



ESADE



---

### III COLOQUIO PREDOCTORAL IBEROAMERICANO

## **The Influence of Materialism on the Propensity to Contract Consumption Debt in the Context of Low-Income Families in the City of São Paulo**

por

Mateus Canniatti Ponchio  
Doctoral Candidate

Supervisor  
Professor Francisco Aranha, Ph.D.

Fundação Getulio Vargas  
Escola de Administração de Empresas de São Paulo  
Brazil



## PRESENTATION

Nearly one year ago, a group of professors and students at FGV-EAESP started an effort of coordination of research activities aiming the development of a common field study.

The elected subject, which fosters particular interests and motivation from all members in the group, is the investigation of “Microcredit for Low Income Households in Sao Paulo”. The focus lies on mechanisms for identifying and characterizing target households; credit worthiness evaluative methods; resource application intentions manifested by household members; determining factors of resource application and its constraints (there is particular interest on family members’ education among those factors); welfare impacts of lending; and default levels.

The present thesis proposal was developed in this context.

**NOTE:** THE ORIGINAL VERSION OF THIS WORK IS WRITTEN IN PORTUGUESE.

## SUMMARY

<b>1</b>	<b>INTRODUCTION</b> .....	<b>5</b>
<b>2</b>	<b>OBJECTIVES</b> .....	<b>7</b>
<b>3</b>	<b>RELEVANCE</b> .....	<b>9</b>
<b>4</b>	<b>LITERATURE REVIEW</b> .....	<b>10</b>
4.1	MATERIALISM .....	10
4.1.1	<i>Possession and Possessiveness</i> .....	10
4.1.2	<i>Belk's Materialism Scale</i> .....	11
4.1.3	<i>Richins and Dawson's Materialism Scale</i> .....	11
4.1.4	<i>Materialism and Age, Gender, Education and Income</i> .....	12
4.1.4.1	Materialism and Age .....	14
4.1.4.2	Materialism and Gender .....	14
4.1.4.3	Materialism and Education .....	14
4.1.4.4	Materialism and Income .....	15
4.2	ATTITUDE TO DEBT .....	15
4.3	RELATIONSHIP BETWEEN MATERIALISM AND ATTITUDE TO DEBT .....	16
4.4	PROPENSITY TO CONTRACT CONSUMPTION DEBT .....	16
4.4.1	<i>Contracting Credit in the City of Sao Paulo</i> .....	17
4.5	RELIGION.....	17
<b>5</b>	<b>METHODOLOGY</b> .....	<b>19</b>
5.1	SAMPLING PROCEDURE AND STRATEGY FOR PRIMARY DATA COLLECTION .....	19
5.2	CONSTRUCT MEASUREMENT .....	21
5.2.1	<i>Scales</i> .....	21
5.2.1.1	Materialism .....	21
5.2.1.2	Attitude to Debt.....	22
5.2.1.3	Propensity to Contract Credit Consumption .....	23
5.3	STATISTICAL TESTS TO CHECK THE PROPOSED HYPOTHESES .....	23
<b>6</b>	<b>PROJECT CHRONOGRAM OF ACTIVITIES</b> .....	<b>26</b>
	REFERENCES .....	
		<b>31</b>
	APPENDIX I .....	
		<b>34</b>

## 1 INTRODUCTION

The population in the city of Sao Paulo reached 10.435.546 habitants in the year 2000, which correspond to 3.131.389 families (IBGE – The Brazilian Institute of Geography and Statistics, 2000). About 30% of these families are low-income families, which means earning a monthly income of less than 4 minimum salaries (equivalent at that time to R\$ 604.00).

Observing the information concerning consumption in a survey issued by IBGE in 2004 which had taken place in 2002 and 2003 (as summarized in the table below), we realize that the spending percentage on goods and non-essential services such as entertainment and sports, manicure, pedicure, ceremonies and parties, is bigger among families with higher monthly income.

**Table 1:** Distribution of Monthly Average Consumption Expenses for Families in the State of Sao Paulo (%)

Types of Expense	Total	Classes of monetary and non-monetary family monthly income									
		Up to 2 MS (1)	More than 2 to 3 MS	More than 3 to 5 MS	More than 5 to 6 MS	More than 6 to 8 MS	More than 8 to 10 MS	More than 10 to 15 MS	More than 15 to 20 MS	More than 20 to 30 MS	More than 30 MS
<b>Consuming expenses.....</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Food.....	17.69	25.72	26.41	23.02	24.26	21.76	20.23	18.75	16.17	14.09	12.88
Housing.....	36.88	47.74	49.94	43.86	40.86	40.86	37.90	37.66	33.75	35.58	31.53
Clothing.....	4.94	5.13	5.42	5.66	5.98	5.49	5.76	5.12	5.51	4.28	3.94
Transport.....	19.26	9.16	5.98	11.82	12.97	14.83	15.98	19.82	22.65	22.44	24.02
Hygiene & personal care.....	1.91	2.09	1.85	2.21	2.30	2.22	2.88	1.73	1.91	1.44	1.69
Health care.....	6.75	4.87	4.34	5.72	5.21	5.87	6.50	5.75	6.18	7.10	8.90
Education.....	4.87	0.20	0.91	1.14	1.37	1.99	3.68	4.54	4.99	7.35	7.75
Amusement & sports.....	1.45	0.18	0.49	0.67	0.61	0.78	1.23	1.44	1.92	1.94	1.84
Manicure & podiatrist.....	0.21	0.08	0.07	0.14	0.06	0.15	0.22	0.16	0.26	0.25	0.26
Parties & ceremonies.....	0.58	0.17	0.13	0.30	0.64	0.59	0.75	0.31	0.57	0.95	0.62
Other consumptions.....	5.47	4.67	4.45	5.45	5.76	5.46	4.87	4.70	6.09	4.58	6.55

**Source:** IBGE (2004)

**Note:** Selected and treated information.

(1) The amount of R\$ 200.00 was considered for the minimum salary (MS), as it was the amount for the MS at the date of the quoted survey (February, 2003).

