

NOTE TO USERS

This reproduction is the best copy available.

UMI[®]

**ADVERTISING SKEPTICISM AMONG ADOLESCENTS:
AN EXTENSION INTO THE SOCIAL MARKETING ARENA**

Karine Goneau

A Thesis
In
The John Molson School of Business

Presented in Partial Fulfilment of the Requirements
for the Degree of Master of Science in Administration (Marketing) at
Concordia University
Montreal, Quebec, Canada

March 2004

© Karine Goneau, 2004



National Library
of Canada

Bibliothèque nationale
du Canada

Acquisitions and
Bibliographic Services

Acquisitions et
services bibliographiques

395 Wellington Street
Ottawa ON K1A 0N4
Canada

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence

ISBN: 0-612-91036-9

Our file Notre référence

ISBN: 0-612-91036-9

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this dissertation.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de ce manuscrit.

While these forms may be included in the document page count, their removal does not represent any loss of content from the dissertation.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.

Canada

ABSTRACT

Advertising Skepticism among Adolescents: An Extension into the Social Marketing Arena

Karine Goneau

The youth market is of considerable importance to those selling commercial products as well as to those seeking to discourage unhealthy or risky behaviours ('social marketers'). One of the key challenges for social marketing is the development of effective messages. Advertising skepticism, an individual characteristic, has been shown to mediate the effectiveness of commercial ad appeals. However, similar research in the social marketing arena is lacking, although sorely needed.

This study seeks to fill a gap by conceptualizing the construct of skepticism toward social advertising. We develop a measure for this construct in relation to ads seeking to discourage adolescents from risky behaviours such as smoking and drinking and driving, and in a cross-cultural context. Based on an extensive literature review, and input from adolescents and expert judges, this measure was pre-tested using over 210 junior college (Cegep) and undergraduate students, and its reliability and validity investigated.

Subsequently, a refined version of this measure was used in a study where 232 responses were obtained from high school students in two different schools – one French and one English. Results obtained indicate that the scale possesses many desirable psychometric properties, and provide further evidence of its validity. Results also indicate that commercial ad skepticism and social ad skepticism are clearly distinct constructs. For instance, while the former is significantly correlated with parental communication style, the latter is not, although both are affected by a particular type of peer influence. In other findings, adolescents' skeptical attitudes toward social ads were significantly correlated with various risky behaviour perceptions. Finally, additional exploratory tests showed that age and language influence an adolescent's skeptical attitudes toward ads.

Acknowledgements

I begin these acknowledgements by sincerely thanking my thesis supervisor, Professor Mrugank Thakor, Ph.D., for his boundless availability, patience and knowledgeable insight. His dedication and support throughout this process has made this research experience very valuable to me.

I would also like to thank the high school administrators and staff who so graciously welcomed me in their environment in order for my data collection to take place. Their cooperation and time was deeply appreciated.

Also of worthy recognition is my friend Luisa, who recurrently offered me her generous help and support throughout my research process. Sincerely, thank you.

On a last and most important note, I would like to offer my most sincere gratitude and love to my family as well as to my companion Etienne. À mes parents, sans votre appui, vos mots d'encouragements (et même parfois vos gestes d'encouragement!), je n'aurais jamais su surmonter un exploit aussi demandant. Non seulement que je vous apprécie, mais je vous aime énormément. Un gros merci.

Et à toi Etienne, merci pour ta patience, ta compréhension et ton soutien. Un partenaire comme toi, c'est indispensable... tu m'es indispensable. Avec beaucoup d'amour, je te remercie.

Table of Contents

List of Figures.....	viii
List of Tables.....	ix
(1) Introduction.....	1
(2) Literature Review.....	4
2.1) Social Versus Commercial Marketing.....	4
2.2) Ad Skepticism.....	13
2.2.1) Conceptual Definition and Dimensions.....	13
2.2.2) The Importance and Differences Between Social and Commercial Ad Skepticism.....	20
2.3) Risky Behaviour among Youth	22
2.3.1) Perceptions of Risky Behaviours.....	23
2.3.2) Fear Appeals and Protection Motivation Theory	25
2.4) Socialisation Agents: Peers and Parents.....	27
2.4.1) Susceptibility to Peer Influence	28
2.4.2) Parental Influence: Communication Style.....	31
2.5) Adolescent Personality	34
2.5.1) Sensation seeking	34
2.5.2) Materialism.....	37
2.5.3) Self-esteem	40
2.5.4) Reactance.....	42
(3) Framework and Hypotheses.....	45
(4) Methodology	60

4.1) Scale Development	60
4.1.1) Item Generation	60
4.1.2) Item refinement.....	65
4.2) Main study	67
4.2.1) Survey Instrument and Measures	68
4.2.2) Sample and Procedures.....	73
(5) Results.....	75
5.1) Data Preparation	75
5.1.1) Data Coding and Scoring.....	75
5.1.2) Preliminary Data Analysis.....	75
5.2) Assessment of Measures.....	79
5.2.1) Factor Structure: Social Ad Skepticism Scale	79
5.2.2) Construct reliability	81
5.3) Correlations	85
5.3.1) Validity of Social Ad Skepticism	85
5.3.2) Correlations between main variables.....	88
5.4) Hypotheses Testing.....	89
5.4.1) Regression Results : Test of H1 – H8.....	89
5.4.2) Correlation Results: Test of H9	95
5.4) Additional Analyses	97
5.5.1) Age, Gender and Language Differences.....	97
5.5.2) Peers vs. Parents	103
5.5.3) Media Consumption	105

(6) Discussion	107
6.1) Replication of Past Findings.....	108
6.2) Extensions of Past Research and New Findings.....	111
6.3) Additional Findings	116
(7) Limitations and Future Research	119
(8) Contributions.....	123
Bibliography	128
Appendix 1 – English Questionnaire	137
Appendix 2 – French Questionnaire	145
Appendix 3 – Social Ad Skepticism Items	154
Appendix 4 – Attitude toward Social Ad Items.....	156

List of Figures

Figure 1 – Theoretical framework	45
Figure 2 - Steps used to develop health-related social ad skepticism scale.....	62
Figure 3 - Scatterplots.....	76
Figure 4 – Boxplots.....	77
Figure 5 –QQ plots.....	78
Figure 6 – Scatterplots of standardized predicted values vs. observed values	94
Figure 7 – PP Normality plots	94
Figure 8 – Studentized Residuals Histograms	95

List of Tables

Table 1 – Summary of Research on Social Marketing Effectiveness.....	7
Table 2 – Summary Research on Adolescents’ Attitudes toward Advertising.....	17
Table 3 – Social Ad Typologies Inspired by Past Studies	64
Table 4 - Social Ad Skepticism, Dimensionality and Reliability	67
Table 5 – Frequencies and sample statistics	74
Table 6 – Descriptive Statistics – Age and Grade	74
Table 7 – Reversed Scale Items	75
Table 8 – Summary of screened-out cases.....	79
Table 9 - Reviewed Scale for Social Ad Skepticism	81
Table 10 – Measurement Items and Reliabilities.....	82
Table 11 – Reliabilities Table: Past vs. Present Study.....	84
Table 12 – Correlations, Discriminant Validity and Nomological Validity	86
Table 13- Correlations among dependent and independent variables	89
Table 14 – Regression Model 1 – Commercial Ad Skepticism.....	90
Table 15 - Regression Model 2 – Social Ad Skepticism	91
Table 16 – Correlation between risk perceptions and social ad skepticism	97
Table 17 – Descriptive Statistics of new sample: age, gender and language	99
Table 18 – Oneway ANOVA results: gender, age and language	100
Table 19 – Cross tabulation: language * media literacy class	101
Table 20 – Cross tabulations: age * media literacy class.....	102
Table 21 – Correlations to assess adolescents’ preferences of parents.....	104
Table 22 – Summary of hypotheses results	107

(1) INTRODUCTION

Grasping the depths of an adolescent's views of advertising is not only beneficial for traditional marketers, but it is also salient for social marketers and public policy makers. For their part, commercial marketers should want to better target a market that is exposed to more than 40 000 commercials per year (Boush, Friestad and Rose, 1994). Staggering statistics show that a teenager watches 16 to 17 hours of television per week (Strasburger and Donnerstein 1999) and spends an average of 7 hours per day viewing a combination of other types of mass media such as films, internet, videos, billboards, magazines, newspapers, etc. (Morris and Katzman 2003). In turn, this type of media exposure influences a young consumer's shopping habits. Studies indicate that young people spend over 55 billion dollars annually on various goods and services (Boush, Friestad and Rose, 1994). Moreover, teenagers are known to control much of the family's spending habits (Mangleburg and Bristol 1998), making them a salient consumer to consider.

On the other hand, social marketers and public policy makers should also want to better understand the many issues that surround this market in order to adequately target adolescents with their social marketing campaigns. Teens are often faced with unclear choices regarding risky behaviours such as smoking, drinking, drug use, sexual activity and active living. Still, the countless social marketing efforts aimed at informing teens and creating awareness of such issues among youth have often times failed (Palmgreen et al 2001). For instance, in a 2002 focus group study prepared for Health Canada, few adolescents could state with certainty the specific health risks related to smoking, including those risks mentioned in the government-sponsored second-hand smoke ads (Goldfarb Consultants March 2002). Further studies showed that one of Health Canada's

strongest moderation-in-drinking messages was only recalled by half of the adolescents surveyed (Garceau, Canadian Gallup Poll 1985). This is problematic since the 1989 National Alcohol and Drugs Survey (NADS) found that 8 out of 10 adolescent Canadians were in fact regular drinkers, with 50.4% of this group admitting to have consumed alcohol on a monthly basis (see Adrian, Layne and Williams 1995). Finally, only 24% of adolescents were able to recall Health Canada's wide spread campaign regarding the risks of marijuana (Garceau, Canadian Gallup Poll 1985).

Evidently, commercial and social marketers alike should pay close attention to the intricacies of today's youth market. This study will attempt to evaluate one aspect of an adolescent's views on advertising, that of skepticism toward advertising. Commonly known as *ad skepticism*, this concept is defined as the "tendency toward disbelief of ad claims" (Obermiller and Spangenberg 1998). While some past studies have already attempted to clarify the antecedent variables to consider when assessing an adolescent's skeptical attitude toward commercial advertisements (Ford, Smith and Swasy 1990, 1998, Boush, Friestad and Rose 1994; Mangleburg and Bristol 1998, etc.), no attention has ever been given to social marketing efforts. Namely, past research has always concentrated on traditional commercial ads while ignoring social ads targeted at youth.

This study will attempt to fill a gap in past research by striving to separate commercial ad skepticism from social ad skepticism. We will first distinguish commercial marketing from social marketing in order to associate the salience of the latter ad type with adolescent risky behaviours. Additionally, we will focus on the different antecedent

variables that have been proven in past research to affect adolescents' skepticism towards *commercial* advertising, while contending that such variables should also be pondered when considering teens' skepticism of *social* campaigns. To summarise, this paper will attempt to replicate as well as to extend past efforts regarding adolescent ad skepticism. In a continuous parallel with the review of adjacent studies, we will present a comprehensive framework that will emphasise a series of related hypotheses for future analyses. Final discussions on the implications and contributions of this study will then conclude the paper's intentions.

(2) LITERATURE REVIEW

2.1) SOCIAL VERSUS COMMERCIAL MARKETING

In our study, we propose the use of two distinct measures of ad skepticism: one common measure to account for commercial ads and another novel measure to take into consideration social ads. Is this necessary? What are the differences between social and commercial ads that necessitate the development of a new measure? Evidently, the introduction of a social ad skepticism measure will permit an adaptation of past research efforts into the social marketing arena, thus permitting us to verify whether or not ad skepticism can actually be extended to social marketing practices as well. However, the need for a measure of social ad skepticism goes beyond these intentions: when considering the immense differences that exist between commercial marketing and social marketing, one immediately notices the need for distinct measures.

Commercial marketing is an integral part of any firm's business strategy. In a competitive market, a firm must always strive for survival by offering information as well as incentives to consumers in order to achieve sales and to gain profit. It can be agreed that "a free market is characterised by easy access to information" (Obermiller and Spangenburg 1998) and that this information is often times conveyed to consumers through advertising. Commercial advertising (¹) thus becomes a very important aspect of a firm's marketing mix (Abraham and Lodish 1990). In this sense, commercial

¹ Commercial advertising here is defined any communicational effort that is design by businesses, while we will further refer to social advertising as those efforts made by any non-business (public or non-profit agencies).

marketing practices are used to add value to a company, mostly in terms revenue. On the other hand, the objectives behind social marketing practices are, for the most part, not financially driven. Philip Kotler was one of the first researchers to introduce the concept of social marketing when he proposed “an extension of the marketing technologies into non-business arenas [...] thus prompting marketers to benefit society by considering the marketing of *social ideas and causes*” (Crane and Desmond 2002). Social marketing is praised in terms of being able to use business strategies to achieve specific ethical and social goals (Boone, Farley and Samuel 1985). Indeed, it allows non-businesses to use marketing practices in order to raise awareness, or even in some cases, to change a person’s behaviour in regards to a specific social concern.

