	23,4%	38,0%
F12_Q10	9,0%	4,8%	7,3%	8,4%	7,6%	61,2%	6,2%	9,3%
F12_Q11	3,8%	2,7%	2,4%	6%	3,4%	51,3%	3,5%	3,3%
F4-A generalized trust toward others								
F4_Q32	96,8%	95,4%	96,7%	95,4%	96,3%	95,6%	95,3%	97,7%
F4_Q35	16,2%	18,2%	20,7%	7,3%	16,9%	17,1%	13,8%	20,6%
F4_Q41	98,1%	96,8%	97,4%	98,3%	97,6%	89,9%	97,4%	98,0%
F4_Q42	85,0%	90,0%	87,2%	85,5%	86,7%	78,0%	87,7%	85,4%
F4_Q43	77,3%	75,9%	78,7%	72,0%	76,8%	62,2%	73,4%	81,0%
F4_Q44	70,4%	74,7%	72,8%	69,2%	71,8%	57,2%	72,0%	71,6%
F4_Q45	78,9%	81,4%	84,1%	68,7%	79,7%	73,9%	75,4%	85,1%
F5-Perception of a correct functioning of the rule of law								
F5_Q23	15,1%	17,9%	19,0%	8,9%	16,1%	9,2%	13,9%	18,9%
F5_Q26	18,3%	23,0%	21,7%	15,4%	19,9%	13,4%	19,8%	20,0%
F5_Q38	28,4%	22,6%	26,8%	25,6%	26,5%	28,6%	23,8%	29,9%
F5_Q39	12,1%	10,7%	10,5%	14,8%	11,7%	9,2%	12,8%	10,3%
F5_Q40	51,8%	48,5%	47,4%	59,0%	50,7%	30,3%	47,1%	50,7%

**Legend:**

	Difference between groups with the confidence interval at 95%
	Difference between groups with the confidence interval at 90%

Indicator/number of questions	Hyp1 Temperate	Hyp1 Virulent	Hyp2 Catholic t.	Hyp2 Evang. Pen	Hyp 3 Religious	Hyp 3 No-religious	Hyp4 Pentecost.	Hyp4 No-pentecost
<b>F7-Family education inspired by responsible autonomy and creativity</b>								
F7_Q57	32,1%	34,8%	32,7%	33,7%	33,0%	69,2%	33,6%	32,3%
F7_Q59	84,2%	82,0%	85,4%	78,5%	83,5%	78,6%	81,0%	86,4%
F7_Q60	12,1%**	4,9%**	11,3%	6,1%	9,8%	22,9%	5,5%	14,9%
F7_Q67	14,0%	14,5%	15,0%	12,2%	14,2%	43,6%	12,2%	16,5%
<b>F10-Propensity to association</b>								
F10_Q56B	70,8%	62,0%	67,9%	67,9%	67,9	56,3%	66,5%	69,7%
<b>F13-Open-mindedness: Gender equality and homosexuality</b>								
F13_Q14	35,5%	38,4%	35,7%	38,5%	36,5%	14,2%	38,4%	34,1%
F13_Q18	87,6%	89,7%	92,8%	76,8%	88,3%	90,8%	83,9%*	97,3%*
F13_Q30	34,0%	33,1%	45,4%*	5,6%	33,7%	86,8%	20,3%	50,3%
<b>F11-Secularization</b>								
F11_Q16	12,5%	12,0%	12,5%	11,9%	12,3%	56,3%	11,6%	13,3%
F11_Q22	38,3%	26,1%	33,0%	37,3%	34,2%	71,4%	32,3%	36,7%
F11_Q25	34,2%	28,4%	36,5%	21,7%	32,3%	68,9%	25,2%	41,1%

The analysis of differences between groups evidence no significant differences in relations on three factors: “inclination to free competition”, “propensity to privatization” and “propensity to association”. The first two factors are directly linked to an idea of a liberal market, so referring to religious affiliations, there seems to be no difference at the individual level in relation to a specific economic vision. In relation to the propensity to associations, there is a trend for the religious individuals to be inclined towards the associative life than the individuals without religious affiliation<sup>30</sup>, however there is not strong evidence to support this claim.