Accepting the idea that the desire for consuming non-essential goods and services, does not depend on income (BELK, 1999; BELK; GER; ASKEEGARD, 2003), we can conclude that a great number of people, due to their limited income, don't consume these products despite their desire to do so.

Concerning that subject, in the underneath passage a short story is reproduced. It was published recently in a widely distributed newspaper in the capital of the state of Sao Paulo:

[...] It is given a moral connotation to the act of consuming. It is a condemnation mainly on that individual, who does not

arrange his income, and gets involved in abusive interests as the only way for consuming goods.

Some years ago, the baby sitter of my daughter wanted to take my daughter to her house in the outskirts of the city. They went by bus. In the evening we went to pick her up. We entered the house that was built by the owners themselves above another construction. There was a living room, a bedroom and a bathroom. The living room was impeccable with cheap shiny furniture, a simple TV set and a refrigerator. All was bought in one of those popular shops which sell in several monthly payments.

The young woman was able to buy that due to her having a fixed job and salary. That enabled her, for the first time, to get an access to the credit. What we saw there was not a sinful figure of extravagant person, rather than the real happiness of someone who experienced the feeling of citizenship after having access to goods of consumption, even by paying abusive interests.

In this country [...], people worship the market economy but condemn all forms of consumption, justify usury and condemn the victim. Morals for morals reversed even the secular ethics of the church. Usury became virtue. The inability to defend oneself against usury made it an addiction. (NASSIF, 2005, p. B4).

In few lines, the text deals with daily situations featured by low-income families in the city of Sao Paulo: their desire to consume, credit access difficulties and morals concerning the issue of getting into debt.

These subjects will be approached in this study in four variable aspects: materialism, attitude to debt, propensity to contract consumption debt and religiosity. The relationship between these variables will be explained in the following items.

## 2 OBJECTIVES

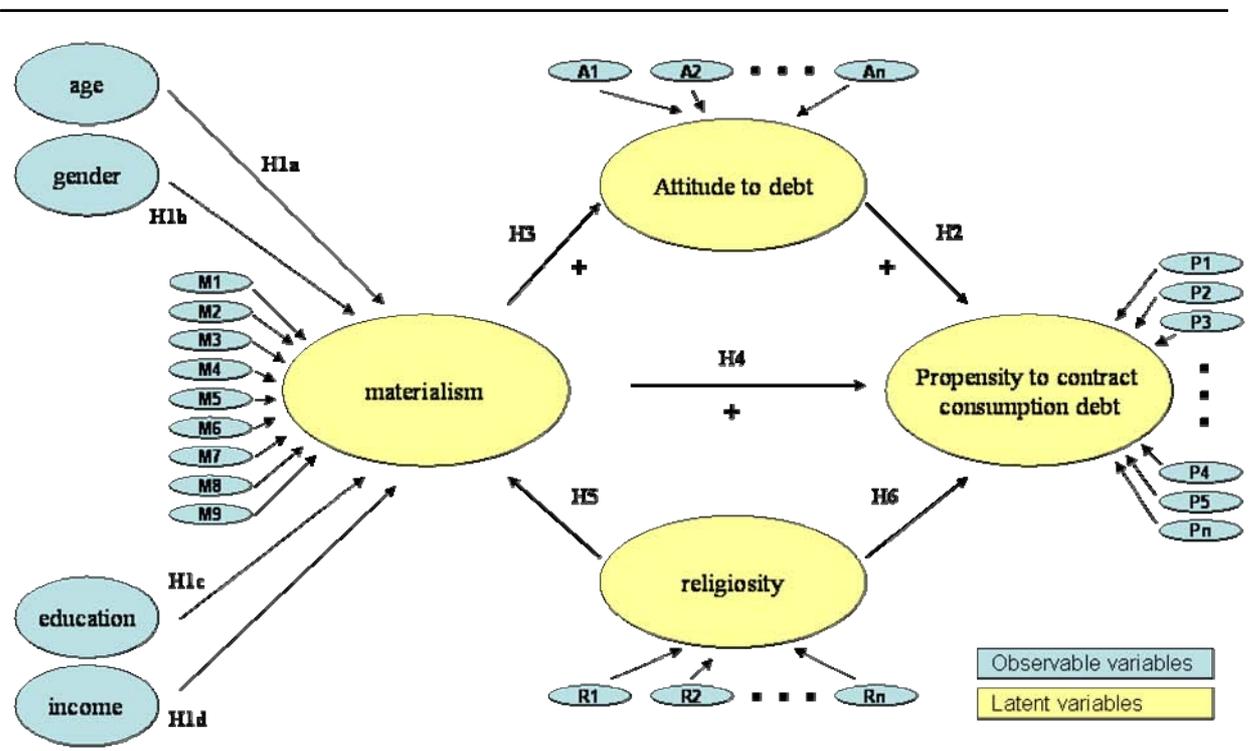
The objective of this research is to examine the influence of materialism on one's propensity to contract credit for consumption. It is speculated that people who are more materialists are more inclined to getting into consumption debts.

The focus of this study will be the population of low-income families in the city of Sao Paulo. Previous studies have shown that materialism can be elevated even among individuals of restricted economic ability (RICHINS; DAWSON, 1992; MICKEN, 1995; WATSON, 2003). For those people, loans are alternatives for the problem of budget restrictions and permit them to satisfy their desires of consumption (RICHINS; RUDMIN, 1994).

Having in mind that religiosity can influence individuals' attitudes and behaviors, mainly concerning materialism aspects (WRIGHT; LARSEN, 1992), religions that are adapted and the degree of involvement to them by the participants of the study will be measured and controlled.

A fourth variable analyzed is the attitude towards getting into debt. It is expected that individuals with more positive attitudes toward debt have higher propensity to in fact get into debt, comparatively to those who have more negative attitudes toward debt (DAVIES; LEA, 1995). In that way, we evaluate the assertion that individuals that are more materialistic have more positive attitudes towards being in debts than those who are less materialistic (WATSON, 1998).

Figure 1 summarizes, in a schematic way, the associations analyzed in this study:



**Figure 1:** Relationships among the Variables Considered in this Study

The co-variables age, gender, education and income will be controlled; specific hypotheses concerning their relation with materialism will be evaluated.