One must always remember the key purpose of social marketing campaigns and advertisements: they are held in order to create as well as to achieve *social change*. Be it to change racial stereotypes (Donovan and Leivers 1993), to encourage anti-smoking initiatives (Mintz et al 1997; Pechman et al 2003; Peracchio and Luna 1998) or even to create awareness on the dangers of drinking (Garceau-Canadian Gallup Poll, 1985), all of these outcomes imply some type of *social change*. In fact, to measure a social campaign’s effectiveness, one must evaluate the degree to which it achieved its *planned social change*. Planned social change is “a (...) task that requires making decisions as to which strategies to use (...) in order to achieve policy objectives related to bringing about a pre-specified magnitude and/or direction of change in a given social or consumption behaviour” (Sheth and Frazier 1982). Considering the effectiveness of social campaigns targeted toward adolescents is especially important since this young audience is often

more prone to engaging in risky behaviours such as smoking, drinking, sexual promiscuity, etc. Table 1 below summarises some of the past literature that has treated such social marketing effectiveness issues.

It becomes obvious that both types of marketing strategies – commercial and social – cannot be regarded in a similar light: while one promotes products or services, the other tries to achieve its planned social change; while one mostly uses persuasive messages, the other mostly uses fear appeals; while one makes more general claims to audiences, the other attempts to reach the public on a more personal level. In any case, it seems appropriate to treat each type of ad separately, thus offering a distinct measure for both commercial and social ad skepticism.

Table 1 – Summary of Research on Social Marketing / Social Advertising Effectiveness

<i>Study</i>	<i>Sample</i>	<i>Objective</i>	<i>Dependent Variable / Main variable of study</i>	<i>Independent Variable / Contexts of study</i>	<i>Major Findings</i>
Brewer (2002)	224 undergraduate students	In a not-for-profit context, to examine the effect of message framing on how people use value words or language to transmit their political views.	Views toward the political topic (frame)	Message frames / value words used in message (Equality vs. Morality)	Participants who received that value words did influence the way in which participants would frame their opinions.
Davies, Preston and Wilson (1992)	116 sixth-formers intending to enter higher education; 62 first year undergraduate students; 75 current final-year MSc. Students	Using a case study to better understand how not-for-profit organisations, such as universities could optimise their competitive advantage through service differentiation.	University Selection	Factors influencing university choice: recreational activities, accommodation, other services	University social ads should emphasize courses offered, likelihood of acceptance, travel commodities, social life advantages and general accommodation.
Donovan and Leivers (1993)	189 local respondents	Pilot study to determine the feasibility of using mass media to modify stereotypes against Australian Aborigines	Social campaign effectiveness (Belief towards aboriginal)	Mass Media Campaign	Results showed significant changes in beliefs about the proportion of Aborigines in paid employment and in the proportion of employed Aborigines in a job for an extended period of time.
Environics Research Group (2003)	1200 adolescents 12 to 19 years of age	To examine current awareness, attitudes and behaviours relating to smoking, second-hand smoke, tobacco companies, government smoking reduction policies and anti-tobacco advertising.	Smoking status and quitting, attitudes toward smoking, attitudes toward second-hand smoke and tobacco industry, communication sources, demographics	n/a (no hypotheses, simply descriptive statistics)	Many descriptive statistics that show that nine out of ten youth have a negative opinion of the tobacco industry and that a majority of the adolescents recalled Health Canada's anti-smoking campaigns.

Table 1 (cont'd) – Summary of Research on Social Marketing / Social Advertising Effectiveness

<i>Study</i>	<i>Sample</i>	<i>Objective</i>	<i>Dependent Variable / Main variable of study</i>	<i>Independent Variable / Contexts of study</i>	<i>Major Findings</i>
Garceau (1985)	Various samples	To summarise advertising recall (and recognition) for various Health Canada social ads regarding tobacco, alcohol and marijuana as per the Canadian Gallup Poll's statistical findings	Advertising recall, advertising recognition.	Age, sex, mother tongue, region, usage of the substance presented in the social ad	Pinpointed the most effective and the least effective social campaigns from Health Canada, in terms of ad recall and ad recognition.
Goldman and Glantz (1998)	1500 children and adults	Focus group studies are used to review research on the effectiveness of different anti-smoking messages	Perceived effectiveness of anti-smoking campaign	Eight advertising strategies	Focus group participants indicated that industry manipulation and second-hand smoke are the most effective strategies to discourage tobacco use.
Grier (2001)	13-16 year olds	Reviewed the Federal Trade Commission's report regarding the impact on violent entertainment on Youth.	Ongoing case study	Ongoing case study	Children generally believe that they should be treated older than they really are, thus giving themselves permission to enjoy restricted entertainment products. Reactance also shows to be a problem when considering movie ratings or music ratings.
Griffin, Botvin, Nichols and Doyle (2002)	Youth from 29 inner-city middle schools (N = 758)	To see whether universal school-based drug-prevention programs are effective for youth.	Reported behaviours in regards to smoking, drinking, inhalant use and polydrug use (Social campaign effectiveness)	High-risk vs. low risk toward substance use and reception of intervention program vs. no reception of intervention program	Results indicate that a universal drug abuse prevention program is effective for at-risk youth.
Keller and Block	97 university-level smokers	To investigate the conditions under which messages that prompt high and low levels of fear are likely to be effective.	Persuasion, problem elaboration, solution elaboration and social recall (as coded b open-ended responses)	Fear arousal (low vs. high), reference (self-reference vs. reference to others) and processing (imagery vs. objective processing)	The elaboration-enhancing interventions used (imagery, self-reference, increased the persuasiveness of a low-fear appeal message.

Table 1 (cont'd) – Summary of Research on Social Marketing / Social Advertising Effectiveness

<i>Study</i>	<i>Sample</i>	<i>Objective</i>	<i>Dependent Variable / Main variable of study</i>	<i>Independent Variable / Contexts of study</i>	<i>Major Findings</i>
Kelly, Slater and Karan (2002)	384 adolescents ages 12-16	To examine "whether attitude toward the ad (Aad) and attitude toward the brand (Ab) mediate the effects of visual, image- oriented content in advertising on perceptions of the desirability of beer and cigarettes as well as soft drinks."	Aad, Ab and Attitude toward product category.	Treatment of ad (image or tombstone); product category cigarettes, beer or soft drinks); people vs. no people in ad.	Advertisements with image-oriented visuals were found to directly produce more positive Aad, Ab and Attitude toward product category.
Kraak and Pelletier (1998)	n/a	To review research methods marketers use to gain information about young consumers in order to design targeted marketing campaigns, and to see how such strategies could be used in a social marketing framework to design more effective nutrition education and health promotion campaigns.	Advertising styles, techniques and channels; market segmentation, television advertising, sales promotions, celebrity endorsements, multimedia exposure, kid's clubs, product placements, etc.	n/a	"It may be strategically necessary to create partnerships with stakeholders who are also concerned about the influence of commercialism on children and teenagers because public health budgets are insufficient to compete with the multi- million dollar campaigns of manufacturers and marketers"
Mintz, Layne, Ladouceur, Hazel and Desrosiers (1997)	11 to 13 year olds	To render psychographic results, tracked the some of Health Canada's anti- smoking campaigns in or monitor the level of recall and track changes in behaviour and attitudes.	Social campaign effectiveness indicators: level of campaign awareness, attitudes, current use and trends.	Demographics, use of cigarette, social activities, interests, lifestyle and personal interests, etc.	From the survey data, seven character types were identified o provide a segmentation framework for new social campaign initiatives..
Moore, Raymond, Mittelstaedt and Tanner (2002)	1343 middle school and high- school aged students	To explore the relationships among several factors – such as socialisation agents (parents, peers and media) – that potentially influence adolescents' sexual knowledge, attitudes and behaviours.	Factual knowledge, attitude toward sexual responsibility, engaging in sexual Intercourse, frequency of sexual activity, number of sexual partners.	Socialisation agents (peers, parents and media)	Parental influence in the most consistent socialisation agent across age groups on all dependent variables studied. However, there are some significant varying results across high school and middle school students.

Table 1 (cont'd) – Summary of Research on Social Marketing / Social Advertising Effectiveness

<i>Study</i>	<i>Sample</i>	<i>Objective</i>	<i>Dependent Variable / Main variable of study</i>	<i>Independent Variable / Contexts of study</i>	<i>Major Findings</i>
O'Shaughnessy (1996)	n/a	Conceptual article that attempt to sort out "a real conceptual confusion between social marketing and social propaganda" by referring to past literature.	n/a	n/a	There is a conceptual difference between social marketing and social propaganda. However, seeing that both concepts are interrelated, the wording and message choices are of great importance to the social marketer.
Palmgreen, Donohew, Lorch, Hoyle and Stephenson (2001)	100 random teenagers selected monthly from two matched communities over a period of 32 months.	"To evaluate the effectiveness of targeted televised public service announcements campaigns in regards to marijuana use among high sensation-seeking adolescents."	Social campaign effectiveness (Levels of marijuana use)	3 campaigns, low vs. high sensation seeking	"Televised campaigns with high reach and frequency that use public service announcements designed for and targeted at high-sensation-seeking adolescents can significantly reduce substance use in this high risk population"
Pechmann, Zhao, Goldberg and Reibling (2003)	1667 adolescents	Using Protection Motivation theory as a backdrop, to assess anti-smoking social marketing initiatives in order to examine the impacts on health vs. social risks on risk severity and risk vulnerability.	Behavioural intentions, health risk perceptions, social risk perceptions, efficacy, cost and benefit perceptions	Nine antismoking message themes (eight treatment, one control)	"Three of the eight message themes increased adolescent's non-smoking intentions compared with the control condition by enhancing adolescents' perceptions that smoking poses severe social disapproval risks."
Peracchio and Luna (1998)	Study 1: 106 high school students Study 2: 104 grade school students	Based on focus groups, to develop an age-appropriate analogy-based advertising campaign to discourage smoking among children and youth.	Study 1 And 2: Opinions on smoking, content of anti-smoking messages, overall social campaign effectiveness etc.	Study 1: Division of four groups: female smokers, female non- smokers, male smokers, male non- smokers Study 2: Presentation of smoking prevention ads	Results show that there indeed exists age differences in children's understanding of advertising analogies designed to discourage smoking.

Table 1 (cont'd) – Summary of Research on Social Marketing / Social Advertising Effectiveness

<i>Study</i>	<i>Sample</i>	<i>Objective</i>	<i>Dependent Variable / Main variable of study</i>	<i>Independent Variable / Contexts of study</i>	<i>Major Findings</i>
Reichert, Heckler and Jackson (2001)	658 undergraduate students from three public universities	To explain how sexual appeals can affect cognitive processing and persuasion for help-self social marketing topics, such as AIDS, or STDs, etc.	Thoughts and cognitions, responses, advertising and persuasion process	Message appeal (sexual vs. nonsexual), 13 marketing topics.	Sexual appeals are more persuasive overall than matched nonsexual appeals for social marketing topics.
Ringold (2002)	n/a	An overview of past research in order to determine how reactance in affecting public health interventions in regards to alcohol consumption. To offer a framework within which some of the unintended consequences of such social ads can be understood and/or avoided.	Past research regarding public health interventions	Looked into individual variables, characteristics of past public health intervention attempts, etc.	Some consumer reactions, such as boomerang effects, should be taken into account as one of the potential costs of launching a mass communication campaign. Consumer reactance is a variable that thus needs to be considered.
Rothschild (1979)	n/a	Conceptual paper that attempt to review ways to effectively use marketing communications techniques for public and non-profit purposes.	Past research regarding social marketing effectiveness	n/a	The study identified factors that lead to social marketing failure or success such as situational involvement, enduring involvement, benefits / reinforcer costs, costs, cost/benefit ratio, pre-existing demand and segmentation.
Schoenbachler and Whittler (1996)	371 adolescents	Used Tanner, Hunt and Eppright's (1991) model of threat appeal effectiveness to see whether or not it can also be used to provide insight about the psychological processes adolescents' experiences when viewing physical and social threat message in a drug-related context.	Personal fable, imaginary audience, counter arguments, support arguments, attitude / PSA, attitude / drug use, behavioural intention – week, behavioural intention – month, behavioural intention – ever	Type of threat used in PSA (social or physical) and intensity of threat presented (high, medium or low)	Social threat communications were more persuasive than physical threat communications. Sensation seeking was an important moderating variable.

