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MONEY VS. MEANING AS DRIVERS OF BEHAVIOR: EVIDENCE FROM LATINOAMERICA

DINERO *VS.* SIGNIFICADO COMO MOTIVADORES DE COMPORTAMIENTO: EVIDENCIA DE LATINOAMÉRICA

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Resumen

La investigación en las ciencias de la decisión, la psicología, la economía conductual y la administración sugieren que los modelos basados en la racionalidad no siempre son válidos para explicar el comportamiento humano (Ariely, 2009; Thaler, 2000). Sin embargo, las escuelas de negocios y directivos empresariales continúan enseñando y utilizando modelos de comportamiento humano desarrollados en países occidentales y basados en la racionalidad, que no tienen en cuenta las diferencias culturales o personales, y las características humanas intrínsecas son incompatibles con modelos de elección racional (Chen y Miller, 2011; Thaler, 2000). Tras los trabajos recientes de Ariely, Kamenica y Prelec (2008), este documento pone a prueba el papel de la significatividad percibida como un motor importante de motivación en el contexto latinoamericano a través de dos estudios experimentales. Las investigaciones anteriores sobre las violaciones de los supuestos de racionalidad se basan principalmente en países occidentales y desarrollados, y los resultados de este estudio proporcionan apoyo en cuanto a la generalización de modelos de comportamiento humano cuasi racionales en América Latina. La evidencia existente se ha ampliado en países con antecedentes culturales diferentes. También aborda las implicaciones para la gestión, los negocios y las prácticas de políticas públicas así como la investigación futura.

Palabras clave: Incentivos, motivación, comportamiento humano cuasi racional, significatividad percibida, experimentos.

Abstract

Research in decision sciences, psychology, behavioural economics, and management suggest that rationality-based models are not always valid to explain human behaviour (Ariely, 2009; Thaler, 2000). However, business schools and management executives continue teaching and using Western-developed and rationality-based models of human behaviour that do not consider cultural or personal differences, and the intrinsic human characteristics are inconsistent with rational choice models (Chen & Miller, 2011; Thaler, 2000). Following recent work by Ariely, Kamenica, and Prelec (2008), this paper tests the role of perceived meaning as a significant motivation driver in a Latin-American setting through two experimental studies. Previous research on the violations of rationality assumptions is based mainly on Western and developed countries, and this study's results provide support towards the generalization of quasi-rational models of human behaviour in Latin America. The existing evidence is expanded to countries

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with different cultural backgrounds. Implications for management, business, and public policy practice as well as future research is also discussed.

Keywords: Incentives, motivation, quasi rational human behaviour, perceived meaning, experiments.

Introduction

For many years, the rational model of man has been the predominant paradigm in economics to explain and model human choice and behaviour. This framework of economics has permeated many disciplines, business studies in particular, despite several early critiques regarding some of its assumption and predictions. Rationality violations and "behavioural anomalies" are regularly described as "subject problems" rather than evidence against prevailing models attempting to represent human behaviour (Thaler, 2000). However, in psychology, decision sciences, management, marketing, and recently in the behavioural branch of economics, there is growing criticism regarding the validity of the rational model of man to explain consumers, workers, and managers' behaviour (e. g. Ariely, Gneezy, Loewenstein, & Mazar, 2009; Andrade & Ho, 2009; Ariely & Norton, 2009; Cian, Krishna, & Schwartz, 2015; Novak & Hoffman, 2009).

These criticisms and empirical evidence have important implications for business, management, and marketing practices, as well as other areas including product design, human resource management, financial decisions, and public policy design. (Amir et al., 2005; Ratner et al., 2008). Unfortunately, most previous work uses the Western and developed world as the main context and setting; this means that there is a dearth of empirical studies for developing nations – particularly for Latin America (Nicholls-Nixon, Castilla, García, & Pesquera, 2011; Olavarrieta & Villena 2014).