In general, it is possible to say that being a member of a religious group has some impact on the behavior of the its followers (see hypothesis 3), Interestingly, within the religious groups, a difference between catholic groups and evangelical groups was observed, in terms of behaviors expressed by the faithful (hypothesis 2). At the same time, there is a process of convergence if we analyze (hypothesis 4) the behaviors of the members of the Pentecostals organizations (composed by the evangelical Pentecostal denominations and catholic charismatic group) in

<sup>30</sup> There is a significant association between the hypothesis 3 and this factor.

relation to the non-Pentecostal groups (catholic non-charismatic): “*the spirit unites what the institution separates*”, at least in terms of attitudes expressed by the believers.

The analysis of differences between temperate organizations and virulent organizations (hypothesis 1), does not show anything particularly significant. This could mean that in the description of a phenomenon should be used interpretative tools related with the characteristic intrinsic of that phenomenon; in our case, we apply an “external” criteria in the description of the religious groups, that focus on the “social attitudes” of the groups. However, the religious groups are complex unity inside the religious system, and each manifestation in their environment is just an epiphenomenal effect that do not involve own autopoiesis, but represent the way in which the system interact with the others systems that it is already established by its organization.

, the main features that emerge from the other hypothesis are the following:

- “Anomic individualism” of the group without religious affiliation; they are open-mind in relation to the abortions, gender equality, homosexuality, moreover they support a kind of education based on the liberal values, and they have a strong secularized vision of the society. However, it is a freedom that is not balanced by moderation, as evidenced by their inclination to take high risk, which results in an individualist mindset characterized by a low propensity to associate, low level of generalized trust and a pessimistic perception of the institutions of the state that is connected to a negative view of the work.
- Divergence amongst the religious groups: Catholics and the Evangelical Pentecostals. In relation to the catholic groups, The Evangelical Pentecostals have a stronger magic/religious vision that it is related with the conviction to be the leader of their own economic success, at the same time are more close respect the catholic in terms of generalized trust, gender relation and homosexuality in that a conservative and traditionally masculine vision of the society is shown
- Convergence amongst the religious groups: Pentecostal organizations and non-Pentecostal group.

The Pentecostal organizations maintain the traits highlighted by the Evangelical Pentecostals, as a magic/religious vision of the reality and the conviction to be of their own well-being. however they assume a position less conservative with respect to the role of women in society, and generally trust a broader range of society. Notably they are still against homosexuality

It is evident that the Pentecostal organizations represent a trans-institutional channel of communication between Catholics and Protestant

In conclusion, looking at the questions at the base of this work, it is possible to answer affirmatively to both: there is an association from the religious theological values as processed in the cognitive systems of the believer, and their attitudes toward specific factors related to socio-economic development. With respect to divergence among the groups, the religious group and no-religion group show marked disparity. Between the religious groups, there is still a *division* between Catholics and Protestant. (In particular in this case the different is most obvious in latter form of the Protestantism, Evangelical Pentecostalism). At the same time this convergence within the different manifestations of (Pentecostalism (e.g, the Renewal Charismatic Movement) crosses the institutional boundaries of the denominations.

Of course, this is just a *partial, particular, and unique* interpretation of the phenomenon...

- **Metodology**

A quantitative approach was applied to the study, which was done in Brazil, which is the most populous country for Catholics, and which recently has experienced a rise in Protestant

proselytism.<sup>31</sup> Specifically, the empirical research was conducted in the city of Rio de Janeiro, where a relevant number of adepts of the main Pentecostal and Neo-Pentecostal churches of the Country are located; respectively: *Assembleas de Deus* and *Igreja Universal do Reino de Deus*<sup>32</sup>. The data has been collected in the metropolitan area of the city in 2016, which was split into five areas according to the administrative subdivision made by the Prefecture of the city according to a number of socio-infrastructural criteria