Table 1 (cont'd) – Summary of Research on Social Marketing / Social Advertising Effectiveness

Study	Sample	Objective	Dependent Variable / Main variable of study	Independent Variable / Contexts of study	Major Findings
Sheth and Frazier (1982)	822 subjects from metropolitan area of Chicago	To present a model of strategy mix that will help achieve planned social change, or rather will ensure the success of a social marketing campaign.	Social campaign effectiveness (overall attitude toward car pooling)	Car pooling behaviour	Results show how the model can be used, that is how a change agent can evaluate which process should be facilitates in a given planned social change situation.
Tanner, Hunt and Eppright (1991)	120 business undergraduate students	To propose and test several changes to the protection motivation model in a sexual context in order to test the effectiveness of fear appeals (presented the <i>ordered protection motivation</i> <i>schema</i>)	Arousal of fear, perceptions of threat severity and probability of occurrence, intentions to adopt coping response, maladaptive behaviours, social costs	Type of information presented regarding STDs (High threat information, low threat information, high threat followed by coping response information, low threat followed by coping response information, coping response information or no information) and demographic information	Results indicate that the ordered protection motivation model should be adopted since the appraisal process is most likely to be an ordered process with threat appraisal preceding coping appraisal.

2.2) AD SKEPTICISM

Simply put, ad skepticism can be viewed as “consumers’ negatively valenced attitude toward the (...) claims made by advertisers” (Mangleburg and Bristol 1998). Although various attempts have been made to accurately define ad skepticism, a common thread that remains among the various existing definitions of ad skepticism is the issue of trust. Indeed, ad skepticism often times alludes to the consumer’s lack of trust in advertising (Boush, Friestad and Rose 1994; Boush et al 1993; Mangleburg and Bristol 1998). Let us review the assorted views that exist in regards to the proper definition of the ad skepticism in order to present our ultimate view of this construct, be it in a social or commercial arena.

2.2.1) Conceptual Definition and Dimensions

Past researchers have attempted to study the concept of ad skepticism from various angles. For their part, Ford, Smith and Swazy (1990) reviewed consumer skepticism with the assumption that this construct would follow the theory of the economics of information. They sought to prove that ad claims higher in subjective, experiential and credence attributes would generate greater levels of ad skepticism than would objective claims. While the results of their study supported most of their assumptions, Ford, Smith and Swazy (1990) nevertheless prompted future academics to “attempt to determine whether skepticism is a unidimensional construct, and if not, [to] identify its components”. Even though their call for further research on the dimensionality of ad skepticism was quickly stated at the end of their report, the authors’ appeal drove various researchers into this area of study, thus provoking this eminent debate regarding the dimensionality of ad skepticism.

Without a doubt, consumer skepticism remains a controversial construct in advertising research. While some academics view ad skepticism as a multidimensional concept, others contend that the variable consists of only one dimension. Most researchers agree that a consumer can be skeptical of the ad claims (Mangleburg and Bristol 1998; Boush, Friestad and Rose 1994; Obermiller and Spangenberg 1998). However there is an ongoing debate to see whether or not ad skepticism can be conceptualised further to include the mistrust of an advertiser's motives or the intrusive nature of advertising (Obermiller and Spangenberg 1998).

For their part, Boush, Friestad and Rose (1994) argue that ad skepticism is multidimensional: it is a two-factor construct that embodies a consumer's disbelief of ad claims and mistrust of advertiser motives. They maintain that "the disbelief items (...) reflect perceptions of the truth of advertising claims, while the mistrust items all have to do with suspicion of advertiser motives." Their view regarding the dimensionality of ad skepticism is shared by other academics, such as Mangleburg and Bristol (1998) who drew on Boush et al's (1994) definition of ad skepticism to present their own report on this issue. Although Mangleburg and Bristol (1998) defined ad skepticism as "consumers' negatively valenced attitude toward the motives of and claims made by advertisers", they did not conceptualise the construct as such in their study. While Boush et al (1994) clearly measured the two dimensions of ad skepticism in a separate fashion, Mangleburg and Bristol (1998) assessed ad skepticism in terms of Gaski and

Etzel's (1986 – see Mangleburg and Bristol 1998) measure of *sentiment toward advertising*.

These latter measures of ad skepticism - as presented by Mangleburg and Bristol (1998), or Boush et al (1994) – fuelled an opposing school of thought, one that argued that ad skepticism should only be viewed as having one dimension. Obermiller and Spangenberg (1998) insist that ad skepticism is a general and standard marketplace belief that *only* shows a consumer's tendency toward the disbelief of advertising claims. They maintain that a consumer's skeptical ad attitudes are limited to the sense of disbelief since they feel that ad skepticism is a completely separate construct from that of *general attitude toward advertising*. These allegations bring doubt to past efforts that used such scales as *the sentiment toward advertising scale* to measure ad skepticism: was the general attitude toward advertising construct actually mistaken for ad skepticism? Obermiller and Spangenberg (1998) argue that “one may dislike advertising because one is skeptical of it, but skepticism and general attitude are conceptually separate”. In this sense, those academics that have taken into account the multidimensional facets of ad skepticism might have unknowingly been treating both a consumer's general attitude toward advertising and a consumer's skeptical attitude toward the ad.

Indeed, one of the most common topics of research includes the evaluation of attitude toward advertising (Aad). Similarly to ad skepticism, this issue has often been viewed from angles: some academics “support the notion that attitudes toward advertising are multi-dimensional, consisting of attitudes toward the institution as well as toward the

instruments used by advertisers” (Muehling 1987). In their review of past research regarding attitude toward advertising, Muehling and McCann (1993) concurred that “reference to attitude toward the ad can be traced back as far as (...) 1925 [with] (...) one stream of research [viewing] Aad primarily as a one-dimensional construct (...) {and} a second stream investigating the notion that Aad may be comprised of more than just a global dimension”. Some researchers even attempted to investigate Aad specifically among adolescents in order to evaluate an emerging trend in advertising research, namely “the memory-by-age phenomenon (...) [and the] younger versus older respondents phenomenon” (Dubow 1995). Table 2 below summarises some of the previous research that has been accomplished on adolescents’ attitude toward advertising in general.

Table 2 – Summary of Some of the Previous Research on Adolescents' Attitudes toward Advertising in General

<i>Study</i>	<i>Sample</i>	<i>Objective</i>	<i>Dependent Variable / Main variable of study</i>	<i>Independent Variable / Contexts of study</i>	<i>Major Findings</i>
Andrews (1989)	Undergraduate marketing students from 6 universities	"Examines the predicted dimensionality of Bauer and Greyser's (1968) belief statements toward advertising's economic and social dimensions.	Bauer and Greayer's belief toward advertising scale	n/a	"Results indicate separate economic and social belief dimensions, dimension consistency among multiple sample groups, skepticism on the part of segments who may be more favourable to advertising in general and predicted institutional differences on social belief items. "
Larkin (1977)	College students	"To provide some insight into the opinions and attitudes of college students toward advertising and to attempt to determine the underlying factors which may account for similarities and differences in these attitudes."	Four attitudinal areas to measure Aad (economic effects of advertising, social effects of advertising, ethics of advertising and regulation of advertising)	n/a (since using factor analysis)	Analysis of the responses revealed five clusters – or types – of individuals based on their attitudes toward advertising in general.
Moore and Moschis (1978)	Adolescents from middle schools and high schools	The study wanted to investigate the learning of selected advertising-related cognitions among adolescents and assess the short-term effect of these advertising-related cognitions & other communication variables on adolescent consumption behaviour.	Cognitive reaction to advertising (and, eventually, consumption behaviour)	Age, communication behaviour (television viewing habits and interpersonal communication such as parent-adolescent adolescent-parent and peer-to-peer)	Study finds that cognitive developments due to advertising occur primarily in a social context with communication with parents and peers as significant predictors.
Muchling (1987)	Undergraduate business students	To examine more closely the antecedent factors that may influence attitude-toward the ad	Attitude toward advertising in general and valenced thought indices		The study supports the notion that attitudes toward the ad is a multidimensional construct, consisting of attitudes toward the institution as well as toward the instruments used by the advertisers.

Table 2 (cont'd) – Summary of Some of the Previous Research on Adolescents' Attitudes toward Advertising in General

Study	Sample	Objective	Dependent Variable / Main variable of study	Independent Variable / Contexts of study	Major Findings
Muehling and McCann (1993)	n/a – conceptual paper	To examine the state of Aad research by detailing the means by which Aad has been defined and conceptualised.	Aad	n/a	Reviews past studies regarding Aad. Reviews the various conceptualisations used in past research: multidimensional conceptualisation vs. one-dimensional conceptualisation of Aad. Presents a full table summary of past research
Riecken and Samli (1981)	Children from grades 2 – 7	"To determine whether Rossister's scale is capable of producing reliable measures of children's attitudes toward commercials in general as well as toward television commercials for specific types of products"	Children's attitudes towards television advertising	None – but attempted to extend scale into three product categories: cereals, propriety medicines and toys	The study attempted to replicate Rossister's short objective test for measuring children's attitudes toward television advertisements. The studies successfully extended the scale into three product categories with high internal consistency and moderate test- reliability found for each case.
Ritson and Elliot (1999)	High school students	An ethnographic study that "shifts the empirical focus to the social viewer and being the process of identifying and conceptualizing a new phenomenon in consumer research: the social uses of advertising."	Social uses of advertising and adolescent's attitudes towards advertising in general	n/a	"The study reveals a series of new, socially related advertising audience behaviours. Specifically, advertising meanings are shown to possess social uses relating to textual experience, interpretation, evaluation, ritual use and metaphor."
Rossister 1977	Children from grades 4-5-6 (ages 9 through 12)	"To introduce a short, standardized test of children's attitudes toward television commercials (which could also be extended to other advertising media) and to report on its psychometric properties in terms of alternative procedures for reliability determination"	Children's attitude toward television advertising	None – scale development study	Successfully establishes a short objective test to use for the measurement of children's attitude toward television commercials.
Ward and Robertson (1972)	Students from grade 8 - 12.	To provide some baseline data about attitudes of adolescents toward advertising and to test hypotheses concerning predictors of adolescent attitudes toward advertising as well as advertising recall	Attitudes toward TV advertising and ad recall	SES, communication media use, intelligence, materialism, and effects on buying	Findings suggest that adolescents do not have extensive attitudes toward television advertising.

The popularity of the concept of Aad could easily explain why some researchers might have incorporated its notion during their assessment of ad skepticism. In any case, we share the same view as Obermiller and Spangenberg (1998) and maintain that ad skepticism should only be viewed in terms of a consumer's disbelief of the ad's claims. We further contend that past efforts that regarded ad skepticism as being multidimensional actually took into account contextual factors of ad skepticism as opposed to its dimensions. Specifically, we believe that when a consumer shows mistrust towards an advertiser's motives, that this consumer is actually concerned with the message source and is not necessarily skeptical of the ad itself. Seeing that the message source consists of a contextual variable that can be manipulated, it must not be considered as a factor of ad skepticism. Although it must be accounted for, a consumer's attitudes towards an advertiser's motives should not be viewed as an aspect of consumer ad skepticism. Its account might actually be measuring the degree to which a consumer has a positive (or negative) attitude toward advertising in general, rather than assessing the degree to which the viewer puts into question the specific ad. Other authors, such as Hardesty, Carlson and Bearden (2002) also agreed with this one-dimensional conceptualisation of commercial ad skepticism since they insisted on using Obermiller and Spangenberg's measure of ad skepticism in their own study.

We also propose to extend this one-dimensional view of ad skepticism into the social arena. That is, we find that social ad skepticism should be characterized as an extension of Obermiller and Spangenberg's (1998) definition of general ad skepticism: we thus define *social ad skepticism as a consumer's tendency toward the disbelief of social*

advertising claims. In this sense, social ad skepticism does not include any allusions towards the possible mistrust a consumer could have of the advertiser's motives. Specifically, it would seem counter-intuitive to doubt a public policy maker or a social advocate of his / her motives. In any case, even if their motives were put into question, such doubt would remain the result of a contextual factor, one that might merely emphasize a person's attitude toward social advertising in general. For these reasons, we have included a measure of this latter construct within our study in order to ensure a significant distinction between attitude toward social advertising and skepticism toward social ads. Furthermore, our assumptions regarding the composition of social ad skepticism found support via our pilot study, which will discuss in a later section.