One anomaly to rationality is the role of meaning in driving behaviour. In particular, following the previous work of Ariely and colleagues (Amir et al., 2005; Ariely, Kamenica & Prelec, 2008; Heyman & Ariely, 2004), we explore the role of perceived meaning on the willingness to act, work, or behave. According to rational assumptions, minor differences in perceived meaning should have no effect on behaviour and should not override economic incentives. However, psychology, marketing, and more recently behavioural economics suggests that perceived meaning can be an important driver of motivation and behaviour, which may reduce or override economic and pay incentives (Csikszentmihalyi & Rochberg-Halton, 1999; Gill, 1999). There is a story about construction workers that explains the role of perspectives (meaning) on motivation and performance. If you ask them what they are doing, they might answer in different ways: they might say, "we are laying bricks", others might say "we are building a wall", and a third group might say "we are building a cathedral". Clearly, the level of motivation and commitment for these three different groups can be expected to be quite different. Is this a frequent phenomenon, or is the example just a special case? Can Latin American's motivation and willingness to collaborate or act by managers, marketers, or policy makers be affected by something? The role of perceived meaning has also been present in marketing studies. For example, Friedmann (1986) and Friedmann and Lessig (1986) have explored the role that the psychological meaning of products has for consumers and the importance of perceived meaning for their choices. Much of the work on brand positioning and existing marketing practices support this idea. Recent work on marketing and consumer behaviour has extended this by using theories of the extended self in the digital world (Belk 2013) and experiential products such as weddings (Nguyen & Belk, 2013).

The main objective of this paper is to study the role of perceived meaning on human subjects through two experiments. We replicate Ariely, Kamenica, and Prelec's (2008) study by focusing on perceived meaning as an intrinsic driver of motivation, decision-making, and productivity to examine it in a Latin American context and extend the generalisation. Is the role of perceived meaning a cross cultural phenomenon, and should its scope be questioned (Olavarrieta, 2001)?

Theory

Classic economic theory suggests that, on average, subjects will base task execution on expected payments (Gill, 1999). Psychology, marketing, and management scholars suggest, however, that other factors may be more important in explaining motivation and performance. In particular, Csikszentmihalyi (1998) and Heyman and Ariely (2004) argue that the search for meaning can be equally as important to drive human efforts and minds.

The concept of meaning is present in several disciplines such as psychology, management, marketing, and economics (Csikszentmihalyi & Rochberg-Halton, 1999; Frankl, 1962; Friedmann & Lessig, 1986; Loewenstein, 1999) and can be viewed as having several levels of depth. In this paper, our interest is centred on a simpler version of meaning. People think that objects or activities are meaningful when somebody acknowledges or recognises them or when they think these activities have a sense of purpose (Ariely, Kamenica, & Prelec, 2008).

In this context, acknowledgement involves another person's (boss, peer, consumer, etc.) appreciation and being aware that the task was completed. It is that simple; that there is no necessity for an economic transaction (i.e. payment). The sense of purpose occurs if subjects understand or believe that a particular activity or work is linked to an objective or goal. Interestingly, psychology, marketing, and behavioural economists suggest that the presence of meaning will act as a key driver of motivation, regardless of the functional or experiential benefits linked to an activity: the amateur runner is motivated by the marathon itself, not for the functional benefits (health, fitness), experiential benefits (being there, sharing the experience), or symbolic benefits (status, image), but for the sake of running a marathon. As Loewenstein (1999) reports in his interesting mountaineering study, mountain climbers like to climb because hills and mountains are there, ready to be climbed, and their mission, their role, their "meaning" is to climb them. This motivation is an important driver for several occupations such as: policemen, fire fighters, athletes, and even university professors. In fact, there is some interesting evidence that more productive researchers are probably not more productive because they are more sensitive to incentives or to reputational benefits, but because they derive more meaning from the research process (Ariely et al., 2009).

One of this work's major hypotheses, following previous research (Ariely, Kamenica & Prelec, 2008; Norton, Mochon, & Ariely, 2012), is that perceived meaning has a significant effect on human behaviour, i.e. work and performance for employees and product choice for consumers. This hypothesis is backed up by work undertaken both in behavioural economics and also in areas of business studies such as management, marketing, and consumer behaviour.