**Picture 5**



Source: *Prefeitura da cidade de Rio de Janeiro*

A survey was created *ad hoc* for this project, on the basis of the model designed by Basañez for the *Cultural Change Institute*<sup>33</sup> (Fletcher School, Tufts University- United States). The model survey has already been tested in East Timor, Mexico, and Calabria (South-Italy). This questionnaire was administered to 457 participants as encountered at various places of worship in the five areas of the city which was then stratified into the 4 groups. For comparative purposes, 119 participants for the control group (non-denominational affiliation), were interviewed through convenience sampling of random members of the public within the 5 divisions of Metropolitan Rio De Janeiro. During this stage, participants who selected a religious denomination were excluded. All participants were 18 years or older.

<sup>31</sup> Cfr. D. Martin, *Tongues of fire: The explosion of Protestantism in Latin America*, Cambridge, Blackwell Publishers, 1993

Cfr. P. Freston, *The Future of Pentecostalism in Brazil: The limits to growth*, in R. W. Hefner (edited by), *Global Pentecostalism in the 21<sup>st</sup> Century*, Indiana University Press, 2013, pag. 63-90

<sup>32</sup> Cfr. C. R. Jacob, D. R. Hees, P. Waniez, *Religião e Território no Brasil: 1991/2010*, Editoria PUC-Rio, Rio de Janeiro, 2013

<sup>33</sup> Interesting suggestion for the formulation of the questionnaire come from the research: *Novo Nascimento. Os Evangélicos em Casa, na Igreja e na Política*, developed by the Instituto de Estudos da Religião (ISER) in 1994 in Rio de Janeiro.

Cfr. R. C. Fernandes, P. Sanchis, O. Guilherme Velho, L. Piquet Carneiro, C. Mariz, C. Mafra, *Novo Nascimento. Os Evangélicos em Casa, na Igreja e na Política*, Mauad, Rio de Janeiro, 1998

Another important point of reference is the *World Values Survey*. It is a global network of social scientists studying changing values and their impact on social and political life, led by an international team of scholars, with the WVS association and secretariat headquartered in Stockholm, Sweden.

<http://www.worldvaluessurvey.org/wvs.jsp>

**Figure 6****Details composition of the groups of the survey**

Catholic parish [Catholic practicing]	Catholic Charismatic Renewal Movement	Classic Pentecostalism	Neo-Pentecostalism	Control Group
Catholic practicing non charismatic [100]	Catholic Charismatic [100]	Assembleias de Deus [85]	Igreja Universal do Reino de Deus [20]	Without religious affiliation [119]
		Igreja Maranata [15]	Igreja Internacional da Graça de Deus [39]	
		Igreja Nova Vida [20]	Igreja da Conquista [20]	
		Restauração e Vida [20]	Igreja Nova [20]	
			Projeto Nova Vida [18]	

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The data of the population for each administrative area and for the populations of the religious groups<sup>34</sup> has been obtained through the manipulation of the microdata of the census 2010

**População RJ com 18 anos ou mais por AP**

		<b>População &gt;= 18 anos</b>	Percent	Valid Percent	Cumulative Percent
Valid	AP 1	229.219	4,8	4,8	4,8
	AP 2	845.187	17,5	17,5	22,3
	AP 3	1.838.093	38,2	38,2	60,5
	AP 4	694.062	14,4	14,4	74,9
	AP 5	1.209.679	25,1	25,1	100,0
	Total	4.816.241	100,0	100,0	

<sup>3434</sup> See the annex for the organizations of the religious groups detected by the Census 2010 (IBGE)

**População Praticante RJ com 18 anos ou mais, por AP e Grupo Religioso**  
Contagem

	Grupo					Total	%
	Católico <sup>35</sup>	Pentecostal	Neopentecostal	RCC <sup>36</sup>	Sem religião		
Área de Planejamento AP 1	37.319	12.759	4.868	22.941	25.925	103.812	4,7%
AP 2	143.488	20.425	5350	88.206	109.560	367.029	16,6%
AP 3	271.221	144.754	35.993	166.725	227.165	845.858	38,2%
AP 4	109.946	41.417	9.038	67.586	73.044	301.031	13,6%
AP 5	144.242	151.800	29.311	88.669	182.650	596.672	26,9%
<b>Total</b>	<b>706.216</b>	<b>371.155</b>	<b>84.560</b>	<b>434.127</b>	<b>618.344</b>	<b>2.214.402</b>	<b>100%</b>