2.2.2) The Importance and Differences Between Social and Commercial Ad Skepticism

Some scholars view ad skepticism in a positive light since it stresses the critical ways of thinking a consumer should have in order to properly process the ad's message (Boush, et al 1993). However, this line of reasoning might not be true in a social context, since social marketers would better appreciate instances when consumers internalise their message rather than question it. Let us review the main differences to consider when assessing advertising skepticism within a commercial versus a social arena.

When assessing commercial ads, some consumers find that marketers will engage in dishonest practices to *persuade* them with their message (Ford, Smith and Swasy 1990; Boush et al 1993, etc.). In all evidence, some consumers are highly skeptical of commercial ad claims. Although these skeptical attitudes do somewhat put into question

the credibility as well as the values of marketers and of their ads, advertising skepticism is nevertheless regarded as a positive consumer reaction. “An attitude of consumer skepticism is beneficial (...) because it rewards truthful advertisers (...) and penalizes deceptive advertisers” (Boush et al 1993). In fact, some researchers contend that “the marketplace both tolerates and relies on some level of consumer skepticism” (Obermiller and Spangenberg 1998).

Hence, commercial ad skepticism is regarded as a crucial process that permits the consumer to accurately assess the information provided by advertisements and therefore is an important skill for consumers to acquire (Mangleburg and Bristol 1998). Some researchers have more specifically assessed adolescents’ formation of attitudes toward ads (Ritson and Elliot 1999), while other academics even evaluated teens’ learning of skeptical attitudes towards advertising (Mangleburg and Bristol 1998; Boush Friestad and Rose 1994). The salient variables considered in past research for the evaluation of adolescent (commercial) ad skepticism – namely parents, peers and personality – will be further discussed in later sections. However, it is important to acknowledge the findings of these past studies in order to try to ascertain if they can contribute to the evaluation of adolescent *social* ad skepticism.

In any case, it becomes evident that social marketers would like to avoid skepticism of their social ads since such campaigns attempt to achieve some type of social change, whereby the person viewing the ad is expected to respond positively to and to comply with the ad’s message. To this end, recall that our view of skepticism entails a

consumer's tendency to show a lack of trust toward the advertising claims (Ford, Smith and Swasy 1990; Boush et al 1993). In the *Elaboration Likelihood Model*, it is contended that "there exists a relationship between trust and persuasion, because mistrust may affect a [consumer's] motivation to process a message" (Boush et al 1993). Since social marketers want to achieve social change, it becomes imperative for them to transmit their message to their captive audience in a way that will be regarded as truthful and trustworthy. For these reasons, we will rather view social ad skepticism in a *negative* light. The target audiences - in our case adolescents – should in fact be *less* skeptical when viewing social ads given that the central messages of such efforts attempt to inform them on social issues. Although *commercial* ad skepticism is praised for bringing about a consumer's critical processing abilities (Boush et al 1993), *social* ad skepticism should contrastingly be viewed as a negative outcome. In all, to ensure that social change is achieved, social marketers must try to avoid this attitudinal result among their audience in order to make certain that their ad campaign is understood, respected and trusted.

2.3) RISKY BEHAVIOUR AMONG YOUTH

Be it for reasons of rebellion, of sensation seeking or even of experimentation, teens regularly endanger themselves by taking part in risky activities such as smoking, drinking, drug use, sexual activity and (in)active living. A study from the Canadian Teachers' Federation (1990) found that 37% of teenage women were preoccupied with the use of alcohol, while 50.9% were concerned with the use of illicit drugs. Furthermore, in a 1993 Health Canada tracking study (see Adrian, Layne and Williams 1995), it was found that 21% of youth aged 11 to 13 reported that they had consumed alcohol within the last year. These tracking studies (1993) also showed that 23% of teens

11 to 13 years of age felt that most of their peers drank while 76% of adolescents aged 14 to 17 viewed majority drinking among their peers. Another Health Canada survey found that 15% of youth did not consider smoking to be as dangerous as people say (EnviroNics, November 2001).

In all, social marketers and public policy makers should further evaluate the various aspects of risky behaviours among teens. Many studies have already attempted to clarify several policy and marketing issues regarding these youth-driven dilemmas. A study by Pechmann et al (2003) evaluated the most effective social marketing practices to use when striving to target youth with anti-smoking messages. For their part, Mainous et al (1996) tried to tie the use of tobacco, marijuana and alcohol to an adolescent's need state. Other academics, such as Calfee (2000) attempted to clarify the impacts that tobacco advertising had on children, while Grier (2001) probed into the world of violent entertainment to assess its effects on adolescents. Past research has also tried to identify some of the main underlying factors that exist when considering youth and risk perceptions (Merill, Kleber, Shwartz, Liu and Lewis 1999; Rindfleisch and Crockett 1999; Rummel et al 2000, etc.). However, let us review some background information to consider when striving to accurately assess the link between adolescent risky behaviours and advertising.

2.3.1) Perceptions of Risky Behaviours

The literature regarding teens and risky behaviours has looked at this issue from various angles. Some scholars treated the negative aspects of risk taking among youth (Chassin, Presson and Sherman 1989; Smith and Rosental 1995) while other academics rather

assessed the intrinsic characteristics (i.e. sensation seeking or impulsivity) that are associated with adolescent risk taking (Schoenbachler and Whittler 1996). However, the more salient school of thought regarding youth and risky activities refers to the notions of risk perceptions (Rindfleisch and Crockett 1999; Smith and Rosenthal 1995; Cohn et al 1995, etc). Indeed, the relative importance of various risky behaviours is oftentimes contingent upon the adolescent's perceptions of such activities.

Some studies refer to teens' risk perceptions in terms of *unrealistic optimism*, namely stating that "adolescents (...) make discriminating judgements about the likelihood of various negative events" (Smith and Rosenthal 1995). Cohn et al (1995) supported this notion of unrealistic optimism when they found that some teens actually undervalued the dangers related with certain behaviours. They agreed that "teenagers [are] underestimating the risk associated with the very activities that they are most likely to pursue, such as occasional intoxication, drug use, and reckless driving" (Cohn et al 1995). For their part, Smith and Rosenthal (1995) extended the ideas of unrealistic optimism by proposing that adolescents do not only evaluate the negative consequences of their risky actions in terms of physical injury to themselves, but they also consider the social costs and the benefits of their activities. In fact, their study showed that teens rated risky activities into two categories: high-risk activities (such as driving under the influence) and low-risk activities (such as drinking beer). Lower-risk activities were thus more readily considered by teens as being less harmful, thus prompting the youth to undermine the true dangers associated with such behaviours.

This same line of reasoning brought Moore and Gullone (1996) to investigate the relation between an adolescent's risk judgements and risk perceptions. After evaluating students' opinions on various risky behaviours, the authors found that teens viewed the activities in terms of their possible payoffs (i.e. pleasure, material gain, etc) and their negative outcomes (death, social costs, etc.). This relationship between the costs and benefits of a given risky activity helped predict the teens' participation in such risky behaviours. Likewise, some researchers viewed teen risk taking in terms of risk acceptability. For instance, Rindfleisch and Crockett (1999) posited that people assessed their perceived risk in terms of different domains. Their study showed that smoking is significantly associated with five types of risks, including financial, addiction, health, social and time risks. Their findings also supported the notion that risk acceptability, namely the degree to which people "like to take risks and enjoy doing things people tell [them] they shouldn't do" (Rindfleisch and Crockett 1999) will moderate the impact of certain risks. This relation, in turn, helped to forecast the person's intentions to partake in risky demeanours. In all, it becomes clear that adolescents' perceptions of a risky behaviour serve as valid predictors of their participation in that activity.

2.3.2) Fear Appeals and Protection Motivation Theory

Social marketers, and even commercial marketers, will often times rely on the shocking impact of fear appeals to convey their message to the public. Fear appeals are a type of message appeal that is used to inform "consumers on the risks of using or not using a particular product" (Quinn, Meenaghan and Brannick 1992). For example, anti-smoking campaigns will readily use fear appeals to warn consumers about the dangers of using tobacco products (Peracchio and Luna 1998; Goldman and Glandz 1998; Pechmann and

Ratneshwar 1994, etc.). However, past research regarding the use of fear appeals found that such scare-tactics might actually increase a consumer's defence mechanisms. In such cases, the viewer might prefer "avoiding the message, minimising the severity of the message, discounting the threat and denying its personal relevance" (Keller and Goldberg-Block 1996).

The Protection Motivation Theory was thus proposed in response to this lack of certainty surrounding the use of fear appeals. This theory provides significant explanations regarding the effectiveness of such appeals (Pechmann et al 2003). The original Protection Motivation (PM) model was based on Roger's (1983) findings and considered an individual's coping behaviours to be mediated by four types of cognitive processes (*see Pechmann et al 2003 and see Tanner Hunt and Eppright 1991*). Consumers are thus thought to cognitively estimate "the perceived severity of the threat, the perceived probability that the threat will occur [(vulnerability to the risks)], the perceived ability of a coping behaviour (coping efficacy) and the individual's perceived ability to carry-out the coping behaviour (self-efficacy)" (Tanner, Hunt and Eppright 1991). The PM theory also hypothesises two distinct sub-processes, namely threat appraisal (severity, vulnerability and benefits) and coping appraisal (self-efficacy, response efficacy and costs). The PM model "posits that people's intentions to protect themselves are weakened by the perceived costs of the advocated risk-reducing behaviour and the perceived benefits of the opposing risk-enhancing behaviour" (Pechmann et al 2003).

In all, the model considers the way in which consumers would cope with ad messages that illustrate physical and/or social threats. Both types of message threats are indeed examples of fear appeals that have respectively found mixed support in past literature. For their part, Pechmann et al (2003) found that messages stressing the negative social consequences of smoking were more effective at reducing smoking intentions among adolescents than physical threat messages. Other studies showed that effective fear appeals are those that follow an ordered version of the PM model, namely by getting consumers to start with the threat appraisal and to finish with the coping appraisal (Tanner et al 1991). Further research also found that message appeals should not be too focused on the negative consequences of the risky behaviour since such an emphasis might interfere with the consumer's effective processing of the coping strategies presented in the ad (Keller and Goldberg-Block 1996). Seeing that the use of fear appeals is inevitable in social marketing – and, in some instances in commercial marketing as well – it becomes extremely important to consider the implications of the PM model. Knowing that adolescents might react differently to various fear appeals prompts one to consider the implications of past studies in this field. Perhaps the guidelines by which the PM model finds fear appeals to effective will also help to predict the extent to which adolescents will have skeptical attitudes toward social ads and/or commercial ads.

2.4) SOCIALISATION AGENTS: PEERS AND PARENTS

Consumer socialisation is viewed as “the process by which young people develop skills, knowledge and attitudes relevant to their functioning in the marketplace” (Moore, Raymond, Mittelstaedt and Tanner 2002). During socialisation, different agents will

often times work in various ways to sway a young person's development (Akers and Lee 1996). These socialisation agents -namely peers, and parents - are "deemed primary influences on the psychological, emotional and moral development of young people" (Moore, Raymond, Mittelstaedt and Tanner 2002). In fact, many researchers found support to indicate an existing link between the impacts of socialisation agents and a teen's advertising knowledge (Boush 2001; Roedder John 1999; Mangleburg and Bristol 1998; Boush, Friestad and Rose 1994, etc.). A thorough review of past literature on consumer socialisation will help us to specifically disseminate the relationships that may exist between peers, parents and adolescent ad skepticism.

2.4.1) Susceptibility to Peer Influence

Although peers are often seen as an adolescent's most salient sources of influence (Aker and Lee 1996; Cooper and Cooper 1992; Moore et al 2002; Mangleburg and Bristol 1998, etc.) there remains contrasting views regarding the appropriateness of peer relationships in past literature. One line of reasoning holds that "*peers are bad* [since] they foster undesirable qualities (...) such as aggression, early sexual involvement and drug use" (Cooper and Cooper 1992). On the other hand, some posit that *peers are good* since they provide "both the setting and the means for adolescents to develop a mature sense of self" (Cooper and Cooper 1992). Regardless of these discrepancies, a common denominator among these contrasting views is the notion that peers do, in one shape or form, influence an adolescent's *social learning*. The social learning theory has been regularly used in past studies to investigate different types of adolescent behaviours, with special attention given to teens' deviant behaviours. In this sense, the theory posits that adolescents learn about deviant behaviours through the information that is provided to

them by their peers and parents (primary groups) as well as by the mass media (secondary group) (Akers and Lee 1996). For instance, the social learning theory proposes that teens will be more likely to take up the habit of smoking if they affiliate with people who are smokers and who hold favourable attitudes toward smoking. There is also an understanding that “when these sources [of information] are in conflict, adolescents will most often behave similarly to close peers” (Akers and Lee 1996). In fact, some researchers contend that “adolescents develop preferences for specific information sources, favouring peers and friends over parents and mass media as they mature” (Roedder-John 1999). It becomes obvious that peer influence plays very strong role – even a more salient role than that of parents – in predicting an adolescent’s views and behaviours.