### 3 RELEVANCE

Abraham Maslow (1954), observing the early North American consuming society, suggested a motivational model in which the search to overcome physiological and security necessities anticipate the search to overcome esteem, social recognition and self-fulfillment necessities. Lately however, researches' observations started defying Maslow's model; it has been said that the model is inefficient to accommodate such consuming practices like buying the latest models of mobile phones or tennis shoes of expensive brands in substitution for food or family hygiene items (GER, 1992; BELK, 1999). These studies offer evidence that the search for dignity through consuming luxury goods is a strong motivation for human beings. For Belk, Ger and Askegaard (2003), the desire to consume and the search for happiness thought consumption are intimately present in the minds of consumers, including those of low-income.

Recent historical analysis present divergent theories concerning the origin of contemporary standards for happiness search through consumption (BELK, 1985). Nevertheless, there's agreement that consumption in favor of happiness has reached a high and essential level in industrial and pos-industrial life (BELK, 1985; RICHINS; MACKEAGE; NAJJAR, 1992; WEBSTER; BEATTY, 1997). This orientation for consumption has been denominated materialism and is defined by Richins and Dawson (1992) as the importance attributed to the possession and acquisition of material goods to reach life objectives or well being.

Materialism is of great interest for academics, social analysts and public politics constructors. Since 1992, more than 100 empirical studies have examined this concept and numberless articles concerning materialism in North-American society were conveyed by the media (RICHINS, 2004). However, in Brazil, there is no register of empirical studies concerning materialism as defined by Belk (1985) or Richins and Dawson (1992).

Since consumption involves almost always monetary expenditure, credit contract can happen to make it feasible. For Lea, Webley and Levine (1993), there are two topics of major interest concerning the subject of getting into debt: those factors that induce some people to contract and use credit more than others, and those which provoke difficulties for the debt to be paid off and, in its limit, start credit crises. In this study, we are interested in the first of these topics. Examining the role of materialism in the propensity to contract consumption debt will help in explaining the dynamic of this process in the context of low-income family in the city of Sao Paulo.

Finally, religion and religiosity will be approached due to the influence that they may cause as much on consumption as on the attitude and propensity of getting into debt (WRIGHT; LARSEN, 1992).

## 4 LITERATURE REVIEW

The main concepts that are applied in this study are presented underneath. The interactions between them, and also the hypotheses that are tested in this study, are presented along the text.

### 4.1 Materialism

There are many references to what materialism means in literature (MOSCHIS; CHURCHILL, 1978; BELK, 1984, p.291; RASSULI; HOLLANDER, 1986, p.10; RICHINS; DAWSON, 1992).

The two definitions mostly used in the consumer behavior literature, exactly like the two most used scales to measure materialism, were proposed by Belk (1984; 1985) and by Richins and Dawson (1992).

According to Belk (1984, p. 291), **materialism** is “the importance a consumer attaches to worldly possessions. At the highest levels of materialism, such possessions assume a central place in a person’s life and are believed to provide the greatest sources of satisfaction and dissatisfaction in life”.

As for Richins and Dawson (1992), individuals holding strong material values place possessions and their acquisition at the center of their lives, value possessions as a means of achieving happiness, and use possessions as indicators of their own and other’s success.

From the two definitions above, the importance of possessiveness to characterize materialism can be highlighted. In the following lines the concept of possessiveness will be explored; then, the scales for materialism, proposed by Belk and by Richins and Dawson, will be better specified.

#### 4.1.1 Possession and Possessiveness

Belk (1983, p. 514) defines possessiveness as “the inclination and tendency to retain control or ownership or one’s possessions, whether confined to individual objects or generalized to all of one’s possessions”.

Belk (1983, 1985; GER; BELK, 1990) tries to connect materialism to the process of definition and extension of the “self” through possessions. Possessions embody and reflect multiple significations that mould and are molded by personal identities. For Belk, the relation between the “self” and possessions is magical, and thus cannot be explained by theories that rationalize behavior; the “self” can be expanded by incorporation of objects, people and ideas, and has multiple layers. In such structure, some objects may become more central than others; objects can also have different meanings, relating to dear ones, memories, beliefs (for example, religious objects) and so on.

However, the presumption that individuals have a central and unified “self” is not coherent with the post-modernist ideas of multiple and fragmented “self” (FIRAT; VENKATESH, 1995) and of social and cultural construction of meanings. This post-

modernist vision seems to accommodate better the relation between the “self” and possessions.

Richins (1994) has an alternative way of characterizing possessions and materialism. For her, material goods are used by people to characterize and communicate their values.

#### 4.1.2 Belk’s Materialism Scale

In his first attempt to measure materialism, Belk (1984) used three theoretical constructs that already existed: possessiveness, non-generosity and envy. According to the author, these constructs are different traits of materialism. In a subsequent study, Belk (1985) combined these theoretical constructs to obtain, differently from the previous study, a unique and wide-ranging scale for materialism. The study suggested that those characteristics (defined in the following paragraph) don’t deplete completely the domain of materialistic traits.

- **Possessiveness** – refer to item 4.1.1 above.
- **Non-generosity** – “unwillingness to give possessions to or share possessions with others” (BELK, 1984, p. 292).
- **Envy** – “displeasure and ill-will at the superiority of (another person) in happiness, success, reputation, or the possession of anything desirable” (SCHOECK, 1966 apud BELK, 1984, p. 293).

In a comparative study of materialism between different countries, Ger and Belk (1996) used an adapted version of the scale proposed in 1985. Supported by collected data, the authors suggested adaptations in the sub-scales of possessiveness, non-generosity and envy. Mainly, they included a new dimension in the domain of materialism: a scale of Preservation. According to the authors, the term preservation would measure the excessively or obsessively valuation of acquiring and keeping possessions (GER; BELK, 1996, p. 63).

Criticisms to the Belk’s materialism scale concern basically its validity and reliability. In a comparative study of materialism scales, Micken (1995) tested a revised version of the Belk scale in a sample of North-American adults; Cronbach’s alpha was computed as a measure of internal reliability, and indicated 0.66 for the scale as a whole. In a study by Ger and Belk (1996), alpha coefficients varied between 0.46 and 0.79, with the average of 0.61 for twelve data sets, each one collected in a different country. For Micken (1995), the existence of a more reliable instrument to measure materialism – the scale of Richins and Dawson – justifies the no adoption or the readjustment of the Belk scale.