**Survey, for AP and Grupo**  
Contagem

	Grupo religioso					Total
	Católico	RCCI	Pentecostal I	Neopentecostal	Sem religião	
Area de Planejamento AP1	20	20	20	20	20	100
AP2	20	20	40	20	20	120
AP3	20	20	40	37	20	137
AP4	20	20	20	20	29	109
AP5	20	20	20	20	30	110
<b>Total</b>	<b>100</b>	<b>100</b>	<b>140</b>	<b>117</b>	<b>119</b>	<b>576</b>

Finally has been calculate the complex plan of the survey. and its weight in relation to the population for each administrative area.

<sup>35</sup> The population is referred to the Catholics practicing non charismatic : of the total 33,3%  
Source: *Pesquisa Dimensões Sociais da Desigualdade* (PDSO)

<sup>36</sup> The Renewal Charismatic Movement represent the 17,7% of Catholics Practicing  
Cfr. CERIS (Centro de Estatística Religiosa e Investigações Sociais), *Desafios do Catolicismo na cidade. Pesquisa em regiões metropolitanas brasileiras*, Gráfica São Paulo (SP), Rio de Janeiro (RJ), 2002

## Annex: religious denominations

Legend:

1	Católico
2	Pentecostal
3	Neo Pentecostal
4	RCC
5	Sem religião
6	Outros grupos

Name	Group
Sem religião	5
Agnóstico	5
Ateu	5
Católica Apostólica Romana	1
Católica Carismática; Católica Pentecostal	1
Católica Armênia; Católica Ucraniana	1
Católica Apostólica Brasileira	6
Católica Ortodoxa	6
Ortodoxa Cristã	6
Outras ortodoxas cristãs	6
Outras católicas	1
Igrejas Luteranas	6
Outras evangélicas de missão luterana	6
Igreja Evangélica Presbiteriana	6
Igreja Presbiteriana Independente	6
Igreja Presbiteriana do Brasil	6
Igreja Presbiteriana Unida	6
Presbiteriana Fundamentalista	6
Presbiteriana Renovada	6
Outras evangélicas de missão presbiteriana	6
Igreja Evangélica Metodista	6
Evangélica Metodista Wesleyana	2
Evangélica Metodista Ortodoxa	6
Outras evangélicas de missão metodista	6
Igreja Evangélica Batista	6
Convenção Batista Brasileira	6
Convenção Batista Nacional	2
Batista Pentecostal	2
Batista Bíblica	6
Batista Renovada	2
Outras evangélicas de missão batista	6
Igreja Evangélica Congregacional	6
Igreja Congregacional Independente	6
Outras evangélicas de missão congregacional	6
Igreja Evangélica Adventista do Sétimo Dia	6
Igreja Evangélica Adventista Movimento de Reforma	6
Igreja Evangélica Adventista da Promessa	2
Outras evangélicas de missão adventista	6