It is with this line of reasoning that some researchers decided to consider the extent to which peers would influence an adolescent’s advertising knowledge (Moore et al 2002; Mangleburg and Bristol 1998; Boush, Friedstad and Rose 1994). Seeing that peers were indeed linked with a teen’s social learning process, such academics decided to consider a young person’s *susceptibility to peer influence* when assessing advertising attitudes among youth. This concept, also known as *consumer susceptibility to interpersonal influence* (CSII), is defined as a “willingness to conform to the expectations of others regarding purchase decisions” (Boush, Friestad and Rose 1994). Scholars thus treated this construct within their framework to adequately assess the prominence of peer relationships. For their part, Moore et al (2002) investigated the roles that *peer social modelling* (i.e.: what peers do) and *peer vocal pressure* (i.e. what peers say) had on an

adolescent's comprehension of topics treated in public service announcements. Their findings actually showed that while peers played a lesser role in influencing a teen's thoughts regarding sexual responsibility, they did greatly sway a teen's views on smoking, namely by promoting this behaviour regardless of the campaign's anti-smoking messages.

Mangleburg and Bristol (1998) pushed this idea even further when they decided to investigate the link between an adolescent's susceptibility to peer influence and commercial ad skepticism. Their work was actually an extension of Boush, Friestad and Rose's (1994) work which initially only drew a link between CSII and commercial advertising skepticism. When Boush, Friedstad and Rose's (1994) hypothesis was only partially supported, Mangleburg and Bristol (1998) attested that this lack of support was due to the multi-dimensionality of CSII. They thus presented the two dimensions of peer influence: the *normative* dimension, which stressed the teens' willingness to merely comply with the wishes of their peers, and the *informational* dimension, which underlined the teens' desire to use and internalise information gathered from their peers. In the end, Mangleburg and Bristol (1998) were not only able to provide significant support for a *positive* link between an adolescent's susceptibility to *informational* peer influence and commercial ad skepticism, but they also provided support for the existence of a *negative* relationship between an adolescent's susceptibility to *normative* peer influence and commercial ad skepticism. Obviously, the notion of peer influence is a notable factor to consider when assessing adolescent ad skepticism. It remains to be seen however if CSII is as good a predictor of social ad skepticism as it was proven to be for

commercial ad skepticism. Be that as it may, if past research is any indication of trends to come, one can at least confidently posit such a relationship in the context of future research.

2.4.2) Parental Influence: Communication Style

Parental socialisation is regarded as a “process that helps children develop habits and values that are congruent with their prevailing cultural environment” (Moore et al 2002). As previously mentioned, the *social learning theory* not only considers the impact peers have on a teen’s (deviant) behaviours, but it also takes into account the influence that parents have on an adolescent’s behavioural intentions (Akers and Lee 1996). Some researchers found that teens will in fact “become more flexible in using different sources of information, favouring peers and friends for some types of product information [while favouring] parents for others” (Roedder John 1999). In this sense, although teens often prefer the opinions of their peers, they will nevertheless consider their parents’ views as well. For example, Moore et al (2002) found that teens actually preferred asking their parents about sexuality rather than relying on their peers for such information.

The salience of parental influence stems from the notion that “the family is the major primary group within which considerably close and intimate socialisation occurs” (Adams, Côté and Marshall 2001). However, seeing that this relationship is non-voluntary - unlike voluntary friendships - (Adams, Côté and Marshall 2001), researchers often evaluate the extent to which an adolescent prefers his peers to his parents (Cooper and Cooper 1992). Three angles can be taken to assess this issue: one can view peers “a necessary compensation for parents, (...) [as] competing with parents (...) [or even as]

unique and complementary to parents” (Cooper and Cooper 1992). The only agreement among these different conceptions lies in the notion that parents indeed hold a great responsibility when considering their child’s up-bringing and social learning. Academics thus recognise that “parents must now compete with a myriad of other influences to have discernible effects on the growth and development of their children” (Adams, Côté, and Marshall 2001). For these reasons, parents ought to carefully choose the manners in which they decide to raise their children. This includes the appropriate choice of parenting as well as communication style.

Parents can choose to be authoritarian (i.e. less responsive and more controlling), democratic/authoritative (i.e.: more responsive and warm) or permissive (i.e.: laissez-faire and neglectful) (Adams, Côté, and Marshall 2001). Although each parenting style has its own strengths and weaknesses, researchers encourage parents to use “ practices that enable adolescents to develop the ability to consider complex issues and make decisions in a rapidly changing social context” (Adams, Côté, and Marshall 2001). In a like manner, parents should also cautiously select a communication style that complements their parenting style since “the family communication environment [has] an important influence on the way children develop an understanding of (...) advertising” (Boush 2001). Communication style can in turn be viewed in terms of two separate dimensions: socio-oriented communication and concept-oriented communication. For its part, socio-orientation is defined as “the extent to which deference and conformity are stressed” (Austin 1993). Parents who adopt a socio-oriented communication style usually monitor and control their child’s consumption activities, thus leaving the child with less

freedom to learn from experience (Boush 2001). On the other hand, concept-orientation is seen as “the extent to which the questioning of ideas is stressed” (Austin 1993). A concept-oriented parent is one who will communicate messages of autonomy to his child by prompting him to develop his own skills as a consumer (Boush 2000).

Past researchers have even specifically evaluated the effects that parental communication style had on an adolescent’s advertising knowledge and attitudes (Austin 1993, Boush 2001; Mangleburg and Bristol 1998, etc.). For example, Mangleburg and Bristol (1998) examined the impact that concept and socio-oriented communication had on commercial ad skepticism. Their findings showed the existence of a significant *positive* link between concept-oriented communication and commercial ad skepticism, yet they found no support for their assumption regarding the *negative* relationship between socio-oriented communication and commercial ad skepticism. In all, they contended that parents who encouraged their children to create their views as a consequence of their own learning experiences would in turn be responsible for awakening their children’s skeptical attitudes toward advertisements. The authors suggested that such an outcome occurred due to the fact that concept-oriented parents would openly discuss the contents of various ads with their children, thus de-sensitising them to the world of advertising. In all, one must recognize the inevitable influence a parent will have on his child’s social learning. If anything, past studies provide future researchers with the opportunity to expand their knowledge regarding the role of parents within the socialization process. In turn, these avenues will most likely help marketers and academics alike to better interpret an adolescent’s social and commercial ad skepticism.

2.5) ADOLESCENT PERSONALITY

Final considerations to account for when trying to evaluate an adolescent's propensity to be skeptical of advertising tactics are a teen's intricate personality variables. Everyone's personality allows them to differentiate themselves from others: it depicts a core by which one can express their views, their values and their main interests. For example, in their evaluation of adolescent deviant behaviours, Chassin, Presson and Sherman (1989) found it imperative to account for the "traditional measures of personality style (...)". When assessing the specific role of advertising among adolescents, other researchers controlled for such personality variables as sensation seeking (Palmgreen et al 2001), materialism (Sirgy et al 1998; Zinkhan 1994), self-esteem (Obermiller and Spangenberg 1998; Boush, Friestad and Rose 1994) and reactance (Ringold 2002). Without a doubt, adolescents' personality will impact the way in which they view ads. Let us review the most salient personality traits to consider when attempting to assess an adolescent's skeptical attitudes toward advertising.

2.5.1) Sensation seeking

Sensation seeking is a personality characteristic more specifically introduced by Zuckerman in the late seventies as "the need for varied, novel and complex sensations and experiences and the willingness to take physical and social risks for the sake of such experiences" (Hoyle et al 2002). Indeed, sensation-seekers are often times viewed as high risk-takers since they feel an exuberant feeling of satisfaction after taking such hazardous chances with their life. For instance, Moore and Gullone (1996) found that adolescents who engaged in risky behaviours and who felt satisfied after "getting away

with it” would most likely be the ones who viewed “risk taking as a form of (...) sensation seeking”. Some researchers even view sensation seeking as a multidimensional construct, namely stating that novelty seeking and intensity seeking work together to form the entity known as sensation seeking (Comeau et al 2001).

Regardless of its various components, sensation seeking is a variable that has often times been used in past risky behaviour research. Many academics account for sensation seeking when they attempt to specifically assess adolescent deviant behaviours (Comeau et al 2001; Moore and Gullone 1996; Chassin, Presson and Sherman 1989, etc.). Researchers agree that that “individuals high in sensation seeking appear to be drawn to activities that are high in risk such as sexual risk-taking, reckless driving, smoking, alcohol use and use of illicit drugs” (Hoyle et al 2002). These findings could reflect sensation seekers’ desire to achieve unattainable excitation levels (Barnea et al 1992) or, on the other-hand, they could merely reflect this group’s dangerous feelings of invulnerability toward risks (MacFarlane et al 1995; Hoyle et al 2002). In fact, Rolison and Scherman (2002) found evidence revealing that high sensation seekers engaged in risky behaviours regardless of the dangers they perceived such activities to bring into their life. The authors were surprised to find out that sensation seeking was “a more significant predictor of risk frequency than the perceived risk variable”. In all, it becomes obvious that high sensation-seekers are more likely than low sensation seekers to not only endanger themselves with their risky behaviours (for example, smoking), but also to endanger others with their risky activities (i.e. second-hand smoke).

With this line of reasoning, much research has attempted to identify a link between high sensation seeking and effective advertisements. Marketers and public policy makers alike wanted to find ways to decrease risk-involvement among all self-professed risk-takers, including sensation seekers. For instance, Palmgreen et al (2001) held three studies in order to uncover the most salient ways to reach high sensation seeking marijuana users. Their findings showed that the use of sensation seeking targeting (SENTAR) approaches would most likely reach this type of audience, since high sensation-seekers have “distinct preferences for high-sensation-value-messages (...) [that] are novel, dramatic, emotionally powerful or physically arousing, graphic or explicit, unconventional, fast paced, or suspenseful”. The results of their investigations proved that the use of such expressive anti- marijuana campaigns successfully reached the high sensation seeking population. For their part, Schoenbachler and Whittler (1996) also attempted to associate sensation seeking with ad effectiveness when they compared the success rate of social versus physical threat communication strategies targeted at adolescents. After controlling for levels of sensation seeking, the authors found that “social threat communications were more persuasive than physical threat communication, [with] sensation seeking [acting] as an important variable [that moderated] response to threat communication” (Schoenbachler and Whittler1996).

In all, if sensation seeking was indeed found to be a salient variable to consider during the conception of such elaborate ad campaigns, marketers and academics should also try to extend its uses toward the assessment of ad skepticism. One is more expressly left to wonder how sensation seeking could impact an adolescent’s skeptical views regarding

those social marketing campaigns that aim to inform youth on the dangers of various risky behaviours. If high sensation seekers have been found to overlook the risks affiliated with various hazardous behaviours in the past, it would seem likely that they would disregard such social marketing efforts. Before positing such assumptions, let us first continue to review the remaining personality variables that are as note-worthy as sensation seeking in the evaluation of ad skepticism

2.5.2) Materialism

Many people contend that “to have is to be” (Dittmar and Pepper 1994). This thought reflects the notion of materialism, namely “a value held by an individual, which embodies the importance one attaches to material possessions” (Clark, Martin and Bush 2001). Literature on materialism presents three theoretical frameworks to evaluate this construct (Dittmar and Pepper 1994). A first school of thought views materialism in terms of a *biological* disposition, one that a child acquires instinctively as a result of his culture’s predisposition to collection of material goods and gift giving. This line of reasoning has regularly been discarded by researchers who contend that a materialistic behaviour can not be fully understood “at such an abstract and diluted level” (Dittmar and Pepper 1994). Thus, a second framework – the *individual-centred* model – rather examined the psychological meanings of various material goods at an individual level by assessing the core functions the good served for the individual. This second view was also often rejected since it did not consider the social functions served by the good. At this end, a third and final framework of materialism, namely a *social constructionist* model, attempted to regard “possessions as material symbols of identity” (Dittmar and Pepper 1994).