Meaning in psychology and management

In general, psychologists and business researchers (in the fields of marketing and management) agree that meaning is an important driver or motivation for behaviour and that meaning can be derived from actions, concrete possessions, and abstract symbols. Frankl and other psychologists have indicated that humans' main driver is the quest for meaning. He states that the absence of meaning is somewhat unbearable for most human beings, who spend most of their lives looking for the significance and meaning of their existence. Consistently, Csikszentmihalyi (1998), when proposing the "flow" concept, made a suggestion based on field studies that human subjects will feel better, will be in a flow state when they are engaged, active, using their skills, and in control. Moreover, Norton, Mochon, and Ariely (2012) report substantial evidence on the do it yourself or IKEA effect: consumers assign more value to products they built themselves, and they are very subjective in terms of assessing the value of products. In these cases, meaning is derived from the task of building the products. This idea is consistent with explanations for intrinsic motivation based on enjoyment and engagement. In the same vein, optimal challenging and self-valuation of a person's competence generates both enjoyment and motivation. Abuhamdeh & Csikszentmihalyi (2012) suggest that these effects on enjoyment are mediated by attentional involvement or "the degree to which one's attention is devoted to the activity at hand (p.258)". Hobbies or 'fulfilling' jobs normally meet these characteristics, and, therefore, generate intrinsic motivations associated with meaning and enjoyment.

Nevertheless, as stated by Frankl, meaning can be derived from daily activities and from the mere possession of goods (Csikszentmihalyi & Rochberg-Halton,1999)

In marketing and branding

Following the work undertaken in psychology, marketing and consumer behaviour researchers have examined and tested the role of meaning in consumer decision processes. Early on, Levy (1959) suggested the importance that symbols and symbolism have on motivating consumer choices. Extending Levy's work, Friedmann (1986) and Friedmnn and Lessig (1986) defined the concept of the psychological meaning of products, arguing that meaning is a key element consumers derive from consumption, and, therefore, that people working in marketing should be aware on how to deliver it. This work on meaning and symbols was later adopted in the 1990s by researchers working on branding who took what had previously been done and integrated it using a more holistic approach. They wanted to understand what a brand was, its dimensions, and highlight the brand image construct. Dobni and Zinkhan (1990) explored the definitions of brand image in great detail, and they very much embraced Levy's symbolic consumption approach and the role of meaning in their decision processes. Other authors proposed frameworks that included brand image as well as other elements to be considered as part of a brand (Keller, 1991). Brakus, Schmitt, and Zarantonello (2009), for example, looked at the experiences provided by brands as a key brand equity driver. Some market and design researchers went even further by exploring the visual elements representing brands –the key containers or representations of the brand– from which consumers derived their impressions and meanings (Schmitt & Simonson

1997; Olavarrieta & Friedmann2007). Even in advertising, several communication researchers have provided important evidence indicating that perceived meaning of an ad can be a key driver of consumer reactions to advertising (Durgee & Stuart, 1987).

Additionally, as suggested by Levy, humans can derive meaning from symbols related to products. The idea of the self can be constructed through possessions (Belk, 1988), from the derived image linked to product categories and brands (Dobni & Zinkhan, 1990), and also from tasks and activities people have to perform related to products, consumption, and brand experiences (Brakus, Schmitt, & Zarantonello, 2009).

Therefore, previous literature in psychology, marketing and consumer behaviour, decision sciences, and experimental economics suggest that meaning can be derived from products or things, but more importantly from the activities involved, particularly if they are optimally challenging (not too easy - not too difficult) and if they allow for a self-valuation of competence (Abuhamdeh & Csikszentmihalyi, 2012; Csikszentmihalyi, 1998; Norton, Mochon, & Ariely, 2012). Thus, we hypothesize that perceived meaning and the effects of intrinsic motivation are not just linked to Western cultures and more developed contexts; they are cross-culturally stable (Moneta, 2004), and take an "etic" perspective on behaviour (Berry, 1999; Olavarrieta, 2001). In particular, we suggest that the effects of meaning is an important driver to explain behaviour in a Latin American context and that these effects should be stable across genders.