270 Igreja Evangélica Episcopal Anglicana	6
279 Outras evangélicas missão episcopal anglicana	6
Igreja Evangélica Menonita	6
Outras evangélicas de missão menonita	6
Exército da Salvação	2
Igreja Evangélica Assembleia de Deus	2
Igreja Assembleia de Deus Madureira	2
Igreja Assembleia de Deus Todos os Santos	2
Outras evangélicas de origem pentecostal assembleia de Deus	2
Igreja Congregação Cristã do Brasil	2
Outras evangélicas de origem pentecostal congregação cristã do Brasil	2
Igreja Evangélica Pentecostal O Brasil para Cristo	2
Outras evangélicas de origem pentecostal o Brasil para Cristo	2
Igreja Evangelho Quadrangular	2
Outras evangélicas de origem pentecostal evangelho quadrangular	2
Igreja Universal do Reino de Deus	3
Outras evangélicas de origem neopentecostal universal do reino de Deus	3
Igreja Evangélica Casa da Bênção	2
Outras evangélicas de origem pentecostal casa da bênção	2
Igreja Evangélica Casa de Oração	2
Outras evangélicas de origem pentecostal casa de oração	2
Igreja Evangélica Pentecostal Deus é Amor	2
Outras evangélicas de origem pentecostal Deus é amor	2
Igreja Evangélica Pentecostal Maranata	2
Outras evangélicas de origem neopentecostal maranata	2
Evangélica renovada, restaurada e reformada não determinada	6
Pentecostal renovada, restaurada e reformada não determinada	6
Outras evangélicas renovadas não determinadas	2
Igreja Evangélica Comunidade Cristã	6
Outras evangélicas de origem pentecostal comunidade cristã	3
Igreja de Origem Pentecostal Nova Vida	2
Outras evangélicas de origem pentecostal nova vida	2
Igreja Evangélica Comunidade Evangélica	3
Outras evangélicas de origem pentecostal comunidade evangélica	3
Outras Igrejas Evangélicas Pentecostais	2
Igreja Internacional da Graça de Deus	3
Igreja Apostólica Renascer em Cristo	3
Igreja Evangélica Reviver em Cristo	3
Igreja Universal dos Filhos de Deus	2
Igreja Mundial do Poder de Deus	3
Igreja Pentecostal Avivamento Bíblico	2
Outras evangélicas de origem pentecostal avivamento bíblico	2
Igreja Evangélica Cadeia da Prece	3
Outras evangélicas de origem pentecostal cadeia da prece	3
Igreja do Nazareno	2
Outras evangélicas de origem pentecostal igreja do Nazareno	2
Evangélica não determinada	6

Declaração múltipla de religião evangélica	6
Outros evangélicos	6
Igreja de Jesus Cristo dos Santos dos Últimos Dias/Mórmons	6
Outras igrejas de Jesus Cristo dos santos dos últimos dias	6
Testemunha de Jeová	6
Outros evangélicos testemunha de Jeová	6
Legião da Boa Vontade/Religião de Deus	6
Espiritualista	6
Outras espiritualistas	6
Espírita, Kardecista	6
Outras Espíritas	6
Umbanda	6
Outras umbandas	6
Candomblé	6
Outras candomblés	6
Religiosidades afro-brasileiras	6
Declaração múltipla de religiosidade afro com outras religiosidades	6
Outras declarações de religiosidade afro-brasileira	6
Judaísmo	6
Essenismo	6
Outras judaísmos	6
Hinduísmo	6
Ioga	6
Outras hinduísmo	6
Budismo	6
Nitiren	6
Budismo Theravada	6
Zen Budismo	6
Budismo Tibetano	6
Soka Gakkai	6
Outros budismos	6
760 Igreja Messiânica Mundial	6
Seicho No-le	6
Perfect Liberty	6
Hare Krishna	6
Discipulos Oshoo	6
Tenrykyo	6
Mahicari	6
Religiões Orientais	6
Bahai	6
Shintoísmo	6
Taoísmo	6
Outras religiões orientais	6
Islamismo	6
Druso	6
Outros Islamismos	6
Esotérica	6
Racionalismo Cristão	6

Outras esotéricas	6
Tradições Indígenas	6
Santo Daime	6
União do Vegetal	6
A Barquinha	6
Neoxamânica	6
Outras indígenas	6
Religiosidade cristã não determinada	6
Religiosidade não determinada ou maldefinida	6
Declaração múltipla de religiosidade católica/outras religiosidades	1
Declaração múltipla de religiosidade evangélica/outras religiosidades	6
Declaração múltipla de religiosidade católica/espírita	1
Declaração múltipla de religiosidade católica/umbanda	1
Declaração múltipla de religiosidade católica/candomblé	1
Declaração múltipla de religiosidade católica/kardecista	1