Although all three frameworks refer to materialism in a somewhat negative light - one that emphasises a materialistic person's constant need for superficial fulfilment - marketers, on the other hand, view materialism as a double-edged sword. "*Terminal* materialism refers to this runaway habit of possession, where consumption becomes an end in itself (...) [while] under *instrumental* materialism, the possession of things serves goals that are independent of greed" (Zinkhan 1994). For these reasons, some believe that marketers should only be expressing views that support instrumental materialism. However, researchers argue that "much of television advertising reinforces material consumption (...) [and thus] contributes to terminal materialism – materialism for the sake of materialism" (Sirgy et al 1998). Indeed, much research regarding media and materialism has found that individuals who are heavily exposed to consumption rich programming will readily hold disillusioned "beliefs about what other consumers have and do" (O'Guinn and Shrum 1997).

For their part, adolescents are also very vulnerable to succumbing to the urges posited by materialistic views. For example, Moore and Gullone (1996) found that materialistic outcomes were reason enough for some adolescents to engage in risky behaviours. For instance, their findings show that 264 of the subjects involved in the study would engage in either major and/or minor criminal behaviour in order to obtain a "material gain" (Moore and Gullone 1996). Moreover, it is even more alarming to realise that adolescents actually pick up these materialistic urges during their socialisation process. As previously mentioned, adolescents must go through a period of *social learning* with

the help of various socialisation agents in order to gather adequate marketplace knowledge. To this end, many studies have established that some of the learning experiences gathered through the socialisation process can actually influence an adolescent's views on materialism. To illustrate, Clark, Martin and Bush (2001) found that the learning experiences adolescents had gathered from their role models (namely fathers and athletes) positively influenced their views on materialism. Furthermore, in her review of past consumer socialisation literature, Roedder-John (1999) stated that "one of the most enduring concerns about consumer socialisation is that our culture encourages children to focus on material goods as a means of achieving personal happiness, success and fulfilment."

The media is no exception when considering the impact socialisation agents can have on a teen's materialistic behaviours. Pechmann et al (2003) uncovered that the positive and "cool" images found in tobacco marketing might actually be the reasons why some adolescents begin smoking, regardless of the known health risks related to such a habit. According to past findings "youth perceive that smokers *look cool*, in large part, because the attractive, cool models in cigarette advertisements prime or make salient positive smoker stereotypes and bias social perceptions" (Pechmann et al 2003). Findings from these studies can be easily explained by adopting the views posited by the constructionist framework of materialism: indeed, individuals will consume various goods in order to socially portray what they want others to perceive them to be (Dittmar and Pepper 1994).

In all, one can view the ease with which the media - and more specifically advertising - can alter a consumer's materialistic perceptions. Indeed, not only are adolescents' views on materialism influenced via their *social learning* process, but their material needs are also inflated through the many marketing strategies that support *terminal* materialism. Thus, it is more than likely that a teen's skeptical views regarding such commercial ads might also be negatively swayed. If an ad promotes material gains, adolescents might merely adopt commercial claims - or even reject social claims - in order to fulfil their own materialistic urges, without critically questioning the depths of a marketer's intentions.

2.5.3) Self-esteem

The degree to which adolescents feel confident about standing up for their own opinions will likely vary among teenagers. This notion of self-esteem and autonomy is often regarded as a salient point to consider when assessing various youth behaviours. Indeed, self-esteem "involves feelings of self-worth and belief in one's own abilities" (Boush, Friestad and Rose 1994). Self-esteem levels also works to reflect an adolescent's maturity level, that is, a teen's "readiness to assume completely the roles typical for men and women in a modern industrial society"(Inkeles and Leiderman 1998). Indeed, adolescent maturity measured in accordance to many psychosocial qualities, including (*among others*) a teen's efficacy and individualism. While efficacy understands that a teen is *self-confident* and that he/she can successfully complete a given task, individualism rather stresses that the adolescent will also be "*autonomous* without being uncooperative" (Inkeles and Leiderman 1998). An article by Chassin, Presson and

Sherman (1989) found that although some deviant actions taken by adolescents demonstrate their *true independence* and *autonomy*, these same behaviours were frequently too risky to be sound. In fact, teens that displayed more *mature* levels of assertiveness and independence were also more likely to smoke cigarettes and indulge in substance use.

Undeniably, past research has repeatedly concentrated efforts on the evaluation of a youth's self esteem. Reasons for this might lie in the fact that independence is contingent upon self-esteem: before teens gain feelings of autonomy, they must have increased self-confidence. In fact most literature treating advertising attitudes constantly treated the notion of adolescent self-esteem (Obermiller and Spangenberg 1998; Boush, Friestad and Rose 1994). For these reasons, we shall follow the contentions of past research by focusing on the sole impact of adolescent self-esteem on advertising skepticism. Interestingly, past research has uncovered that higher self-esteem levels among adolescents will result in higher levels of ad skepticism. "The [process] – increased counter arguing, increased self-confidence, (...) and so forth – would all result in a tendency to disbelieve ad claims" (Obermiller and Spangenberg 1998). Boush, Friestad and Rose (1994) supported this assumption when they provided significant evidence regarding the existence of a positive relationship between ad skepticism and teenage self-esteem levels. They found that "skeptical attitudes toward advertising were positively related to self-esteem (...) [indicating] that [such] adolescents have the confidence to rely on their own judgement and discernment necessary to separate advertising truth from advertising hype" (Boush, Friestad and Rose 1994).

Clearly, one must consider adolescent self-esteem when attempting to assess the degree to which teens will resist and oppose advertising views. To take such a contradictory position indeed requires a teen to be autonomous with his thoughts and to be self-confident in his beliefs. Thus, one would anticipate that any study attempting to replicate past efforts (*such as those of Boush Friestad and Rose 1994*) would again find that commercial ad skepticism is positively influenced by self-esteem. However, it remains to be seen if an extension of these past attempts would hold true in social arena. That is, one must wonder if self-confident adolescents are also more prone to doubt the intentions of social marketing campaigns and to thus provide self-asserted counter-arguments for their claims.

2.5.4) Reactance

Reactance is commonly known as “a counterforce that is aroused when an individual’s freedom is threatened or eliminated” (Hellman and McMillin 1997). For obvious reasons, adolescents are often demonstrating this type of personality trait (Donnell, Thomas and Buboltz 2001). For example, Rummel et al (2000) found that adolescents prefer to consume products that their parent’s specifically disapprove of, while younger children would conform to the parents’ preferences. Moreover, they were able to significantly link the teens’ product preferences to reactance since “parental disapproval, which could be interpreted by children as threatening their freedom of choice, could motivate them to purchase rather than avoid the products in question” (Rummel et al 2000). Grier (2001), for her part, found that entertainment ratings for youth audiences, conceived to protect adolescents from overtly violent films and music, would actually

motivate teens to consume such products even more: "... youth are (...) aware of the rating systems and [are] influenced by them (...) they may view the products as *forbidden fruit* which attracts them to the restricted material". It becomes apparent that adolescents are easily attracted to what they can't have.

This reasoning is especially important when considering advertising. Ringold (2002) found that the theory of psychological reactance could help explain the many boomerang effects of public service interventions. Namely, she realized that public health warnings such as drinking and driving announcements or alcohol education efforts would produce opposite effects to those intended due to psychological reactance, namely "the state of being aroused in opposition to perceived threats to personal choice" (Ringold 2000). Indeed, some social announcements are perceived as threatening messages, and could in turn produce contrary effects than those expected from the target audience. For instance, during their evaluation of anti-smoking ad effectiveness among adolescents, Pechmann et al (2003) confirmed that "when youths are targeted, stressing the severity of long-term health risks does not appear to an effective strategy; indeed doing so could enhance smoking's forbidden fruit allure".

In all, it becomes evident that reactance should be considered when evaluating a consumer's skeptical views of any type of ad, be it social or commercial. If ads are perceived as threats rather than informational tools, they can spark a boomerang effect among consumers, as explained by the psychological reactance theory. Furthermore, across the adolescent generation, occurrence of rebellion, delinquency and/or reactance is

even more frequent (Levy 2001), stressing how important it becomes to consider this variable in our research context. In any case, such a personality trait should be accounted for when assessing adolescent attitudes and behaviours.

(3) FRAMEWORK AND HYPOTHESES

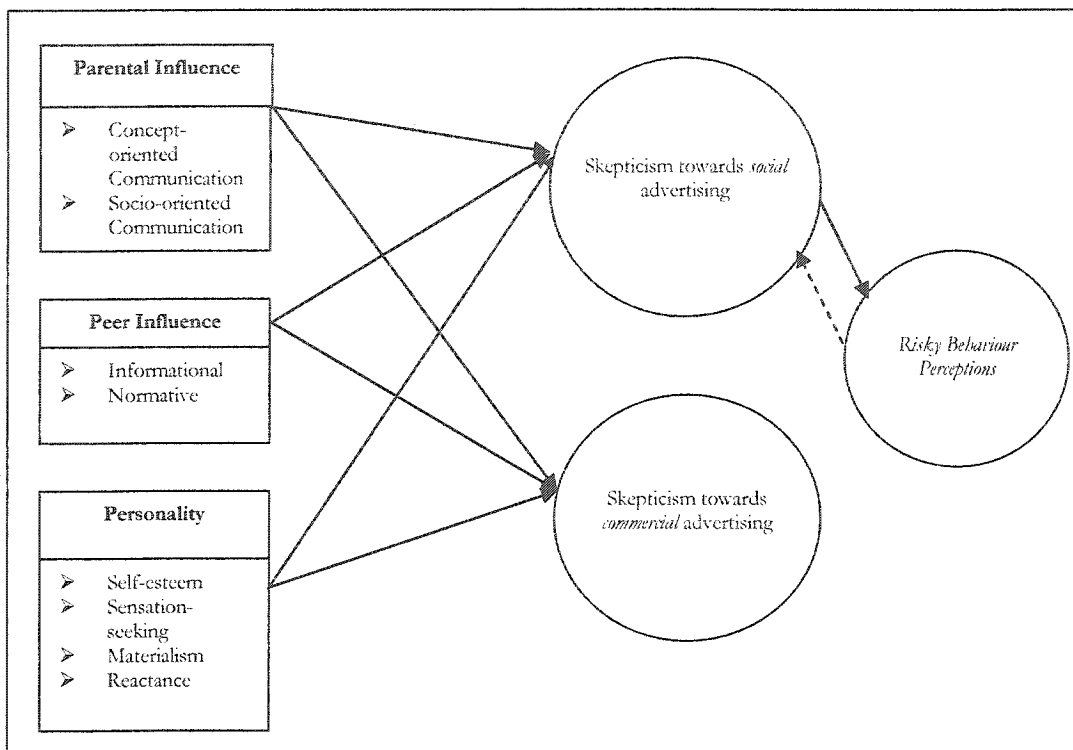


Figure 1 – Theoretical framework - Antecedents and Consequences of Social and Commercial Ad Skepticism

A thorough review of the strategic points highlighted in past literature permits the consequential elaboration of an appropriate framework for this paper. Hence, the conceptual model depicted in *Figure 1* proposes *nine hypotheses* regarding the implications that surround a teenager's social and commercial ad skepticism. Our framework illustrates which antecedent variables to consider when assessing an adolescent's skeptical attitudes toward both social and commercial advertising.

In our literature review, we saw how many studies were able to identify the variables that impact an adolescent's skeptical attitudes toward *commercial* ads. Namely, we stressed the roles that the many socialisation agents had on an adolescent's social learning. We

also saw how teen characteristics (sensation seeking, materialism, self-esteem and reactance) would likewise affect an adolescent's skeptical attitudes. We thus propose to both replicate and to extend the efforts of these articles. Replicating the assumptions of past studies will help solidify the validity and the reliability of the existing body of literature regarding adolescent ad skepticism. Then, we attempt to further contribute to this line of literature by considering the impacts of past findings within a social marketing context. Since the various socialisation agents and the teen personality variables were found to be accountable for influencing an adolescent's skeptical attitudes toward commercial ads, we can posit that the same type of effects could be true in a social arena.

Parental Influence

Let us first weigh the impact of parental influence on advertising skepticism. Recall that Mangleburg and Bristol (1998) had examined the impact of family communication style on commercial ad skepticism. They found that concept-oriented communication style indeed increased an adolescent's commercial ad skepticism since, in such a context, parents encouraged children to develop views and to set their own responsible boundaries. In this sense, concept orientation fosters the notion of critical thinking, whereby children are explained the motives of advertisers, etc. Concept-oriented parents thus take more time to discuss the content of different ads and encourage their children to provide counter-arguments for their claims (Mangleburg and Bristol 1998). Mangleburg and Bristol (1998) also attempted to look at the effects of socio-communication style on adolescent ad skepticism. While they posited that socio-oriented communication discouraged a teen to be actively skeptical of ads, no significant result was found to

support such a link. They proposed this hypothesis under the contention that teens would develop less opinionated views about advertising when parents set boundaries for them instead of when parent permit them to learn from their own experiences.

