

# Hope, Perceived Risk and Propensity to Indebtedness

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**Purpose** – The purpose of this paper is to investigate the relations among three constructs in marketing: hope, perceived risk and propensity to indebtedness, which play important roles in consumer behavior.

**Theory** – Hope arises from the belief or expectancy that a future outcome can possibly be achieved, since it is positive and goal congruent, important and uncertain. Recently, the literature suggested that: i) hope can be one factor which influences perceived risk (Snyder 2000); ii) hope brings a person to action and getting indebted to purchase an expensive goal may become one of these actions (MacInnis and de Mello, 2005); and iii) when one has lower perceived risk, s/he is less likely to take protective actions (Brewer et al., 2004). For these reasons, hope is a crucial construct in consumer behavior, and it can play an important influence on perceived risk and propensity to indebtedness.

**Methodology** - This article investigates the relations among those three variables through two empirical studies: i) a laboratory experiment in which we evaluated the impact of hope and perceived risk on getting a mortgage loan; ii) a structural equation model representing university students' propensity to get indebted to pay for their university tuition, given their hope and perceived risk.

**Findings** - Our findings demonstrate that hope plays an important role on propensity to indebtedness, as higher levels of hope predicted an increase in the propensity to accept the mortgage loan, independent of actual risks, and an increase in the propensity of college students to get indebted to pay for their studies. The experiment suggests that hope may lead to a decrease in perceived risk, which, however, has not been confirmed by the second study. We present some methodological contributions, since this is the first study in the international marketing literature using an experimental approach to understand hope and its relationship with perceived risk and propensity to indebtedness.

**Discussion** - Our results expand the current literature in three ways. First, we provided empirical evidence that hope works as an antecedent of consumer's propensity to indebtedness. Second, we suggested that one of the reasons for getting indebted when hope is high is a decrease in perceived risk. Finally, results supported that the three constructs (hope, perceived risk, and propensity to indebtedness) can be integrated in one theoretical model, which may provide insights for future research.



### INTRODUCTION

In general, people hope everyday: when a man applies for a new job, he hopes to get it; when a mother sends her children to school, she hopes they will have a good future; when a person buys a lottery ticket, s/he hopes to win. Hope seems to be pervasive and because it can be found in everyone's mind, it has become an important construct in a number of fields, such as Philosophy (Bloch, 1986), Theology (Moltmann, 1967), Psychology (Snyder, 2000), Nursery (Cutcliffe and Herth, 2002) and Medicine (Schneiderman, 2005). Recently, hope was found to be also an important construct in marketing, being an antecedent of a number of important marketing variables, such as trust, expectation and satisfaction (MacInnis and de Mello, 2005). However, little research has investigated hope in the marketing literature (MacInnis; de Mello, 2005, MacInnis; Chun, 2007, Vanzellotti, 2007).

One hopes when s/he has a goal and strongly believes it can be achieved. Goals are often related to acquisition or consumption, either directly (e.g. to buy a house) or indirectly (e.g. to buy an airplane ticket to enjoy a wonderful vacation), so hope has become increasingly important in the consumer behavior field. Specifically, it has been suggested that hope plays an important role on personal credit acquisition due to the fact that hope renders it possible for the individual to dream about enjoying a different future despite current deficiencies. However, this relationship between hope and propensity to indebtedness has only been investigated by Fleming (2008)'s qualitative research.

Also, literature suggests that high hope can lead to lower perceived risk, which can lead consumers to harmful behaviors (Fleming, 2008). For instance, a consumer who has a high level of hope can underestimate risks and be more prone to indebtedness. Perceived risk in purchase decisions may be lower when hope is strong, since stronger levels of hope (i) increase the perception that the desired goal will happen, (ii) lower the perception of the likelihood of negative consequences and of their severities (MacInnis and Chun, 2007). Although these authors have not empirically tested these propositions, those reasons make it reasonable to suppose that it is by lowering perceived risk that hope influences the propensity to indebtedness.

However, it is still unclear the nature of the relationship of these two variables. For example, instead of reducing perceived risk, hope may just increase the perception that the risk-return relation is worthwhile (Chen, 2007). Some studies found that higher levels of hope are related to preventive behaviors (Snyder, 2000), which would lead to an understanding that hope would actually increase perceived risk, and other studies found that a decrease in perceived risk would not necessarily lead to riskier behaviors (Temoshok et al., 1987).

This article empirically investigates the influence of hope on perceived risk and on propensity to indebtedness. Our findings may contribute to the existing literature by: (i) providing empirical evidence to a causal relation among hope, perceived risk and propensity to indebtedness, which has already been pointed only by theoretical and qualitative research; (ii) demonstrating whether it is possible to integrate two relations already found in the literature (hope and perceived risk, and hope and propensity to indebtedness) in a single model. The article is structured as follows: first we review the literature about hope and its related concepts, perceived risk and propensity to indebtedness, and then we explain the two empirical studies, demonstrating their method and results. We conclude by discussing the finding's implications to the literature, to the marketing practice and public policy, as well by suggesting avenues for future research.