H1: The perceived meaning of a task has significant and positive effect on subjects' behaviour

H2: The perceived effects of meaning on behaviour is stable for both genders

Method

Researching meaning and behaviour is a complex subject, particularly if surveys are used as the main research strategy. It is critical to observe actual behaviour, while at the same time isolating other potential causes. For this reason, experiments may be the best alternative to simulate real world scenarios and to observe human reactions to variations in perceived meaning. If subjects have to perform the same tasks in different treatment conditions, and the stimulus is very subtle –just a minor variation to affect slightly perceived meaning– the observed behaviours (and differences) may provide strong support for the working hypothesis. Stronger effects can be found in real life situations, where perceived meanings can vary to a great extent and are affected by emotions, contexts, endowments, and other factors. Such an experimental setting is risky from a design point of view since small treatment differences may not be perceived by subjects; thus, subjects' behaviour will have a reduced variance. However, at the same time, the presence of significant effects may be considered a strong test for the theory behind the hypothesis.

Study 1

Experimental studies replicate the method and design of Ariely, Kamenica, and Prelec's (2008) article adapting it slightly to Latin American countries' contexts and experimental settings (i.e., language, instructions, procedure to recruit subjects). In fact, experiments are a novelty in Latin American university campuses, which can provide a positive context to avoid the effects of memory, history, or learning, but they make it more difficult to recruit subjects (they are not used to receiving payments to participate in a study) and to administer the experiments.

Study 1 includes one-hundred subjects recruited in their first to third years at a Chilean University through signs posted on bulletin boards, Facebook announcements, emails, and class announcements. All these announcements read, "Get paid for participating in a 30 minute study". Students had to sign up to a web page that had fixed places for an equal number of women and men, and they were contacted to schedule the experiment time. The experiment was conducted in the study rooms of the university library. The task of the experiment involved finding 10 3-letter sequences in a sheet of paper with 20x20 letter squares. For the first completed page, participants received CL$250 (0.50 $USD approx.). After completing the first page, they were asked if they wanted to complete a second sheet for CL$220 (0.45 USD, or 5 cents less), and so on until the tenth sheet of paper for which they would receive CL$50 (5 cents). Students participated alone with no other subject in the room, apart from the person conducting the experiment. Subjects were separated by sex, and then they were randomly assigned to three different experiment areas that manipulated perceived meaning: acknowledged, ignored, and shredded. For the acknowledged condition, subjects had to write their names on each sheet of paper, the person conducting the experiment checked the page in order to establish if it was correct, and then they were filed in a folder. After this procedure, they received the pre-established amount of cash, and were asked if they wanted to continue playing. For the ignored condition, students were not asked to write their names, and the person conducting the experiment just left the sheet of paper on a

table when subjects turned them over. For the shredded condition, subjects were told that pages will be immediately destroyed after giving them to the person conducting the experiment, and then the paper was shredded in front of the subjects. Effort or labour supply was measured by counting the number of total pages completed by each subject. Subjects could cheat in all areas as monitoring was purely symbolic for the acknowledged condition. From a traditional economic viewpoint, the acknowledged condition has higher perceived costs to cheat since subjects needed to write their names, and then they had to wait for the experimenters to review the page. For the other two conditions, the cost of cheating was lower and in the case of the shredded condition it was almost non-existent since subjects knew the pages would be destroyed without them ever being revised.

Psychology, management, decision theory, behavioural economics and marketing theories will not predict uniformly. Each discipline will suggest different explanations for why an "acknowledged" scenario will increase perceived meaning, motivation, and, given this, total labour supply (effort or production) will be higher. In economic terms, reservation wages will be lower!