#### 4.1.3 Richins and Dawson’s Materialism Scale

The Richins and Dawson’s materialism scale (1992) is based both by theoretical and popular definitions of the term (FOURNIER; RICHINS, 1991), and has the concepts of possession and acquisition as the central ideas.

The scale has three dimensions (RICHINS; DAWSON, 1992):

- **Centrality** – a construct that indicates the position of possessions and acquisitions in a person's life; possessions and acquisitions would be main elements in the lives of the materialists.
- **Happiness** – a construct that indicates the degree of hope of an individual in the idea that possessions and acquisitions will bring happiness and well-being.
- **Success** – A construct that indicates a person's tendency to judge himself and the others in terms of the amount and quality of one's possessions.

Differently from Belk (1985), to whom materialism is a personality trait, Richins and Dawson (1992) understand it as a cultural value.

In a recent study, Richins (2004) revised works that used the scale of Richins and Dawson (1992) and, starting from 15 raw data sets, concluded that the scale performed well in terms of reliability and empirical usefulness, although the originally proposed dimensional structure was not always present in the data. The results were considered satisfactory and clearly superior to those found by studies that utilized the Belk scale. Richins (2004) proposed the reduction of the original scale, compounded by 18 items, to 15. She also proposed reduced scales of 6 and 9 items to measure materialism as a whole. The scale of 9 items was recommended for studies whose objective is to work only with the global indicator for materialism, without the indicators of each one of the three sub-scales (RICHINS, 2004).

#### 4.1.4 Materialism and Age, Gender, Education and Income

In the consumer behavior literature, there hasn't always been a common sense regarding the associations between materialism and age, gender, education and income. The following table resumes empirical evidences found for these associations from selected papers:

Study	Scale used to measure materialism	Sample	Research context	Reported relationship between materialism and			
				age	gender	education	income
BELK, 1985	Belk (1985)	2 samples (n1 = 338 and n2 = 99)	discuss the relevance of materialism to the consumer behavior literature and propose a scale to measure the construct	yes	yes (*)	no	no
RICHINS; DAWSON, 1992	Richins and Dawson (1992), 18 original items	3 samples (n1 = 250; n2 = 235 and n3 = 205)	analyse materialism and its measurement and present the development of a new scale	yes	yes (*)	yes (*)	yes (*)
MICKEN, 1995	Ger and Belk (1996), under construction (before publication)	266 North-American adults from the middle east	analyse the Ger and Belk's materialism scale in terms of reliability	yes	yes (*)	yes (*)	yes (*)
WATSON, 1998	Richins and Dawson (1992), 18 original items	299 students from a New Zealand's university	examine the relationship between material values, attitudes toward debt and levels of indebtedness	yes (*)	yes (*)	no	no
WATSON, 2003	Richins and Dawson (1992), 18 original items	322 North-American individuals from the State of Pennsylvania	investigate the relationship between materialism and the propensity to spend and / or save and the attitudes and behaviors toward borrowing money	yes	yes (*)	yes (*)	yes (*)

(\*) No statistically significant relation was detected.

**Table 2:** Associations Among Materialism and Selected Demographic Variables

#### *4.1.4.1 Materialism and Age*

In the sample of Watson (1998), 39% of the respondents were 20 years old or less, 56% were between 20 and 24 years old and only 5% were more than 25 years old. It wasn't detected significant statistical relation between materialism and age in this context.

In another study, Watson (2003), grouping the respondents in categories of 18 to 24 years old (5%), 25 to 44 years old (48%), 45 to 64 years old (30%) and 65 years old or more (17%), concluded that younger individuals are more materialistic (chi-square equal to 7.0, significant at 0.07). This relation is coherent with the one found by Micken (1995): for her, the linear correlation between age and materialism was 0.19, significant at 0.002. For both Richins and Dawson (1992) and Belk (1985), the level of materialism declines after the middle-age.

Thus, in this work it is expected that:

**H1a:** There is dependence between materialism and age; young adults tend to be more materialistic than older ones.

#### *4.1.4.2 Materialism and Gender*

In the sample of Watson (1998), 55% of the respondents were male and 45% were female. No significant relation between gender and materialism was found. The results are coherent with the ones found in Watson (2003), Micken (1995), Richins and Dawson (1992) and Belk (1985).

Thus, it is conjectured in this study that:

**H1b:** There is no dependence between materialism and gender.

#### *4.1.4.3 Materialism and Education*

Dividing the respondents in 6 groups, concerning years of study, Watson (2003) concluded that there wasn't relation between education and materialism. The studies of Micken (1995) and Richins and Dawson (1992) have reached the same result.

Thus, it is believed in this study that:

**H1c:** There isn't dependence between materialism and education.

#### 4.1.4.4 *Materialism and Income*

Dividing the respondents in 5 groups by income, ranging from less than \$15,000 to more than \$ 75,000 dollars per year during the time of the study, Watson (2003) did not find association between materialism and income. The studies of Micken (1995) and Richins and Dawson (1992) also had converging conclusions.

However, the target population of none of these studies was restricted to low income individuals. As presented in item 1 of this proposal, in the context of low income families of Sao Paulo, small variations of income can allow bigger variations in the expense with consumption of non-essential goods and services. In this study it is speculated that the jump between being at the margin and participating in the consumption society can be reflected positively in the levels of materialism of these individuals. Thus:

**H1d:** Among the low income population, the level of materialism of an individual is positively influenced by income.

## 4.2 **Attitude to Debt**

According to Davies and Lea (1995), research on running into debt, in the economic psychology domain, had gained prominence from the works of Katona (1975). They had expanded quickly in recent years, as it can be verified by the works of Livingstone and Lunt (1992), Lea, Webley and Levine (1993), Tokunaga (1993) and Watson (1998, 2003).