#### THEORY

What Hope is



Some scholars conceptualize hope as an emotion (MacInnis and de Mello, 2005; Nenkov et al., 2009) evoked in response to an uncertain but possible goal-congruent outcome. They understand that hope is a feeling of wanting something, but being unsure about the possibility of getting it. Others consider hope a cognitive set (Snyder 2000) that is based on a reciprocally-derived sense of successful agency and pathways. Agency is "the motivational component to propel people along their imagined routes to goals", while pathways are these imagined routes needed to achieve the desired goal. Together, they enhance each other, once they are continually affecting and being affected by each one as the goal pursuit process unfolds (Snyder, 2000). Nevertheless, according to Day (1991) hope has both emotional and cognitive components, since it involves a combination of belief, which has cognitive purport, and desire, which does not.

Hope arises from the belief or expectancy that a future outcome can possibly be achieved, since it is positive and goal congruent, important and uncertain. Those characteristics of hope are detailed as follows: i) future orientation: hope is always future oriented, meaning that it is based on outcomes that have not happened yet, related to a way of seeing oneself not the way s/he really is, but how s/he would like to be, which was conceptualized by Markus and Nurius (1986) as possible-selves; ii) congruency to positive goals: neither negative outcomes nor outcomes contrary to our wishes will produce hope. In a benign environment, goal congruency means that a favorable outcome could occur, while in an aversive or threatening environment a negative outcome could be avoided or solved (e.g. one might hope for getting a salary raise - favorable outcome in a benign environment - or that s/he will not have cancer - avoiding a negative outcome in a threatening environment); iii) importance: there is no hope for ordinary subjects and the level of hope can vary according to the will, so people will not feel hope when they do not want to reach their goal anymore (Averill et al., 1990); iv) perceived possibility: hope arises with an evaluation of possibility, so a person can hope even when the likelihood of a certain result is very low; v) expectancy: when one perceives a situation as possible, s/he starts to believe or to expect a certain result (those two characteristics, perceived possibility and expectancy, can be exemplified by a person expecting being fired of her/his job because there is a high probability due to a situational crisis, but still having hope of not being so due to the possibility that still exists of maintaining her/his job); vi) uncertainly: hope appears when one perceives barriers to the desired goals. Goals with 100% of probability of attainment (i.e. it is certainly going to happen) do not require hope, while goals with 0% of probability (i.e. it is certainly not going to happen) do not produce hope (Averill et al., 1990).

Because of all these characteristics, hope seems to be more than just the absence of hopelessness (i.e. one may not hope that s/he will find a new job not because s/he feel hopeless about it, but because it is just not important). Also, hope can have either a promotion or prevention focus, which means that one can hope that a favorable outcome will be achieved (e.g. win the lottery) or that an undesired outcome will be avoided (e.g. not have cancer) (Poels and Dewitte, 2007).

## What Hope is not

When thinking about hope, a lot of words come to mind, such as expectations, optimism, confidence, faith and desire. So, we provide understanding of those constructs which are often related to hope, trying to differentiate them.

Expectations: unlike hope, expectation is a construct already extensively explored in the marketing literature (Fleming, 2008). Expectations are the perception of likelihood that reflects the perceived probability that an outcome will be achieved (MacInnis and Chun, 2007). There is hope only when the outcome is goal congruent, while there are expectations for goal congruent, incongruent and irrelevant outcomes (e.g. a person can have expectations



about losing his/her job, but still hope to keep it). There is only hope for important outcomes, while there can be expectations for ordinary ones. Also, it seems that talking about hope involves more passion: Vanzellotti (2007) found in her interviews that the word 'expectations' was used for more realistic and less passionate examples than the word 'hope'. Finally, for hope to exist, the outcome must have a higher degree of uncertainty than for expectations.

Optimism: optimism is a personality trait that makes one assume that negative outcomes are momentous and their causes are external (Seligman, 1991), so a person who is optimistic has generalized joy-producing outcomes expectancies and copes well with challenges of life (Carver et al., 1989). While optimism produces generalized expectations, for hope to exist there must be a specific goal (Bruininks and Malle, 2005), which means that if one is optimistic, s/he will believe that 'everything is going to be all right', while one hopes that specific outcomes such as getting a new job or losing weight will happen. Hope is something experienced by everyone, in different parts of their lives, while only some people are optimistic. Also, while hope can be caused by outcome congruent information, optimism is not caused by specific events (Bruininks and Malle, 2005). Optimism is sometimes referred to as a personality trait, thus it would exist independently from a particular situation.

Confidence: confidence can be conceptualized as the perceived certainty about someone's future behavior (Das and Teng, 1998). While both hope and confidence arise from future uncertain situations, the uncertainty aspect seems stronger for hope (MacInnis and Chun, 2007). When one is confident that something will happen, s/he does not think about the likelihood of it not happening. If this person hopes for something, in contrast, s/he wants it to happen, but is aware of the possibility of an undesired outcome.

Faith: both hope and faith are part of the values from many religions (Smith, 2005). But, unlike faith, hope can be found in non-religious contexts (e.g. one may hope to go to heaven after death - religious context - but one can also hope to win the lottery - non-religious context). Specifically, hope in purchases and consumption seems to be seldom related to religion, but to the achievement of desired outcomes from a number of different natures. While hope is always future oriented, faith can be future, present or past oriented (e.g. one can have faith that Jesus existed, that God is protecting her/him or that s/he will go to heaven after death). While someone must want an outcome to happen when s/he has hope, the same does not happen with faith (Vanzellotti, 2007), since faith does not require an outcome (e.g. one may have faith in God and not want, wish, desire, yearn, expect or hope for any outcome to happen). Also, hope is influenced by the environment while faith seems to depend on individual values (MacInnis and Chun, 2007).