Results

The results from Study 1 go against classical economic theory predictions and provide support for the "meaning-motivation" hypothesis. Subjects taking part in the acknowledged condition completed, on average, 9.81 puzzles (receiving USD 3.5), higher than for the extreme shredded area (zero meaning) with 7.53 complete puzzles. The ignored condition generated an intermediate output as subjects in this category completed 8.48 puzzles. Differences are statistically significant at the global sample level (p=0.010). In fact, for the acknowledged condition, over 60% of the participants completed puzzle 10 (only receiving CLP$50 or less than 10 US cents), and 42% continued playing after puzzle 10 without receiving any payment. For the shredded condition, only 19% of the subjects completed more than 10 puzzles.

Overall, these results are consistent with Ariely, Kamenica, and Prelec (2008) and the meaning-motivation hypothesis rather than the classical economic rational choice hypothesis. Even in the case of very non-significant tasks, individuals appear to be affected by small differences in the perceived meaning of the task (i.e. acknowledgement). Additionally, an interesting insight form this study (compared to the original American one) is the possibility of having sex as a moderator, which might be related to the task's characteristics or relevance. In this case, there were clearer and highly significant differences for the female subsample (Acknowledged: 10.5 vs. Ignored: 9.2 vs. Shredded: 7.0). A potential explanation is that these kinds of puzzles that only involve a cognitive task (compared to more physical tasks), will be more appealing to women than to men. Ridgers (2011), found that boys tend to perform more physical activities in school recess than girls. Girls, instead, engage in more activities involving socialization and conversation.

Alternatively, a methodological issue could also explain at least part of this moderating effect. Those conducting the experiments noticed a confounding factor that may have reduced the magnitude of the difference between acknowledged and shredded conditions. For logistical reasons, we decided to run several experiments simultaneously in different study rooms (we wanted to reduce "word of mouth" or the "contagion" effect as much as possible; we wanted to collect more data in less time. For the shredded condition, we also decided to shred the

Table 1a: Study 1. Puzzles. Average answered puzzles in each condition

Subjects received USD 0.50 for completing the first puzzle and 5 cents less for each additional puzzle until the 10th puzzle when they receive 5 cents. For the 11th puzzle they were not remunerated. To adjust results by purchasing power, these payoffs we need to be multiplied by 2 approximately.

Gender	A Acknowledged	I Ignored	S Shredded	p-value
Men (53)	9.2 (18)	7.9 (18)	8.1 (16)	0.455
Women (49)	10.5 (15)	9.2 (17)	7.0 (16)	0.010*
TOTAL (102)	9.8 (33)	8.5 (35)	7.5 (32)	0.010*

(*) p-value < 0.01

Table 1a: Study 1. Puzzles. Subjects completing 10+ PUZZLES in each condition

	A Acknowledged	I Ignored	S Shredded
% Subjects completing 10 PUZZLES	63.6%	45.7%	50%
% Subjects exceeding 10 PUZZLES completed (no extra payment)	42.4%	11.4%	18.8%

sheets manually instead of using a shredding machine. This small change made some students angry, but also made several others (mostly men) smile, which showed some sort of liking of the "destruction process". It also motivated them to continue completing the sheets just to see the process again. A more impersonal shredding process would probably reduce the number of cases, and more extreme differences would be found on the total sample and the male subsample levels.

Obviously, the characteristics of this study are somewhat distant from real life situations, and some may argue that these results may change with other types of tasks. Therefore, a second experiment was designed in order to test our hypothesis within a different context. This time the task involved both cognitive and manual skills.

Study 2

The second experiment uses a task with a higher physical or manual component as most jobs involve both cognitive activities and physical ones. Salespersons have to analyse markets and convince people, but they also have to frequently move around, call, and take action. Teachers need to think and prepare classes, but they also need to communicate, move, and interact with students. In order to check the meaning-motivation hypothesis, based on Ariely, Kamenica, and Prelec's (2008) experiment, a second study was implemented that involved assembling one LEGO-like model.