According to Katona (1975), there are three reasons that explain why an individual may spend more than he earns: (i) low income, thus his necessary expenses are not covered; (ii) high income combined with high desire to spend; and (iii) lack of desire not to spend (independently of the income). The study is relevant in the sense that it puts for discussion the origin of credit problems: getting into debt and, in the limit, credit default are provoked directly by adverse economic factors, or are, also, caused by psychological factors, in particular for the biggest tolerance for being into debt? In this thesis, it is believed that psychological factors can explain the behavior of individuals in what it says about the act of credit contract for consumption. As a result, the second hypothesis that will be tested can be stated in the following way:

**H2:** The more positive the attitude toward debt, the greater is the propensity to contract credit for consumption.

It must be noticed that to be tolerant towards being in debt does not implicate it. It is possible, also, that the causality relation occurs in the opposing direction: being in debt contributes positively in forming the individual's attitude toward debt. A way to investigate causality relations is by using longitudinal experiments (PEDHAZUR; SCHMELKIN, 1991), in which time changes in attitude and in behavior can be observed. Longitudinal studies are, however, onerous; they require a long time and are frequently weakened by participant attrition. Davies and Lea (1995), in their study concerning debt

among university students, had simulated a situation of time lapse controlling, simultaneously, students of first and last years. This pseudo-longitudinal study concluded that the causal relation between attitude and behavior is in a way that the attitude toward debt influences credit contract itself.

### **4.3 Relationship between Materialism and Attitude to Debt**

Materialistic individuals have been characterized as excessive consumers motivated by the pleasure of the next acquisition (BELK, 1985; FOURNIER; RICHINS, 1991; RICHINS; DAWSON, 1992). By contracting credit, these people can advance or even make the excessive consumption feasible. According to Watson (1998), socio-demographic and behavioral variables are commonly tested in models on indebtedness, but few studies had searched to understand the relation between materialism and indebtedness. It is speculated that high materialistic individuals, to accommodate their high appetite for consumption, have more positive attitude toward debt than their low materialistic partners (RICHINS; RUDMIN, 1994).

Reference groups also influence on the individual's consumption decisions. The Duesenberry's theory of consumption (1949) placed social comparisons as central in consumption decisions. The individuals would consume what they had imagined as normal or valued by their groups of reference. In consequence, if an individual had enough money to acquire everything whatever he imagined as necessary, then probably he would save the exceeding capital; otherwise, he would be more inclined to contract credit (WARNERYD, 1989). Richins (1992) suggested that people with high levels of materialism consider people of higher socio-economic level as reference. Thus, to follow the materialistic demands of consumption, people who are more materialistic would be more inclined to running into debt.

Out of that argument, a third hypothesis can be outlined:

**H3:** The higher the level of materialism of an individual, the more positive his attitude toward debt will be.

### **4.4 Propensity to Contract Consumption Debt**

While in developed countries a materialistic lifestyle seems to be integrant part of modern life (WATSON, 2003), in the developing countries there's still multitudes of individuals for whom consumption is something both distant and desired (BELK, 1999).

With the proliferation of stores "which sell in several monthly payments" (NASSIF, 2005, B4), the low income population gained the possibility to advance or even make the consumption of higher value material goods possible.

In conformity with the previously formulated hypotheses, it is expected that:

**H4:** Individuals who are more materialistic are more inclined to contract credits for consumption.

#### 4.4.1 Contracting Credit in the City of Sao Paulo

Credit for monetary loans can be classified in two major groups: production credit and consumption credit.

For small loans, production credit has been called microcredit, defined as credit for entrepreneurs that own productive units with less than 5 workers and annual revenues not greater than R\$ 220,000.00 (BANCO CENTRAL DO BRASIL, 2004); for low income families, microcredit represents a potential for income diversification and asset acquisition (PARENTE, 2002).

This work analyses consumption credit – those not destined to productive activities. Many agents, such as financial institutions, department stores, relatives and friends (NASSIF, 2005, B4) supply this type of credit. Interest rates, however, are often higher than for production credit, and are dependent of difficult to perform credit analysis.

In general, transaction costs for granting consumption credits are elevated and are compensated by high interest rates (PARENTE, 2002).

## 4.5 Religion

Keng, Swinyard and Yin (2002) understand religion as a unified system of beliefs and practices relative to sacred things. For these authors, religiosity is defined as the degree to which beliefs in specific religious values and ideals are held and practiced by an individual.

According to Wright and Larsen (1992), many religions such as the Judaism, the Christianity, the Buddhism, the Hinduism and the Islamism have condemned materialism, while others, reflecting the Calvinistic conception of justice, maintained balance between materialism and religion. The authors have studied in depth the Book of Mormon, and had evidenced that the Mormon leaders had established a series of restrictions to prevent the members of the church from accumulating material possessions. “The Book of Mormon suggests that the acquisition of wealth reflects righteousness, but it also suggests that once people obtain wealth and material possessions, they turn away from God, who then punishes them by stripping them of their wealth” (WRIGHT; LARSEN, 1992, p. 50).

Belk (1985) verified, as expected, that blue collar and religious institute groups would have the highest and lowest materialism scores in his research concerning materialism.

Thus, in this study, it is postulated that:

**H5:** There is dependence between religion and materialism; and

**H6:** There is dependence between religion and propensity to contract credit for consumption.

## **5 METHODOLOGY**

This item is divided into three parts: first, the sampling procedure and the strategy for data collection are defined; then, the forms to measure each construct are detailed; and, finally, the statistical techniques to be used in the research are presented.

### **5.1 Sampling Procedure and Strategy for Primary Data Collection**

The research universe comprehends the heads of low income families in the city of Sao Paulo who live in domiciles that have electricity meters installed by ELETROPAULO and that are located in geographic sectors in which at least 80% of the families have low income, understood as total monthly income not superior to 4 minimum salaries.

The concept of family adopted in this research is the same of the IBGE (2004, p. 19): "people who are joined by bows of kinship, domestic dependence or norms of coexistence, resident in the same domiciliary unit, or a person who lives alone in a domiciliary unit". The city of Sao Paulo is divided into 96 districts, each one containing hundreds of geographic sectors. A district is a "territorial and administrative division where certain administrative, judicial or fiscal authority exerts their jurisdiction" (SEADE, 2005). Geographic sectors are geographic units used by the IBGE to divide the Brazilian territory; each one inhabits approximately 300 domiciles.