Desire: for hope to exist, the outcome must be important, i.e. it has to be desired beforehand. Because hope and desire are always related (Belk et al., 2003), it is not always easy to recognize whether a certain behavior is guided by desire alone or whether hope is also there. However, they are different in basically five manners: i) possibility level: even though one only hopes for uncertain outcomes, s/he must perceive them as possible (Lazarus, 1999), but a desire can be a mere fantasy, so one can desire something which is perceived to be impossible. For instance, one can desire to fly or to live forever, without hoping that any of these outcomes will happen; ii) desire needs not to come true, it can be reached through dreams (Belk et al., 2003), so it is reasonable that hope is more action-driven than desire alone (Snyder, 2000); iii) while hope is future oriented, desire can be also past and present oriented (e.g. one can desire to have chosen medical school instead of business school in the past, or may have a desire of eating a chocolate cake in the present time); iv) hope needs a minimum degree of uncertainty to exist, which is not the case for desires (e.g. if one has a chocolate cake in the fridge, s/he can desire to eat a piece of it, but s/he will not hope to do so, because s/he is certain s/he can do it); v) there are differences in inconsistent actions concerning desire



and hope: while desire may lead to some inconsistent and even immoral behaviors (e.g. eating caloric food, committing violence against someone) (Karlsson, 2003), hope for desirable outcomes have individuals resist and avoid these behaviors (e.g. hope for losing weight, hope for true friendships) (MacInnis and de Mello, 2005).

# Hope and Perceived risk

Risk can be conceptualized as the probability of events and the magnitude of their specific consequences (Taylor, 1974). Thus, a very risky situation should involve both high probability and severe consequences, and a situation which is very likely to happen, but does not produce severe consequences, should be perceived as equally risky as another situation, which is not very likely to happen, but produces severe consequences.

There are mechanisms to change the way risk information is processed and, as a consequence, perceived. The concept of perceived risk was first explained by Bauer (1960) as a psychological, and subjective construct that reflects the extent to which a product or service is perceived to have uncertain, personal, and negative consequences. Perceived risk is associated to the anticipation of negative outcomes (Johnson et al., 2008), and it is composed by two components: inherent risk (the latent risk a product holds) and handled risk (the amount of conflict the product is able to arise when the consumer chooses a brand).

Risk is a construct of a multidimensional nature (Jacoby and Kaplan, 1972), involving economic, social, psychological, or physical domains. Recently, the literature suggested that hope can be one factor which influences perceived risk (MacInnis and Chun, 2007; Snyder 2000). First, it is important to contextualize risk in hoped for situations: every uncertain situation involves a certain degree of risk, because there is always the risk of not achieving the desired outcome. Because hope only exists for uncertain situations, it is always related to risk. However, hope seems to lead people to run the involved risk (Averill et al., 1990), while fear would prevent them to do so (Bovens, 1999). People may decide to run the risk because they do not perceive it as too high, if compared to not hoped-for situations. For example, Hopfensitz (2006) found that hope predicted risk preferences in investment decisions. Subjects in Weber et al. (2002)'s study reported high beneficial situations from five different domains to be less risky than low beneficial ones, unlike most every day situations in which risk and benefits are positive correlated. The explanation may be that such perception is affected by affective evaluations (Alhakami and Slovic, 1994), and subjects' hope to get the benefits may be lowering the perceived risk of the high beneficial situations.

Risky behaviors may be related to a distortion in perceived risk in at least six ways. First, when searching for congruent information, people may ignore information pointing to the likelihood of negative consequences. So, high levels of hope may lower the perception of risks that a purchase or consumption process might involve (MacInnis and de Mello, 2005). This process has been found to happen for positive emotions in general, which reduce perceived risk if compared to negative emotions (Chaudhuri, 2002). For instance, people believe a medical treatment to be riskier when their emotions are negative rather than positive (Bowen et al., 2003). If hope could be considered a positive emotion or could evoke positive emotion, it would seem reasonable to infer that higher levels of hope lead to reduced perceived risk. Second, defense mechanisms lead people to only pay attention to non-risky decisions aspects (e.g. a person who hopes to lose weight may ignore the side effects information displayed on a medicine label) (MacInnis and de Mello, 2005). Third, because people tend to rely more on information which is congruent to their initial beliefs they are more likely to terminate the process of searching for information earlier when the information found supports a desired conclusion than when it does not (Edwards and Smith, 1996). Thus, people high in hope may look for less information to avoid finding incongruent information; consequently they are led to believe that there is no incongruent information to be found.



Fourth, if risk information is processed, one is likely to counter-argument this information, to search for more congruent information (Nenkov et al., 2009), or to change her/his own acceptance criteria (e.g. a person who hopes to heal a disease may tell him/herself that a medical treatment is not that painful). Joining all these processes, negative consequences seem less likely. Fifth, hope brings to mind favorable images (MacInnis and Price, 1987), which can reduce the perception of consequences' severity. Thus, because those negative images are less latent, they seem less likely to happen, due to the fact that people tend to place too much weight on highly salient data. Finally, Almeida (2010) found that women who strongly hope to look more attractive perceive plastic surgery as less risky than women whose hope is weaker. In other words, when one has a high level of hope, her/his wish for achieving the desired goal can be so strong that running any risks may seem worthwhile.