Subjects were recruited by email, Facebook, web, and bulletin board announcements. They were, once again, invited to participate in an activity for which they can win money by playing. Subjects have to register on a website in order to choose their time slots. Subjects were separated based on sex and then they were randomly assigned to two different experimental conditions: meaningful and meaningless. All participants received general instructions on the activity. They had to assemble a 55-piece LEGO figure (a person riding a 4-wheel motorcycle), and they received immediate cash for completing the task according to a scale that started with CLP$650 (approximately USD $1.35), which reduced by CLP$50 (0.10 USD) until the 7th assembled LEGO figure for which they received $0. Each time a participant finished assembling a figure, they passed the figure to the person conducting the experiment and received the cash. They were then asked if they wanted to continue assembling LEGO. For the meaningful area, LEGO figures were visibly placed on the table. For the meaningless area, the person conducting the experiment started disassembling the figure immediately after the subject began to assemble the new figure; the subject was told this was necessary as he/she only had two figures. This process ended when the subject wanted, but we limited time to thirty minutes. In previous trials, we timed different subjects, and we estimated an average assembly time of four minutes. Therefore, in thirty minutes, subjects would be able to complete a maximum of seven figures.

Results

Results confirm the working meaning-effort hypothesis in a new more complex setting. This suggests that meaningful conditions generate better motivation, effort, and performance. In the meaningful condition subjects assemble on average more LEGO model (6.7) than in the meaningless condition (5.6). The difference is statistically significant (p=0.016). The experimental time constraint (thirty minutes) is important as it reduces the variance of results for subjects who would have continued assembling figures, particularly under the meaningful condition. Several subjects would have continued without the time constraint. Also, since two female outliers were removed from the meaningless treatment group (because they did not complete any LEGO models), the differences might be even larger and more significant. The results of this second study, that consider a more complex task (combining cognitive and physical activities), are consistent with the results from Study 1. This, in turn, provides stronger support to the meaning-motiva-

Table 2: Study 2. Legos. Average assembled LEGOS in each condition

Subjects received USD 1.35 for completing the first LEGO and 20 cents less for each additional LEGO until the 6th puzzle when they receive 20 cents. For the 7th LEGO they were not remunerated. To adjust results by purchasing power, these payoffs we need to be multiplied by 2 approximately.

	LEGO Destroyed (Meaningless) (n = 41)	LEGO Preserved and showed (meaningful) (n = 40)	p-value
Men (n=41)	5.9 (22)	7.2 (19)	0.009*
Women (n=43)	5.4 (19)	6.2 (21)	0.273
TOTAL	5.6	6.7	0.016*

(*) p-value < 0.01

tion hypothesis, and the quasi rational models of human behaviour rather than the traditional rational models of human behaviour that are used in economics.

An additional interesting result, consistent with Study 1, is the difference between the male and female subsamples. In Study 2, the results show noticeable differences in the male subsample (average of assembled figures: Meaningful condition: 7.2 vs. Meaningless: 5.9; $p = 0.009$) compared to the female subsample (Meaningful condition: 6.2 vs. Meaningless: 5.4; $p = 0.273$). However, in both subsamples, the results go in the hypothesized direction, and the non-significant results for the female subsample can be explained –at least partially– by sample size (including two female subjects being eliminated, which was previously explained) and the time constraint.

Further analysis and research of these differences based on sex is needed. In Study 1 (word puzzles), the female subsample had more noticeable effects, and in Study 2 (LEGOs), the male sample had more noticeable results. One explanation might be linked to a certain preference of the sexes for particular activity types (see for example Crosson & Gneezy, 2009): males being more drawn toward more active/physical activities such LEGO assembling tasks and women less interested in tasks involving physical actions. Other authors in education and psychology have found evidence for such differences (see for example a recent meta-analysis by Voyer & Voyer, 2014). A potential explanation could be linked to different attitudes toward studying vs. physical activities or even differences in the effects of competition contexts for males vs. females. The literature in the field of education (see for example Van Houtte, 2004), psychology (Moxley et al., 2017), and behavioural economics (Crosson & Gneezy, 2009) should be considered so as the results can be reconsidered and a better explanation can be provided. Future research should look at these differences as well as the potential moderating effects of sex and/or type of activity on the role meaning has on motivation and performance.