Austin (1993) expressed similar points of view in her earlier work when she discovered that higher levels of parental mediation would occur in families who prefer concept-oriented communication. In turn, parental mediation was found to result in higher television skepticism among children. Although Austin (1993) had posited contrary effects to happen when considering socio-orientation (that is, that socio-orientation would negatively correlate with active mediation, which in turn would decrease ad skepticism among the youth), she too found no significant support for her assumptions. In all, Austin was still able to provide significant evidence regarding the positive impact concept-oriented communication style on adolescent ad skepticism, albeit through the mediated effect of active parental mediation.

While both studies were unable to provide significant results to assess the impact of socio-oriented communication, they still helped establish quite a distinctive link between family communication and advertising attitudes. They particularly indicated the salience of the relationship that exists between a parent's communication style and an adolescent's commercial ad skepticism. Seeing that Mangleburg and Bristol (1998) more specifically treated this relationship in their research, let us attempt to replicate the explicit assumptions posited in their work in order to assess the reliability and the validity of their results. A replication of their efforts might even help to rule out any methodological

flaws that could have influenced their insignificant results regarding the impact of socio-communication style on ad skepticism. To this end, we present these first replicate hypotheses:

H1 (a): Concept-oriented communication is *positively* related to commercial advertising skepticism.

H1 (b): Socio-oriented communication is *negatively* related to commercial advertising skepticism.

It is to be noted that commercial ad skepticism is regarded as a *positive* concept for teens in the above-mentioned studies (Bristol and Mangleburg 1998; Austin 1993). Indeed, commercial ad skepticism is, according to Boush et al (1993), an indicator that a person is more independent as well as critically sound and so it might demonstrate that teens can use critical judgement when analysing advertisements. As previously revealed, it was for these reasons that we rather viewed social ad skepticism in a contrastingly *negative* light (see section 2.2.2). We found that when adolescents distrust the intentions of social marketers, disappointing results (in terms of ad effectiveness) would inevitably occur. This is why effects *opposite* to those seen in the studies (that we wish to extend) are assumed to take place when considering *social* ad skepticism. We thus posit that concept-oriented parents, who usually permit and provide more creative sources of learning to their children, will have more influence on a child's interpretation of certain advertisements. Parents who are concept-oriented foster better two way communication with their children. In turn, such parents may be more likely to have the opportunity to hear their kids' counterarguments in regards to social advertising and thus respond to these arguments. Such parents might encourage their teens to be *less* skeptical of social advertising since they would want their children to accurately process ads that seek to

benefit the child's social welfare and well-being. On the other hand, families who push parental control and monitoring (i.e.: socio-orientation) will be less likely to explain the depths of social marketing strategies to their kids, resulting in higher social ad skepticism levels among the teens of such families. Although Boush, Friedstad and Rose (1994) found no significant support for their hypothesis concerning commercial ad skepticism and socio-oriented communication, we feel it important to still attempt to extend the entity of their efforts into the social arena. Noticeably, these assumptions are supported by the many definitions of parental communication style that can be retrieved from various studies (Bristol and Mangleburg 1998; Austin 1993; Boush 2001). As such, we posit that:

H2 (a): Concept-oriented communication is *negatively* related to social advertising skepticism.

H2 (b): Socio-oriented communication is *positively* related to social advertising skepticism.

Peer Influence

Our literature review also provided us with sound evidence regarding the association that exists between ad skepticism and peer influence. Specifically, Mangleburg and Bristol's (1998) work provided significant evidence to support a *positive* link between an adolescent's susceptibility to *informational* peer influence and commercial ad skepticism. Thus, teens who made their own judgements but who looked at their peers for information (i.e. *informational peer influence*) were found to show greater commercial advertising skepticism. Indeed, teens who preferred to use their own critical reasoning would be less likely to be completely swayed by their peers; they would rather use their

friends as a guide to their decision, not as rule-makers. In a like manner, Mangleburg and Bristol (1998) also provided support for the existence of a *negative* relationship between an adolescent's susceptibility to *normative* peer influence and commercial ad skepticism. In this case, teens who would merely followed their peers in order to be socially accepted (i.e.: *normative peer influence*) were thought to contrastingly exert less commercial ad skepticism, namely because of their lack of personal and critical judgement. Intuitively, teens who feared social rejection and who merely wanted to comply with their peers' wishes were, in turn, less likely to employ their own reasoning when it came to evaluating a marketer's motives. In this sense, such teens were more likely to be less skeptical of commercial ads (Mangleburg and Bristol 1998).

Recall that Boush, Friedstad and Rose (1994) initially assessed this relationship when they attempted to draw a link between consumer susceptibility to interpersonal (peer) influence (CSII) and commercial advertising skepticism. Boush et al's (1994) hypothesis was only partially supported because of their lack of consideration regarding the multi-dimensionality of CSII. Indeed, a few years later, Mangleburg and Bristol (1998) found that this concept was two-dimensional, with informational peer influence and normative peer influence acting as distinct dimensions of CSII. Nevertheless, Boush et al's (1994) work still provided the introductory groundwork that would enable other researchers - such as Mangleburg and Bristol (1998) - to extend and to re-evaluate the involvement of peer influence in an adolescent's development of skeptical attitudes toward advertising. In this sense, it becomes only intuitive to also assess the reliability and the validity of

Mangleburg and Bristol's (1998) extensions of Boush et al's (1994) work by attempting to replicate their hypotheses regarding this issue. Thus, we posit that:

H3 (a): Adolescent susceptibility to *informational* peer influence is *positively* related to commercial advertising skepticism.

H3 (b): Adolescent susceptibility to *normative* peer influence is *negatively* related to commercial advertising skepticism.

In Mangleburg and Bristol's (1998) extension, ad skepticism was again regarded as a positive outcome. For this reason, we assume that contrary results will occur when assessing the relationships between peer influence and social advertising skepticism. Teens who feel the pressure to fit-in (*i.e.: normative peer influence*) would likely be more skeptical of social ads that dictate unpopular views regarding risky behaviours. On the other hand, teens who do not feel such social pressures (*i.e.: informational peer influence*) will probably be more receptive to the social ad's intentions, regardless of its contrasting views. In fact, perhaps teens who are subject only to informational peer influence are in turn, also able to better discuss the messages contained in social ads with their friends, thus demystifying the true intentions of the possible fear appeals used in such ads. Further support for these positions regarding the influence of peers on teens' choices can be found in past socialisation articles (Cooper and Cooper 1992; Moore, Raymond, Mittelstaed and Tanner 2002; Roedder John 1999, etc). In all, we would like to extend Mangleburg and Bristol's (1998) work by positing that:

H4 (a): Adolescent susceptibility to *informational* peer influence is *negatively* related to social advertising skepticism.

H4 (b): Adolescent susceptibility to *normative* peer influence is *positively* related to social advertising skepticism.

Influence of personality variables

Our literature review demonstrated that adolescents who engaged in deviant behaviour not only “showed high values of independence [... but also had] higher levels of sensation seeking” (Chassin et al 1989). Likewise, we found evidence regarding the existence of a positive link between sensation seeking and adolescent drug use (Barnea, Teichman and Rahav 1991). Multiple findings indeed confirm the notion that “prior research has consistently found a strong, positive relationship between sensation seeking and drug use, cigarette use and alcohol use” (Schoenbachler and Whittler 1996).

This evidence would provide enough grounds to presume that adolescents who show higher levels of sensation-seeking will also be more likely to put into question a social ad that treats issues such as drug use, cigarette use, alcohol use, etc. Social ads that counteract with a sensation seeker’s existing mental beliefs would have a high likelihood of being disclaimed. In fact, in their 1996 study, Schoenbachler and Whittler proved this notion when they found that high sensation-seeking adolescents had more negative attitudes towards drug-related public service announcements since those teens produced more counterarguments and fewer support arguments in response to such threat communications. Indeed, the researchers explain their finding by stating that “apparently, an individual’s need for sensation directs the development of a repertoire of coping responses that are evoked by threat communications” (Schoenbachler and Whittler 1996). For these reasons, we will posit that high sensation seeking adolescents are more likely to be skeptical of social ads since they probably already engage or want to engage in the

risky behaviours pictured in those campaigns. These directional assumptions could be formally stated as such:

H5: Sensation seeking is *positively* related to social advertising skepticism.

If a link between sensation seeking and *social* ad skepticism should be pondered, it becomes credible to assume a similar relationship between sensation seeking and *commercial* ad skepticism. A reminder that sensation seeking is indeed defined as a *personality trait* rather than a *situation-specific state* (Steenkamp and Baumgartner 1992 as quoted by Marketing Scales Handbook Volume II, 1996). In this sense, sensation-seekers are individuals who search for exciting adventures and emotions, thus taking extreme gambles by engaging in certain risky behaviours. It would thus seem unlikely that viewing a commercial ad in a skeptical manner would require one to be adventurous. Still, some authors found that sensation seeking was “closely related to the idea of rebelliousness and nonconventionality” (Chassin, Presson and Sherman 1989). With this line of reasoning, we could expect adolescents with high sensation seeking levels to be more likely to put into question traditional advertisements, maybe due to its conventionality for example. Nevertheless, the lack of past theory regarding the salience of sensation seeking among adolescents who hold skeptical views toward commercial ads does not provide us with enough grounds for the inclusion of such an unorthodox hypothesis. For these reasons, we will not posit any hypothesis regarding the potential impact of sensation seeking on commercial ad skepticism.

Additional personality variables to consider include that of materialism. Past research often supported the notion that those individuals who showed rather materialistic views appreciated the claims made by marketers since “advertising plays a demand-stimulation

role, encouraging this pattern of over-consumption” (Zinkhan 1994). In fact, researchers agreed that “material goods feature prominently in everyday social life (...) in the many hours of television and advertisements people watch” (Dittmar and Pepper). In their study regarding television viewership and quality of life perceptions, Sirgy et al (1998) found that people who watched more television in turn became more materialistic. The authors also contended that materialistic people likely consumed products advertised on television since such people believe that “the continued acquisition of possessions will lead to greater happiness and satisfaction in life” (Sirgy et al 1998). This finding supports the view that materialistic people, in general, are less likely to be skeptical of commercial ads since they were found to more readily fulfil their needs with products advertised in the media. For her part, Roedder-John (1999) reviewed past literature on materialism only to find that young adolescents were also vulnerable to succumb to the marketers’ promotion of this type of *terminal* materialism (Roedder-John 1999), namely one that promotes a “runaway habit of possession” (Zinkhan 1994). Indeed, advertising is less likely to promote *instrumental* materialism which rather underlines the acquisition of things in order to serve “goals that are independent of greed” (Zinkhan 1994). In her review, Roedder-John (1999) found that high school students did in fact “focus toward materialistic life goals”. In all, one could attempt to combine the findings of these aforementioned studies to propose that materialistic adolescents would be more likely to trust advertisers’ claims – perhaps naively – since they merely want to fulfil their own needs and wants. Based on the theory displayed in past studies, we thus we posit this directional hypothesis:

H6: Materialism is *negatively* related to commercial advertising skepticism.

As for its effect on social ad skepticism, we contend that materialism will have no direct impact. That is, we do not believe that an adolescent's materialistic values would impede or inflate his skeptical views toward a social ad. We find that the central messages of social ads do not attempt to depict neither material means nor ends that would tempt an individual who "attaches (...) [a great importance] to worldly possessions" (Sirgy et al 1998). In fact, past research has never presented evidence regarding the possibility of an association between materialism and social ad skepticism. Still, we do admit that past literature in the field of social marketing is scarce, especially in the sector of social ad skepticism. Certainly, there remains much work to be done in this area. However, due to a lack of support for such a hypothesis, we will not posit a direct link between materialism and social ad skepticism.

Our literature review also helped us to notice that self-esteem was a common variable in past skepticism research. For instance, we saw that Obermiller and Spangenberg (1998) considered self-esteem as an important personality trait to consider when they attempted to develop a proper scale to measure general ad skepticism. In fact, a validation study of their scale revealed that "more skeptical participants [showed] higher self-esteem" (Obermiller and Spangenberg 1998). Other evidence on the utility of self-esteem in predicting levels of ad skepticism came from Boush, Friedstad and Rose's (1994) study which provided support for the existence of a direct *positive* link between adolescent self-esteem and commercial ad skepticism. In this sense, we would like to account for the notion of self-esteem our evaluation of ad skepticism by first trying to replicate Boush Friedstad and Rose's (1994) hypothesis. A justification for such an attempt stems from

the fact that if we successfully replicate their hypothesis in our research context, we would contribute to the validity and the reliability of their finding. Thus, we posit that:

H7(a): Self-esteem is *positively* related to commercial advertising skepticism.