So, hope seems to be a predictor of perceived risk, in terms that high hope people would perceive less risk compared to low hope ones. However, such relationship is still not clear in the literature. In this article we focus on the perception of financial risk, which occurs when there is some monetary cost in the transaction, and we hypothesize that: *H1: The higher the level of hope, the lower the perceived risk.* 

# Hope and Propensity to Indebtedness

Consumer's financial decisions involve a number of psychological, physic and social values, many of them rooted in feelings and emotions (Vitt, 2004). Some of them can diminish precautions to maintain financial balance. For example, a person who has unrealistic expectations about future earnings is more prone to get indebted (Norvilitis et al., 2003). In Fleming (2008), respondents stated that they would get indebted to achieve a goal which would allow a dream to come true. When hope was high, the information search process was simple, coming to an end when the expected result appeared to be possible.

One of the risk domains affected by hope is the economical domain (MacInnis and Chun, 2007). Actually, hope may be an antecedent of risky behaviors such as gambling (Clotfelter and Cook, 1989). Davies and Lea (1995) hypothesized that college students accumulate debt because of a belief that their current financial situation is temporary, so students' expectations are that as soon as they graduate, income will increase and debt will decrease. But maybe it is not only expectations that are playing a major role on propensity to indebtedness, but hope as well. Also, hope for a long and healthy life can be playing a role in affecting saving behaviors of young adults, since people may fail to imagine that they may not be healthy and underestimate costs of care arrangement for older adults, which results in not enough effort to save money for the future (Vitt, 2004). Indeed, people tend to underestimate their difficulties in the future, which is called 'the credit card effect'. The credit card usage creates a cognitive dissonance, in which one do not feel the sacrifice of losing his/her money, given that the payment will only happen in the future (Block-Lieb and Janger, 2006).

When one hopes to achieve an important goal, s/he produces pathways, which are mental plans about what to do to achieve this goal. Because many goals are achieved by consuming some products (MacInnis and de Mello, 2005), purchasing them can become an important pathway. When the product is expensive, being able to purchase it may become another goal, which we call a "purchase goal", and getting indebted may become a feasible personal strategy. Hope brings a person to action and getting indebted to purchase an expensive goal may become one of these actions. This explanation is consistent with the motivational character of hope.

Obviously, contracting debts is not the only pathway to achieve the goal of buying an expensive product (or service), since possible pathways include saving the money and postponing the purchase. But because there is only hope when the goal is important, it is



possible that one might not want to wait to achieve it. So, we hypothesize that: *H2: The higher the level of hope, the higher the propensity to indebtedness.* 

# Perceived risk and Propensity to Indebtedness

Inability to predict what can happen to a person's life has been proposed as a major explanation for financial problems (Leskinen, 1990). When one has lower perceived risk, s/he is less likely to take protective actions (Brewer et al., 2004), which would prevent her/him to become indebted. Even though this relation seems intuitive, there is also evidence that there are some circumstances in which an increase in perceived risk is followed by a decrease in preventive behaviors (Temoshok et al., 1987), contrary to what may be predicted. The reason behind it is that when some risk is perceived as too high, people may feel helpless about it, which, in turn, decreases intentions to behave adaptively (Maddux and Roggers, 1983).

Some studies failed to find a relationship between perceived risk and risky behaviors. For example, there was little support for a relation between perceived risk and seatbelt usage in Stasson and Fishbein (1990), which main conclusions were that perceived risk only affects behavior through subjective norms and attitudes. Weinstein (1984) argued that people seem to be able to recognize causes and consequences of risky situations when they are lived by other people, but are much poorer to recognize the relationships between their own actions and the risks they run.

Since it is not clear whether there actually is a relation between perceived risk and risky behaviors, the prediction that a decrease in perceived risk leads to an increase to the likelihood of getting indebted is a matter of investigation. When investigating the relation between perceived risk and propensity to indebtedness, there is also the possibility that different people will perceive a given situation as equally risky, but for some the benefits are worthwhile and they are willing to engage in this behavior, while others may see the benefits as less appealing (Conchar et al., 2004). We hypothesize that: *H3. The lower the perceived risk the higher the propensity to indebtedness*.

Next we present the two empirical studies to test the relationship between hope, perceived risk and propensity to indebtedness.

## STUDY 1

#### Method

The experimental design was a 2 (high vs. low hope) X 2 (high vs. low risk) factorial between-subjects. The dependent variables are perceived risk and the propensity to indebtedness. Subjects (n=133; average age = 34.2 years; 50% male; 59% have a monthly income above US\$4,000) were randomly assigned to one of the four pre-tested conditions.

Hope was manipulated by using of a projective technique in which subjects put themselves in an imagined person's life so this third person's hope could be effectively manipulated. Instructions in high hope scenario were about Paul, a hopeful and hard working 30-year man whose dream was to buy an apartment, in the way to start a new life of independence and freedom. Because he just graduated from college and lives frugally, he strongly believes that can save the money previously allocated for tuition, allowing him to pay installments to finance a small apartment. Deeply inside, he is completely convinced that he wants and needs this apartment and he believes "now" is the right time. Instructions in low hope scenario were about John, a hopeless and hard working 30-year man thinking about the possibility of buying an apartment. He just graduated from college and although he lives frugally he believes his savings are not enough to pay installments to finance a small apartment. Deeply inside, he is not much convinced that he wants this apartment because he is not sure it is the right time.