Discussion and implications

The overall results support theories and findings in psychology, decision sciences, management, marketing, and, more recently, behavioural economics that favour bounded rationality assumptions over full rationality ones to model human behaviour. Most of the previous evidence has been generated in Western and developed countries; therefore, these studies provide interesting evidence to be able to make generalisations about these theories. These results are particularly important for different areas of business studies and applied policy, both for researchers and practitioners.

For human resources and general management, it might be even more relevant to consider the role of meaning and the process of providing this meaning when studying the effects of organizational design, incentive systems, and leadership (among other organization variables) or even absenteeism (see for example Machorro-Ramos & Romero-Ortiz, 2015). How workers derive meaning, and how leaders can be providers of meaning (beyond communication, for example) could be interesting areas for further research. How organizational artefacts, systems, policies, and rules affect meaning may be as important as the "rationality" or economic justice associated with those policies and regulations (e.g. Szabo, 2006). It may also be important to acknowledge individual differences and the importance of providing 'customized meanings' to different team members or collectives.

Top managers' decisions and behaviour may also be influenced by limited or bounded rationality (see for example Rivas & Londoño-Correa, 2015) and the effects of meaning could be a relevant influence. Top management incentive-schemes need to consider these findings and theories in order to overcome the limitations of simpler performance-based incentive schemes. Apparently, agency theory (mainly based on rationality and individual incentives and motives) needs to be complemented with other complex assumptions regarding human perception and meaning. This is particularly important for board member incentives, self-control and corporate governance mechanisms, and for studying the strategy making process for which all these factors may play a key role. It is very important to consider cross cultural issues, particularly if management models need to be developed for emerging nations. Chen and Miller (2011), recently examined the role of Eastern relational philosophy (which values integration, balance, and harmony over distinction and competition), on interpersonal considerations and temporal dimensions. They suggest that the lack of considering relational issues may explain some of the Western organizational shortcomings in leadership, strategic decision-making, and organizational performance. This might be critical for studying how top executives construct meaning.

From a marketing perspective, consumers' decisions need to be examined considering the different value generating (diluting) issues involved in a particular purchase decision. A key element to be identified by marketers is: what is the meaning of products, services, experiences, activities by consumers, and how they derive this from existing or potential offers (Belk, 1988; Csikszentmihalyi, 1998; Csikszentmihalyi & Rochberg-Halton, 1999; Fried-

mann & Lessig, 1986). People working in marketing and market research specialists are presented with greater challenges to understand this phenomenon than just identifying the perceived levels of a particular product or brand's attributes. There are two types of challenges: methodological and theoretical challenges (in terms of having logical, sound, and grounded explanations of how this process may work). To help address these, a key finding in this study is the potential differences between male and female consumers regarding meaning perception and construction. Task or object differences could be an explanation, but they might be contrasted against biological explanations (brain, genes), sociological explanations (gender issues and social structures), and/ or psychological explanations (personalities, personal goals, and motives).

Experimental studies have some limitations that need to be considered. First, experimental conditions attempt to represent a real life situation, but they are not necessarily equivalent to real life consumption or working situations. Compared to experiments in psychology, these experiments add some "reality" by having real effects for different levels of outputs (i.e. actual cash payments); thus, some of the lack of external validity is reduced. Additionally, sample issues (size, student subjects) could be addressed in further studies or replications. Similarly, a key challenge is to find more creative or ingenious ways to recreate real life situations at lower production and execution costs. Combining experiments with some qualitative methods and theoretical perspectives (behavioural economics, psychology, and business disciplines) could be an important research strategy to address some of the meaning-motivation hypotheses and to expand knowledge regarding meaning construction for economic and business agents.

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