According to the Census of 2000, published by IBGE (2000), about 37.69% of the families in Sao Paulo lived with less than 5 minimum salaries of total monthly income. Table 3 below presents selected data:

	Percentage of Families by Class of Income (in Minimum Salaries – MS)					
	Less than 2	Between 2 and 5	Between 5 and 10	Between 10 and 15	Between 15 and 25	More than 25
City of Sao Paulo	13.3	24.39	25.97	11.29	10.98	14.06
Marsilac	44.10	31.22	19.47	4.31	0.19	0.71
Sapopemba	18.08	31.19	30.19	10.75	6.79	3.00
Pinheiros	3.77	5.98	14.34	9.60	16.53	49.78
Moema	2.91	3.43	9.95	8.55	13.78	61.38

**Table 3:** Frequency Distribution of Income of the Families in the City of Sao Paulo and in Selected City Districts

**Source:** IBGE (2000)

**Notes:** Excluding collective domiciles.

Minimum salary of reference used in the Census of 2000: R\$ 151.00. Selected data.

The variability in the format of the distribution of frequency of familiar income in the Sao Paulo districts observed in table 2 above is accentuated when the geographic sectors are considered.

For this research, 30 geographic sectors will be sampled; new assortments will define 15 domiciles for each sector, totalizing 450 domiciles in the sample. In the cases where the visited domicile does not possess electricity meter clock installed by ELETROPAULO, the domicile will be substituted. The fact that ELETROPAULO covers more than 99.5% of the domiciles of the city of Sao Paulo guarantees that the percentage of substitution in function of the inexistence of electricity meter is small.

In each visited domicile, the interviewer will look for the responsible for financial decisions (identified as "head" in this proposal), being able to return to the domicile (if necessary) up to two times to find him / her. In the domiciles inhabited by more than one family, the heads of each family will be interviewed.

Questionnaires will be fulfilled by the field interviewers according to their dialog with the respondents.

The primary data that will be obtained through this process is sufficient to test the theoretical model proposed in part 2 of the present study. No secondary data will be used to test the aforementioned hypotheses.

## 5.2 Construct Measurement

The demographic variables to be measured are:

- Age – respondent's number of completed years of age;
- Gender – respondent's gender, whether male or female;
- Education – respondent's educational level;
- Color or race – respondent's color or race;
- Individual Income – total individual monthly income (including incomes from work, pension, rent, scholarship money, unemployment insurance, and so on);
- Family Income – total familiar monthly income (the sum of incomes for all the family individuals living in the domicile);
- Religion – respondent's religion (examples: catholic, protestant, evangelic, spiritualist and so on);
- Religiosity – indicators of the importance of religion for the individual;
- Frequency in which the respondent goes to church (or temple, when applied);

The constructs **materialism**, **attitude to debt** and **propensity to contract consumption debt** will be measured through specific scales, detailed in the following items.

### 5.2.1 Scales

The psychometric literature has been relatively consistent in describing the basic qualities a good scale must possess (RICHINS, 2004), and these qualities are well summarized by Bearden and Netemeyer (1999): content validity, dimensionality, confidence in the internal consistency, construct validity and response bias.

Three scales will be used to measure, respectively, materialism, attitude to debt and propensity to contract consumption credit. Each one of them is described ahead.

#### 5.2.1.1 Materialism

The level of materialism of the individuals will be measured by means of the Richins (2004) scale, specifically by the 9-item reduced version.

The construct of materialism has three dimensions: centrality, happiness and success. Each one will be represented by three items. The items will be measured in a 5-point Likert scale, ranging from 1 = 'totally disagree' to 5 = 'totally agree'. The level of

materialism of the individual is obtained by adding the item scores. This procedure is precisely the same described by Richins (2004).

To accomplish the first pre-test, 2 researchers had translated the original items from English to Portuguese, independently. The two scales had been, then, compared and transformed into an only one, after quarrel on the divergent terms.

44 questionnaires were filled in, throughout one week in May, by two researchers. The respondents were adult customers of a snacks box in the city of Sao Paulo. They received a simple meal in exchange for their participation in the research. Only people who had a monthly income of less than R\$ 1,200.00 (4 minimum salaries) were interviewed. The results are synthesized in the following table:

**Table 4:** Statistics for the 1<sup>st</sup> Pre-Test of the Materialism Scale

Item	Statement(*)	Count	Min.	Max.	Mean	St.Dev.
1	Eu admiro pessoas que possuem casas, carros e roupas caras.	44	1	5	2.20	1.46
2	Eu gosto de gastar dinheiro com coisas caras.	44	1	5	1.55	1.04
3	Minha vida seria melhor se eu tivesse muitas coisas que não tenho.	44	1	5	3.16	1.51
4	Eu me incomodo quando não consigo comprar coisas que meus amigos têm.	44	1	5	1.43	0.97
5	Comprar coisas me dá muito prazer.	44	1	5	3.55	1.47
6	Eu ficaria muito mais feliz se pudesse comprar mais coisas.	44	1	5	3.64	1.50
7	Eu gosto de possuir coisas que impressionam as pessoas.	44	1	4	1.52	0.93
8	Eu dou pouco valor para as coisas materiais.	44	1	5	3.55	1.30
9	Eu fico incomodado por não poder comprar todas as coisas que eu gostaria.	44	1	5	2.75	1.48

(\*) The original items, in English, are presented in APPENDIX I.

Although the obtained result, Cronbach's alpha equal to 0.64, is not bad – alpha coefficients between 0.60 and 0.70 are considered acceptable by Churchill (1979) – we believe the scale can be improved. It is foreseen, thus, that at least one more round of pre-tests will occur.

### 5.2.1.2 Attitude to Debt

To measure "attitude toward debt", the scale proposed by Davies and Lea (1995) will be adopted. This scale consists of 14 items measured in a 5-point Likert scale, ranging from 1 = "totally disagree" 5 = "totally agree". This scale will be translated and submitted to pre-test rounds before being part of the final questionnaire.