The high hope situation was consistent to the theory, showing a person who had a positive and important goal for the future and showed some degree of belief that this goal could possibly be achieved. The low hope situation, on the other hand, showed that the same goal was not that important and the belief that it could possibly be achieved was weaker. In the pre-test, 40 subjects read the situation and evaluated the character's hope by agreeing to the following statement: "Paul/John hopes a lot to buy the apartment" (1 = totally disagree; 7 = totally agree) (p<0.005; Kruskal Wallis test).

Risk was manipulated by showing different mortgage payment options for each condition. The main differences were: i) value of each monthly payment (high vs. low proportion of character's monthly salary), ii) finance conditions (12% annually adjustable interest rate for 60 months vs. 8% annually fixed interest rate for 360 months), and iii) character's occupation (riskier: free-lancer vs. safer: public administration officer). To check differences in subjects' perception of the riskiness of each choice, we run a pre-test with 40 subjects (hope was not manipulated in this pre-test), where they read the situation and evaluated its riskiness by agreeing to the following statement: "Paul runs a lot of risk by getting this loan" (1 = totally disagree; 7 = totally agree). There was a significant difference between high (mean=33.52) and low risk (mean=21.35) (P<0.005; Kruskal Wallis test).

After reading the situations, subjects answered a questionnaire about: hope and perceived risk of getting indebted and not being able to pay it back (manipulation check); character's propensity of getting indebted to purchase an apartment and character's perceived risk of getting indebted and not being able to pay it back (dependent variables). We measured hope based on Poels and Dewitte (2007) by the following statements: i) "Paul/John hopes a lot to buy the apartment", ii) "Buying an apartment is important to Paul/John", and iii) "Paul/John believes he will be able to buy the apartment" (1 = totally disagree; 7 = totally agree). To measure propensity to indebtedness, respondents were asked to rate how much they believed Paul/John would end up getting this loan (1 = "no way!"; 7 = "for sure!"). To measure respondent's perceived risk, respondents were asked to show their level of agreement to the following statements: i) "Paul/John runs a lot of risk by getting this loan"; ii) "The probability that Paul/John will not afford all month payments is high"; iii) "It is likely that Paul/John will have unexpected expenses during the loan period"; iv) "It is likely that Paul/John loses his main income source during the loan period" (1 = totally disagree; 7 = totally agree). To measure the character's perceived risk, subjects were asked whether they think that the character would perceive the risk he was running by getting the loan: i) "Paul/John perceives the risk of getting this loan"; ii) "Paul/John thinks it is likely that he will not afford all month payments"; iii) "Paul/John think about the possibility of having unexpected expenses during the loan period"; iv) "Paul/John thinks about the possibility of losing his main income source during the loan period" (1 = totally disagree; 7 = totally agree).

#### Results

In the manipulation check, hope ( $\alpha$ =0.85) and perceived risk ( $\alpha$ =0.77) were perceived as different in the two manipulated situations (p<0.001). Supporting hypothesis 1, an ANOVA of character's perceived risk ( $\alpha$ =0.75) revealed a main effect between high and low hope conditions (M = 12.66 vs. 18.31, respectively; F(1,133) = 54.49; p<0.001). It means that respondents who imagined a character (Paul/John) having stronger levels of hope said he was less likely to perceive the risks associated to getting a mortgage loan than respondents who imagine a character having weaker levels of hope. Supporting hypothesis 2, an ANOVA of propensity to indebtedness revealed a main effect between high and low hope conditions (M = 5.51 vs. 3.48, respectively; F(1,133) = 51.40; p<0.001). It means that respondents who imagined a character having stronger levels of hope said that he was more prone to accept the loan than respondents who imagine a character having weaker levels of hope. Supporting



hypothesis 3, an ANOVA of propensity to indebtedness revealed a main effect between high and low perceived risk conditions (M = 4.17 vs. 5.02, respectively; F(1,133) = 6.80; p < 0.001). When the situation seemed less risky, respondents stated that the character would be more prone to get the loan. There was no interaction between hope and perceived risk on propensity to indebtedness, and no interaction between hope and perceived risk on the character's perceived risk (p>0.05). FIGURE 1 illustrates the main effects of hope and perceived risk on propensity to indebtedness.

FIGURE 1- Propensity to indebtedness' means for the four experimental conditions

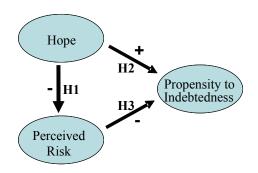
As mentioned before, perceived risk was measured twice. First, the respondent's perceived risk was measured for the manipulation check. Then, the character's perceived risk was measured as a dependent variable, being influenced by hope. For this reason, it is important to evaluate whether the manipulation of risk affected the character's perceived risk. Character's perceived risk was not significantly different in high risk (M = 15.11) vs. low risk (M = 15.5) conditions (F(1,133) = 0.18; p>0.05). It suggests that the respondents evaluated the risk in a rational way, but when they projected themselves onto the character's situation, they allowed hope to interfere in their perception of the risk.

### STUDY 2

#### Method

To summarize hypotheses 1, 2 and 3, a theoretical model is presented in FIGURE 2, demonstrating the proposed relationships among the three variables. The purpose of this study is to test the relationship among those variables in a real consumer context, in addition to increasing external validity of the findings from study 1.

FIGURE 2 - Proposed model of the role of hope on perceived risk and propensity to indebtedness





Some prior in-depth interviews with undergraduate students of a large private business school brought "graduating from college" as a hoped for situation, which would lead to a major goal of building a successful career and, as a consequence, finding "the job of their dreams". This situation may be capable of provoking indebtedness, because some students may not afford to pay their monthly tuition fee. As a result, indebtedness may become a risky situation.

Subjects (n=264; average age = 23.84 years; 38% male; 58% sophomore of business administration) answered an online questionnaire from October to December 2010. We used Structural Equation Modeling for data analysis (software AMOS 19.0.0) (maximum likelihood estimator).

To measure hope, we used a scale from Vieira (2008), the only one developed in Portuguese and tested with Brazilian consumers, as seen in TABLE 1. It is multidimensional in nature (dimensions: importance, perceived possibility, goal congruency). Originally, this scale was developed for the situation of hope of losing weight, and we adapted to represent the context of hope of finding the "dream job" through graduating from college.

TABLE 1 – Indicator of the hope scale

Dimension	Indicators	Dimension	Indicators		
Importance	(IM1) Achieving the job of my	Goal	(C1) Achieving the job of my dreams is		
1	dreams is important to me	Congruency	part of my greatest life's goals		
Importance	(IM2) To be fully satisfied, I need to	Goal	(C2) I need to achieve the job of m		
	achieve the job of my dreams	Congruency	dreams to consider myself a happy person		
Importance	(IM3) To achieve the job of my	Goal	(C3) Achieving the job of my dreams is an		
	dreams, it is imperative to graduate	Congruency	ideal in my life		
	from university		-		
Perceived	(PP) From 0% to 100%, how sure are you that you will achieve the job of your dreams?				
Possibility					

Even though they are part of the concept of hope, some dimensions could not be included in the questionnaire. Uncertainty was removed from the scale after the pre-test, since questions such as "I am not sure that I will achieve the job of my dreams" did not reflect uncertainty, since people who strongly believed in this possibility totally disagreed with this statement. Writing the same statement as a reverse question (e.g. "I am 100% sure that I will achieve the job of my dreams") resulted in the same kind of interpretation. However, because this situation (achieving the "dream job") is in the future, it is implicit that it is uncertain. The dimension "future orientation" was also removed for the same reason.

TABLE 2 – Indicators of Propensity to Indebtedness and Perceived risk scales

Propensity to indebtedness	Perceived risk		
(PE1) Contracting debt to pay the university's tuition	(PR1) Going to university is a very high investment.		
is worthwhile	(PR2) Going to university requires a lot of sacrifices		
	(financial and non-financial).		
(PE2) I prefer to get a loan instead of to wait to save	(PR3) Making all considerations, I think going to		
money to pay the university's tuition	university could be a mistake.		
(PE3) I would be willing to compromise a significant	(PR4) I feel that going to university could bring me		
part of my future income to pay the installments of my	negative consequences.		
university's tuition loan	(PR5) I am afraid of not being able to pay my		
	university's tuition.		
(PE4) I find it natural when people are indebted in	(RI) The decision to go to university involves high		
order to pay their university's tuition	risk.		
	(PR1) Going to university is a very high investment.		



Propensity to indebtedness was adapted from Ribeiro et al. (2009), who measured attitudes toward indebtedness. The adaptations were made: i) to contextualize the statements in the given situation; and ii) to measure not only attitudes, but also the willingness to engage in this behavior. Perceived risk was adapted from Eroglu and Machleit (1990) and Stone and Gronhaug (1993). All variables were measured in a 7-point Likert scale (totally disagree; totally agree), and their indicators are displayed on TABLE 2.

#### Results

After exploratory factor analysis for each variable, we found that perceived risk's indicators loaded on three factors, showing construct's multidimensionality. The indicators PP, HO, and IM3 were dropped from further analysis since they did not load on any factor.

Hope was measured by five items (IM1, IM2, C1, C2 and C3; propensity to indebtedness was measured by four items (PE1, PE2, PE3 and PE4) and perceived risk was measured by four items (PR1, PR2, PR5 and RI). All three variables had all standardized regression weights higher than 0.50. For perceived risk, the best fit was achieved by a second order model, having two dimensions (factor 1: sacrifice; factor 2: financial risk), according to the multidimensionality of this variable (Johnson et al., 2008). Indexes for the measurement model and reliability of the three variables are displayed in TABLE 3. The final model is displayed in FIGURE 3.

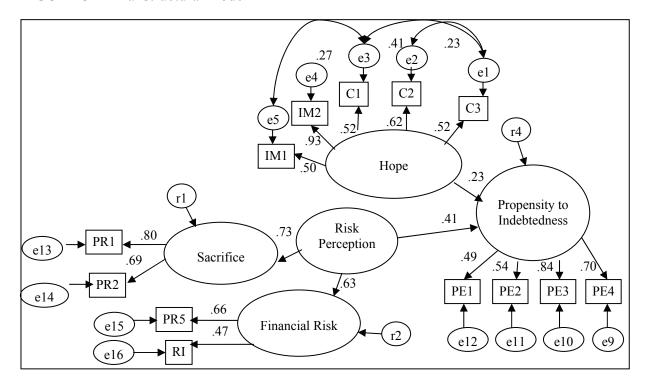
TABLE 3 - Indexes for the measurement model and reliability of the three variables