### *5.2.1.3 Propensity to Contract Credit Consumption*

Further literature review will be necessary to obtain a suitable scale to measure the propensity to contract consumption debt in the context of this study.

As shown in the project's chronogram of activities, detailed in topic 6 ahead, this activity will take place along the next 6 months.

## **5.3 Statistical Tests to Check the Proposed Hypotheses**

To adequately determine the statistical techniques to test the study hypotheses, it is necessary to examine the nature of the data and the relations between the variables. Table 5 summarizes such information:

	Variable 1		Variable 2	
	Name	Nature of the Data	Name	Nature of the Data
<b>H1a:</b> There is dependence between materialism and age; young adults tend to be more materialistic than older ones.	materialism	discrete (integers ranging from 9 to 45)	age	discrete (number of years of age)
<b>H1b:</b> There is no dependence between materialism and gender.	materialism	discrete (integers ranging from 9 to 45)	gender	nominal (male / female)
<b>H1c:</b> There isn't dependence between materialism and education.	materialism	discrete (integers ranging from 9 to 45)	education	categorized
<b>H1d:</b> Among the low income population, the level of materialism of an individual is positively influenced by income.	materialism	discrete (integers ranging from 9 to 45)	income	continuous
<b>H2:</b> The more positive the attitude toward debt, the greater is the propensity to contract credit for consumption.	attitude to debt	discrete (integers ranging from 1i to 5i, i being the number of items in the scale)	propensity to contract credit for consumption	discrete (integers ranging from 1i to 5i, i being the number of items in the scale)
<b>H3:</b> The higher the level of materialism of an individual, the more positive his attitude toward debt will be.	materialism	discrete (integers ranging from 9 to 45)	attitude to debt	discrete (integers ranging from 1i to 5i, i being the number of items in the scale)
<b>H4:</b> Individuals who are more materialistic are more inclined to contract credits for consumption.	materialism	discrete (integers ranging from 9 to 45)	propensity to contract credit for consumption	discrete (integers ranging from 1i to 5i, i being the number of items in the scale)
<b>H5:</b> There is dependence between religion and materialism.	religion	categorized	materialism	discrete (integers ranging from 9 to 45)
<b>H6:</b> There is dependence between religion and propensity to contract credit for consumption.	religion	categorized	propensity to contract credit for consumption	discrete (integers ranging from 1i to 5i, i being the number of items in the scale)

**Table 5:** Summary of the Study's Hypotheses and Nature of the Data for the Variables Considered in the Study

Variables that can assume a limited (and sometimes low) number of answers are predominant. The same tests utilized in previous studies concerning materialism (BELK, 1985; RICHINS; DAWSON, 1992; MICKEN, 1995; WATSON, 1998, 2003) will be applied to this context. They are: variations of the chi-square test, analyses of variance, linear correlation between two variable and partial correlations between two variables.

A useful technique to measure dependence between two categorical variables, called partitioning chi-square (REYNOLDS, 1984) will be used to test the hypotheses H5 and H6. This technique offers a simple method for more precisely analyzing a cross-classification, and consists of partitioning a contingency table in 2x2 sub-tables according to the rules of Iversen (1979 apud REYNOLDS, 1984). The advantage of the method is to prevent information from being masked by the overall chi-square.

## 6 PROJECT CHRONOGRAM OF ACTIVITIES

This research project is intended to be concluded by September, 2006. To do so, the following tasks should be performed:

1. Additional literature review: it will be necessary to access further information concerning the theoretical constructs mentioned in this work, especially those related to religion and propensity to contract consumption credit. It is intended to explore secondary data to learn how those variables manifest in the context of low income families from the city of Sao Paulo. **Estimated time**: 6 months.
2. Preparation for primary data collection: at this stage, there will be performed final pre-tests for the scales and questionnaire to be utilized; also, the sample composition and the operational definitions will be drawn. **Estimated time**: 3 months.
3. Data collection: the data collection itself will occur. This researcher will escort the field interviewers to certify the quality of the data collection process. **Estimated time**: 1 month.
4. Data analysis: in possession of the above mentioned data set, the formalized hypotheses will be tested; other possible and interesting analyses will also be conducted. **Estimated time**: 1 month.
5. Final considerations and writing of conclusions: the conclusions concerning the work executed will be written. **Estimated time**: 2 months.
6. Writing of the final document (Thesis): to conclude, the thesis paper itself will be written and properly formatted. **Estimated time**: 1 month.

The following table exhibits the tasks described above:

Fase	Task	Year of 2005						Year of 2006							
		July	August	September	October	November	December	January	February	March	April	May	June	July	August
1	Additional literature review	X	X	X	X	X	X								
2	Preparation for primary data collection							X	X	X					
3	Data collection										X				
4	Data analysis											X			
5	Final considerations and writing of conclusions												X	X	
6	Writing of the final document (Thesis)														X

**Table 6:** Chronogram of Activities

## REFERENCES

- Banco Central do Brasil. (2004). *Seminário de Microcrédito*. Goiânia, Brasil: Author.
- Bearden, W. O., & Netemeyer, R. G. (1999). *Handbook of Marketing Scales* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.
- Belk, R. W. (1983). Worldly Possessions: Issues and Criticisms. *Advances in Consumer Research*, 10, 514-519.
- Belk, R. W. (1984). Three Scales to Measure Constructs Related to Materialism: Reliability, Validity, and Relationships to Measures of Happiness. *Advances in Consumer Research*, 11, 291-297.
- Belk, R. W. (1985). Materialism: Trait Aspects of Living in the Material World. *Journal of Consumer Research*, 12(3), 265-280.
- Belk, R. W. (1999). Leaping Luxuries and Transitional Consumers. *Marketing Issues in Transitional Economies*, 38-54.
- Belk, R. W., Ger, G., & Askegaard, S. (2003). The Fire of Desire: A Multisited Inquiry into Consumer Passion. *Journal of Consumer Research*, 30, 326-351.
- Churchill, G. A. (1979). Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16, 64-73.
- Davies, E., & Lea, S. E. G. (1995). Student Attitudes to Student Debt. *Journal of Economic Psychology*, 16, 663-679.
- Duesenberry, J. S. (1949). *Income, Saving, and the Theory of Consumer Behavior*. Cambridge, MA: Harvard University Press.
- Firat, F., & Venkatesh, A. (1995). Liberatory postmodernism and the reenchantment of consumption. *Journal of Consumer Research*, 22, 239-267.
- Fournier, S., & Richins, M. (1991). Some Theoretical and Popular Notions Concerning Materialism. *Journal of Social Behavior and Personality*, 6, 403-414.
- Ger, G. (1992). The Positive and Negative Effects of Marketing on Socioeconomic Development: The Turkish Case. *Journal of Consumer Policy*, 15(3), 229-254.
- Ger, G., & Belk, R. W. (1990). Measuring and Comparing Materialism Cross-Culturally. *Advances in Consumer Research*, 17, 186-192.