Variable	Composite Reliability	α	Indexes for the measurement model					
variable			$\chi^2$	$\chi^2/DF$	RMR	GFI	RMSEA	CFI
Hope	0.76	0.79	5.880	2.940	0.003	0.099	0.086	0.990
Propensity to indebtedness	0.74	0.73	1.447	0.724	0.002	0.997	0.000	1
Perceived	Factor 1: 0.70	0.70	4.018	2.009	0.025	0.992	0.062	0.986
risk	Factor 2: 0.56	0.53	4.018					

 $<sup>\</sup>chi$ 2: Chi-Square;  $\chi$ 2/df: ratio of Chi-Square and degrees of freedom; RMR: standardized root mean square residual; GFI: goodness-of- fit index; RMSEA: root mean square error of approximation; CFI: comparative fit index



FIGURE 3 – Final structural model



In the final model all estimates have achieved significance, and because the relation between hope and perceived risk had not achieved significance, it was omitted from the model. After that, the inspection of modification indices did not suggest any misspecification of the final model. TABLE 4 displays the goodness-of-fit indexes for the structural model.

TABLE 4 – Goodness-of-fit indexes for the structural model

Goodness-of-fit indexes for the structural model								
df	$\chi^2$	$\chi^2/DF$	RMR	GFI	AGFI	RMSEA	CFI	
59	76.999	1.305	0.051	0.958	0.935	0.034	0.978	

 $\chi$ 2: Chi-Square;  $\chi$ 2/df: ratio of Chi-Square and degrees of freedom; RMR: standardized root mean square residual; GFI: goodness-of-fit index; AGFI: adjusted goodness-of-fit index; RMSEA: root mean square error of approximation; CFI: comparative fit index

Hypothesis 1 was not supported, suggesting that hope does not influence perceived risk. This finding supports the idea that getting indebted may be worthwhile. An alternative explanation for this finding is that because all subjects actually are university students, their perceived risk about going to university may already be low if compared to people who do not go to college. Hypothesis 2 was supported (p<0.005; standardized regression weight = 0.233), so subjects who showed willingness to get indebted to pay for their studies are the ones who showed to have more hope. However, it does not mean that they see it as a risk-free decision.

In other words, the model suggests that the higher the subjects' hope for achieving the job of their dreams, the higher their willingness to get indebted to pay for their university's tuition. The results provide empirical support to Fleming (2008)'s qualitative finding. Therefore, it is possible to suppose that getting indebted may be seen as a pathway to afford college tuition, which, in turn, is a pathway to achieve a good job, in accordance with Snyder (2000)'s theory.

The structural model showed a significant positive relation between perceived risk and propensity to indebtedness (p<0.001; standardized regression weight = 0.351) (hypothesis 3 predicted a negative relation between those variables). It means that subjects who perceived



more risks in going to college are the ones who showed more willingness to get indebted. We found three alternative explanations for this finding. First, students who can afford to pay for their studies may not find this a risky decision and may not have been able to see themselves in a situation in which they would get indebted. Second, the fact that all subjects are actually university students may have influenced the results, since students who perceive going to college as a risky choice are not undergraduate students and have not being included in the sample. Third, when some risk is perceived as too high, people may feel helpless about it, which in turn decreases intentions to behave adaptively (Maddux and Roggers, 1983), according to other findings in which an increase in perceived risk is followed by a decrease in preventive behaviors (Temoshok et al., 1987).

#### FINAL REMARKS

### Discussion Study 1

The first study investigates experimentally the impacts hope plays on perceived risk and propensity to indebtedness, and the influence of perceived risk on propensity to indebtedness. Our results in this study confirm that hope influences propensity to indebtedness. In accordance to Fleming (2008), when the character showed to have a higher level of hope, subjects believed he would be more prone to get indebted than when he showed a lower level of hope. The reason behind it could be either a decrease in perceived risk or a reflection that to achieve the desired goal running high risks might be worthwhile.

Hope influenced perceived risk, in agreement with MacInnis and de Mello (2005). Specifically, when subjects faced the high hope scenario, they agreed that the character perceived less risk in getting the loan, compared to when subjects faced the low hope scenario. Hence, we can suppose that a decrease in perceived risk could have contributed to an increase in the likelihood of getting indebted.

This study also showed evidences that perceived risk may influence the propensity to indebtedness. When the perceived risk was lower, subjects were more prone to agree that the character would get the loan. These findings are consistent to the theory that perceived risk is an antecedent of behavior (Brewer et al., 2004). Although both hope and perceived risk seemed to influence consumers' propensity to indebtedness, we did not find a significant interaction between them.

Our results in this study expand the current literature in three ways. First, we provided empirical evidence that hope works as an antecedent of consumer's propensity to indebtedness. Second, we suggested that one of the reasons for getting indebted when hope is high is a decrease in perceived risk. Finally, results supported that the three constructs (hope, perceived risk, and propensity to indebtedness) can be integrated in one theoretical model, which is the focus of study 2.

# Discussion Study 2

The second study investigates through path analysis the impacts hope plays on perceived risk and propensity to indebtedness, in a more real context compared to the first study. Specifically, the goal was to investigate whether hope for a better future would lead to a decrease in perceived risk and, as a consequence, to an increase in propensity to get indebted. The level of subjects' hope to achieve the job of their dreams influenced an increase in the propensity to get indebted to afford college tuition, in accordance with the first study and with Fleming (2008). Going to college may be seen as a major pathway to achieve this hoped-for goal.