- Ger, G., & Belk, R. W. (1996). Cross-cultural differences in materialism. *Journal of Economic Psychology*, 17, 55-77.
- IBGE – Instituto Brasileiro de Geografia e Estatística. (2000). *Censo Demográfico 2000. Características Gerais da População*. Rio de Janeiro, Brasil: Author.
- IBGE – Instituto Brasileiro de Geografia e Estatística. (2004). *Pesquisa de Orçamentos Familiares, 2002-2003. Primeiros Resultados*. Rio de Janeiro, Brasil: Author.
- Katona, G. (1975). *Psychological Economics*. New York: Elsevier.
- Keng, K. A., Swinyard, W. R., & Yin, P. H. (2002). Quality of Life in Singapore: an analysis of the influence of materialism and religiosity. *Asia Pacific Advances in Consumer Research*, 5, 282-283.
- Lea, S. E. G., Webley, P., & Levine, R. M. (1993). The economic psychology of consumer debt. *Journal of Economic Psychology*, 14, 85-119.
- Livingstone, S., & Lunt, P. K. (1992). Predicting personal debt and debt repayment: Psychological, social and economic determinants. *Journal of Economic Psychology*, 13, 111-134.
- Maslow, A. H. (1954). *Motivation and Personality*. New York: Harper & Row.
- Micken, K. S. (1995). A New Appraisal of the BELK Materialism Scale. *Advances in Consumer Research*, 22, 398-405.
- Moschis, G. P., & Churchill, G. A. (1978). Consumer Socialization: A Theoretical and Empirical Analysis. *Journal of Marketing Research*, 15, 544-609.
- Nassif, L. (2005, April 27<sup>th</sup>). Consumo e cidadania. *Folha de São Paulo*, p. B4.
- Parente, S. (2002). *Microcredit as a Financial Market Mechanism to Reduce Poverty*. Master Thesis, Massachusetts Institute of Technology.
- Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, Design, and Analysis: An Integrated Approach*. New Jersey: Lawrence Erlbaum Associates.
- Rassuli, K. M., & Hollander, S. C. (1986). Desire-Induced, Innate, Insatiable? *Journal of Macro-marketing*, 6, 4-24.
- Reynolds, H. T. (1984). *Analysis of Nominal Data* (2<sup>nd</sup> ed.). Beverly Hills: Sage Publications.

- Richins, M. L. (1992). Media Images, Materialism, and What Ought to Be: The Role of Social Comparison. *In Meaning, Measure, and Morality of Materialism. Proceedings of the Research Workshop on Materialism and Other Consumption Orientation*, F. Rudmin and M. Richins (eds.), Provo, UT: Association for Research, 202-206.
- Richins, M. L. (2004). The Material Values Scale: Measurement Properties and Development of a Short Form. *Journal of Consumer Research*, 31, 209-219.
- Richins, M. L., & Dawson, S. (1992). A Consumer Values Orientation for Materialism and Its Measurement: Scale Development and Validation. *Journal of Consumer Research*, 19, 303-16.
- Richins, M. L., McKeage, K. K. R., & Najjar, D. (1992). An Exploration of Materialism and Consumption-Related Affect. *Advances in Consumer Research*, 19, 229-236.
- Richins, M. L., & RUDMIN, F. W. (1994). Materialism and Economic Psychology. *Journal of Economic Psychology*, 15, 217-231.
- SEADE – Fundação Sistema Estadual de Análise de Dados. (2005, April 12<sup>th</sup>). Accessed in <http://www.seade.gov.br>.
- Tokunaga, H. (1993). The use and abuse of consumer credit: Application of psychological theory and research. *Journal of Economic Psychology*, 14, 285-316.
- Warneryd, K. (1989). On the Psychology of Saving: An Essay on Economic Behavior. *Journal of Economic Psychology*, 10, 515-541.
- Watson, J. J. (1998). Materialism and Debt: A Study of Current Attitudes and Behaviors. *Advances in Consumer Research*, 25, 203-207.
- Watson, J. J. (2003). The relationship of materialism to spending tendencies, saving, and debt. *Journal of Economic Psychology*, 24, 723-739.
- Webster, C., & Beatty, R. C. (1997). Nationality, Materialism, and Possession Importance. *Advances in Consumer Research*, 24, 204-210.
- Wright, N. D., & LARSEN, V. (1992). Material Values in the Book of Mormon. *Meaning, Measure and Morality of Materialism*, 50-55.

## APPENDIX I

**Selected items from the Richins (2004) Material Values Scale used for this research (item numeration is based on Table 4):**

Item	Statement
1	I admire people who own expensive homes, cars, and clothes.
2	I enjoy spending money on things that aren't practical.
3	My life would be better if I owned certain things I don't have.
4	(*)
5	Buying things gives me a lot of pleasure.
6	I'd be happier if I could afford to buy more things.
7	I like to own things that impress people.
8	I put less emphasis on material things than most people I know.
9	It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like.

(\*) Statement 4 does not belong to the Richins' MVS. This item was excluded from the final questionnaire for this research.

Support card for the 5-point Likert scale questions (in Portuguese).

<b>Escala de 5 pontos</b>				
				
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Discordo totalmente.</b>	<b>Discordo em parte.</b>	<b>Neutro.</b>	<b>Concordo em parte.</b>	<b>Concordo totalmente.</b>