However, this study failed to find a significant relation between hope and perceived risk, suggesting that the level of students' hope to achieve the job of their dreams has not been



sufficient to make the decision to go to university seems less risky. The reason may be that they think that running this risk is worthwhile, or because all of them have already decided to go to college, apparently independent on their level of hope. In other words, if hope really is an antecedent of perceived risk, low hopeful people may have not being included in the sample because of their decision of not going to university. Unlike what has been predicted, this study found a positive relation between perceived risk and propensity to indebtedness. A possible reason is that people who said that going to college is a risky choice are the ones who already considered getting indebted to pay the university's tuition. It may be possible that their income level is affecting both their perceived risk and propensity to indebtedness, which is a matter of further investigation.

## *Implications*

Both studies offered support to the hypothesis that hope influences propensity to indebtedness. Specifically, higher levels of hope predicted an increase in the character's propensity to accept the mortgage loan, independent of actual risks, such as fixed installments or income stability. In addition, higher levels of hope predicted an increase in the propensity of college students to get indebted to pay for their studies. Findings are consistent with the idea that getting indebted would be a feasible pathway (Snyder, 2000) to achieve an important goal. Consistent with MacInnis and Chun (2007) and MacInnis and de Mello (2005), purchase and consumption appeared to be the goal per see (buying an apartment) or the means to achieve the main goal (going to university is a mean to achieve a good job).

However, the two studies have shown conflicting evidences regarding the impacts of hope on perceived risk and of perceived risk on propensity to indebtedness. Instead of reducing perceived risk, hope lead subjects believe that running any risks would be worthwhile (Bell, 1995; Chen, 2007), as the benefit of achieving a good job would be evaluated as higher than the risk of not being able to pay the installments (Weber et al., 2002). Another possibility, which has not yet been investigated, is that situational aspects moderate the influence of hope on perceived risk and of perceived risk on propensity to indebtedness. Here, the hope for purchasing an apartment negatively influenced the perceived risk of a mortgage loan, while the hope for having a better future was not sufficient to negatively influence the perceived risk of going to college.

This research offers some methodological contributions, being the first empirical study investigating the relation among hope, perceived risk and propensity to indebtedness, providing support for the hypothesis that consumer's hope increases propensity to indebtedness. Because hope can be stimulated by advertising (MacInnis and Chun, 2007), this research shows an opportunity for increases in sales by stimulating installment payments or consumer credit acquisition. Also, our findings suggest that consumers may underestimate the risks of getting indebted or think that these risks are worth running, when they strongly hope for an acquisition (product or service). For this reason, managers may develop and apply mechanisms to prevent themselves from selling goods to people who might overestimate their ability to pay. Finally, our results have implications for public policies: an over-indebted population causes a number of negative consequences for the society, from an increase in prices to an economical crisis. Understanding the impact of consumer's hope on propensity to indebtedness sheds light for the development of mechanisms to prevent over-indebtedness.

# Future Research

Notwithstanding this study has provided new thoughts, several limitations should be concerned, and overcome in future research. First, while the projective approach has shown to be appropriated for study 1, respondents may fail to imagine themselves in the character's situation and answered the questions thinking about how a third person would behave instead



of him/herself. Manipulating respondents' own hope level looks fruitful for future studies. Second, there have been only a few trials of measuring hope in consumer behavior (exceptions are Almeida, 2010; Chen, 2007; de Mello et al., 2007; Poels and Dewitte, 2007; Wang, 2007; Nenkov et al. 2009), each of them using different scales. Consequently, it may be difficult to compare findings among studies (marketing literature needs a better measure for hope). Third, concerning study 2, there are other variables that could cause effects on perceived risk and propensity to indebtedness, such as personality traits, attitude toward indebtedness and past experience. Finally, using a students' sample was not sufficient to offer evidences of the relation between hope and perceived risk and between perceived risk and propensity to indebtedness. It would be ideal to include in the sample people with the same demographic characteristics, who decided not to go to university.

Future studies could investigate the role of income as a moderator of perceived risk and propensity to indebtedness, check whether there is any differences in propensity to get indebted and real indebtedness, and whether is possible that the risk of getting indebted is seen as too high and able to inhibit preventive behaviors.

An alternative explanation about the influence of hope on propensity to indebtedness is that it is not due to a decrease in perceived risk, but due to a feeling that running any risks may be worthwhile. This idea has been presented by Bell (1995), MacInnis and de Mello (2005) and Chen (2007) and should be further investigated. The reason for getting indebted for high hope people (a reduction in perceived risk or the feeling that running risks is worthwhile) should be further investigated: if both mechanisms can happen as a consequence of hope, when each one is more likely to operate and what are the reasons? If hope really decreases perceived risk, it is not clear whether it decreases the perception of the likelihood that a negative outcome could happen or the severity of its consequences. Such issues have not yet been investigated and would increase our knowledge about how people make purchase decisions.

Finally, literature suggests that hope is related to important marketing variables, such as trust, expectation and satisfaction (MacInnis and de Mello 2005; Almeida et al. 2007). Testing causal relations among these variables would broaden our current knowledge of the role of hope in consumer behavior.

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