Note that Boush et al's (1994) premise for such a hypothesis came from the notion that "those who are low in self-esteem lack the self-confidence to rely on their own beliefs and judgement and therefore fall back on the judgement of others". The authors also stressed that "a predisposition to doubt advertising claims reflects the self-confidence to challenge advertiser's persuasive attempts" (Boush, Friedstad and Rose 1994). With this line of reasoning, we would believe the same to be true for social ad skepticism. Although we have concurred that social ad skepticism is a negative concept (*since teens would put into question the goals of social marketers*) while commercial ad skepticism is a positive concept (*since teens would show a more critical point of view in regards to ad claims*), it remains that adolescents with higher self-esteem levels will be more likely to challenge all forms of authority. Therefore, it is presumable that teens who are more self-confident will put into question any type of advertising, be it social or commercial. For these reasons, we find that self-esteem will affect an adolescent's social ad skepticism in a similar fashion as it would affect the teen's commercial ad skepticism. More formally, we posit the hypothesis:

H7(b): Self-esteem is *positively* related to social advertising skepticism.

Finally, a last personality variable to consider when assessing social ad skepticism is reactance. Recall that psychological reactance "reflects the individual's response to social influences; it is a counterforce that is aroused when an individual's freedom is threatened or eliminated" (Hellman and McMillin 1997). Indeed, past research confirms that people will react when they perceive themselves to be threatened or manipulated.

Seeing that certain people regard advertising as random attempts at consumer manipulation, some would assume that such ads could bring people to become more defensive and react negatively to the ad's intended message. One must also bear in mind that reactance is considered to be an individual personality trait, not a situational state (Donnell, Thomas and Buboltz 2001). In this sense, based on the *reactance theory*, we could assume that adolescents who show higher levels of reactance will likely be more skeptical of both social and commercial ads.

Ads also try to bring about change in a person's behaviours. For their part, social ads usually make an effort to achieve some type of social change, requesting people to reconsider their current risky habits and to alter their behaviours for the benefit of society (Sheth and Frazier 1983). Such requests could easily be regarded as a series of attacks on one's individual freedoms, which would consequentially prompt one to react in order to protect their choice and free will. These types of reactions could especially occur if the social marketers makes use of fear appeals since we saw that in such cases the viewer might prefer "avoiding the message, minimising the severity of the message, discounting the threat and denying its personal relevance" (Keller and Goldberg-Block 1996).

Similarly, commercial ads also try to entice consumers to change their behaviours and to conduct themselves according to the ad's instructions: the consumers should buy the company's products in order to gain self-fulfilment. In this case, the target consumer might react in opposition to the ad's claims, namely to take a stand and prove that he or she does not need to consume any product in order to gain more happiness. In any event,

both types of ads – social or commercial – could easily be considered as being manipulative, thus triggering some sort of reactive behaviour. We thus hypothesize that:

H8(a): Reactance is *positively* related to commercial advertising skepticism.

H8(b): Reactance is *positively* related to social advertising skepticism.

Perceptions of Risky Behaviours

It becomes clear that adolescents' perceptions of risky behaviours serve as valid predictors of their participation in that activity. Recall that many scholars have linked an adolescent's perceptions of certain risky behaviours to be *unrealistically optimistic* (Smith and Rosenthal 1995; Cohn et al 1995, etc.). Many social campaigns thus attempt to warn adolescents of risky behaviours by specifically underlining the salience of the dangers related to such activities. Yet, a teen's *unrealistic optimism* will likely interfere with the social marketers' attempts. In this sense, social marketers will often times rely on the shocking impact of fear appeals to convey their message to the public. However, bear in mind that past research regarding the use of fear appeals found that such scare-tactics might actually increase a consumer's defence mechanisms.

Seeing that the use of fear appeals is inevitable in social marketing, it becomes extremely important to consider their implications. In this sense, the extent to which adolescents will have skeptical attitudes toward social ads might also help us to interpret their risky behaviours perceptions or even intentions. In fact, it is intuitive that those teens that show skeptical attitudes toward any ads might also be prone to indulge in risky behaviours. However, we propose a correlation among various risky behaviours and social ad skepticism since we do not wish to claim that one causes the other; we are

merely implying that a relationship among these variables exists. We thus posit our final hypothesis:

H9: Social ad skepticism is negatively (cor)related with risky behaviour perceptions

(4) METHODOLOGY

The methodology for this research was twofold. First, a pre-test - or scale development study – was elaborated in order to accurately measure the novel construct proposed in the study, namely social advertising skepticism. After an appropriate scale was developed, a main study involving high school students was conducted in order to test the hypotheses included in the research framework.

4.1) SCALE DEVELOPMENT

4.1.1) Item Generation

In his study, Rothschild (1979) confirmed that social marketing issues “can be considered from the perspective of intuitively low or high involvement”, thus substantiating the fact that social ads can be used for a variety of causes. The focus of social campaigns can be political (i.e.: “Vote for the democratic party”), social (i.e.: “Prevent Forest Fires”), personal (i.e.: “Stop Smoking”), national (i.e.: “Join the Military”), etc (Sheth and Frazier 1983, Rothschild 1979). Knowing that social advertising covered an assortment of various topics, we decided it would be best to concentrate the measure of our scale to less broad areas of social concern, namely health-related topics.

This decision was not made lightly: only after discovering that health-related problems were of growing concern did we decide to focus our efforts towards health-related topics. For instance, Statistics Canada (2004) confirms that 34% of health-related deaths could be preventable if there were more awareness regarding such health-related topics as suicide, sexually-transmitted diseases, smoking, alcohol, and active living. Furthermore,

it becomes truly alarming to see that a person's probability of developing lung cancer (in Canada) is 14.3 %, and that 13.3% of those who have lung cancer actually die from this oftentimes preventable disease (Statistics Canada 2004). Interestingly, some researchers even believe that health-related topics should be specifically targeted at teens rather than adults in order to be more effective. For instance, Mintz et al (1997) suggested that the target of Health Canada's tobacco prevention campaign should be 11 to 13 year-olds since "research (...) suggested that people who had not taken up the habit [of smoking] by age 19 were unlikely to ever start smoking." In any case, since the majority of past studies regarding the use and effectiveness of social advertising mostly reviewed health-related social issues (see table 1 – namely Pechmann 2003; Rindfleisch and Crockett 1999; Perrachio and Luna 1998, etc.) our study should consider a similar focus.

Nevertheless, we do not believe that this decision will affect, in any way, the generalizability of our scale. Indeed, we believe that certain health-related topics can easily be extended into other areas of social welfare such as social awareness campaigns and pro-environmental efforts. As described by Sheth and Frazier (1982), a social marketing campaign should attempt to achieve planned social change. Thus, if our scale is able to account for one type of planned social change, that is, health-related changes, it necessarily should extend to others areas of social concern (Sheth and Frazier 1983). Furthermore, according to Rothschild (1979), health-related ads can, in some cases, require low involvement on behalf of the target audience, while requiring high involvement in other instances. For example, quitting smoking is a high-involvement request since the individual must actually suffer through numerous costs, be they

monetary or non-monetary, in order to adapt to the change proposed in anti-tobacco campaigns. On the other hand, a health-related ad concerning drinking and driving awareness can be of low involvement since it merely asks the individual to acknowledge the issue. Seeing that health-related social ads can be found at either ends of the “response involvement level continuum” proposed by Rothschild (1979), we believe that our scale will thus also be able to deal with other social topics found on this spectrum. Hence, we decided to attempt to develop a scale that would specifically measure social ad skepticism in relation to health-related concepts.

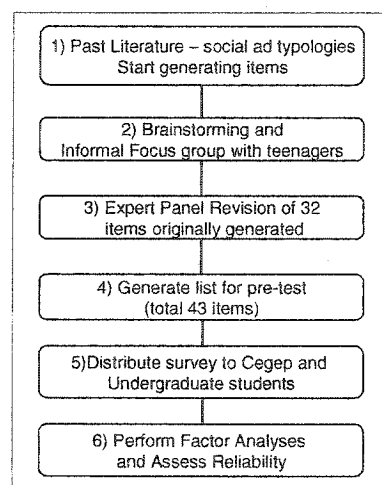


Figure 2 : Steps used to develop health-related social ad skepticism scale

In an attempt to construct a likert-type scale of health-related social ad skepticism, we followed the steps Obermiller and Spangenberg (1998) used to develop their scale of general ad skepticism. Figure 2 (above) summarizes the many steps used to perform this intricate task. We initially generated a list of items by first referring to past literature. Most interestingly, we turned to literature that proposed unofficial frameworks for social ads. That is, we reviewed social ad “typologies” proposed by the likes of Pechmann et al (2003), Goldman and Glantz (1998), Health Canada (2003), Kraak and Pelletier (1998), Mintz et al (1997), Moore et al (2002), etc. For instance, Pechmann et al (2003)

attempted to evaluate the effectiveness of specifically themed anti-smoking ads on the basis of the Protection Motivation Theory. They wanted to examine which message theme (such as “endangers others” or “selling disease and death”) would be more likely to successfully achieve an influence strategy by making the subjects process the message in terms of risk severity, self efficacy or resistance. The seven messages proposed in their article served as a starting point for our social ad skepticism items since we could shape our items to reflect the common appeals used in anti-smoking social ads.

In a like manner, Goldman and Glantz (1998) proposed their anti-smoking message themes in JAMA, sharing great similarities with those proposed by Pechmann and her colleagues (2003). We thus also accounted for the anti-smoking ad strategies Goldman and Glantz (1998) had presented, such as addiction, second-hand smoke, youth access, etc. Correspondingly, Health Canada’s various works on the anti-smoking front also helped us to acknowledge some possible areas of skepticism, facilitating yet again our item generation process. In any case, we felt confident that our list of items covered the many recommendations proposed by the social ad “typologies” found in past literature, even though some of these frameworks were not seen as official models at the time of their publication. Table 3 (below) summarizes the studies used for our social ad typology references.

Table 3 – Social Ad Typologies Inspired by Past Studies

<i>Study</i>	<i>Journal</i>	<i>Contribution(s) to social ad typology</i>
Environics Research (2003)	Presented to Health Canada	<p>Concludes that anti-smoking messages should:</p> <ul style="list-style-type: none"> ▪ Be targeted either at youth smokers or youth non-smokers (since targeting both groups at the same time proves to be too difficult) ▪ Work to counteract the strong influence of friends and close family members who smoke ▪ Reinforce the negative effects of second-hand smoke ▪ Use television as communication source ▪ State health problems, both long and short term ▪ State cessation ▪ State addiction problems ▪ State money problems ▪ State negative views of tobacco industry
Goldman and Glantz (1998)	JAMA	<p>Anti-smoking message and ad Strategies:</p> <ul style="list-style-type: none"> ▪ Industry manipulation ▪ Second-hand smoke ▪ Addiction ▪ Cessation ▪ Youth access ▪ Short-term effects ▪ Long-term effects ▪ Romantic rejection
Kraak and Pelletier (1998)	Family Economics and Nutrition Review	<p>Mentions how to use marketing industry's tactics to reach children and youth with social ad campaigns by ensuring that the campaign's message:</p> <ul style="list-style-type: none"> ▪ Is simple, strong, repetitive and specific about the desired behaviour ▪ Promotes reward ▪ Is upbeat in order to engage and excite children as well as teens ▪ Is convincing ▪ Is catchy and easy to remember
Mintz et al (1997)	From the book <i>Social Marketing: Theoretical and Practical Perspectives</i>	<p>Presents different genres of anti-tobacco ads (as per Health Canada's initiatives):</p> <ul style="list-style-type: none"> ▪ Health-related consequences of smoking ▪ Second-hand smoke effects ▪ Retail (sales) ▪ Anti tobacco industry campaigns
Moore, Raymond, Mittelstaedt and Tanner (2002)	JPPM	<p>Results of research regarding teens' sexual knowledge and PSAs indicate that:</p> <ul style="list-style-type: none"> ▪ There is a need to stress the negative effects of social pressures and peer influence ▪ There is a need for <i>segmented</i> preventive messages ▪ Effective messages must be included
Pechmann et al (2003)	Journal of Marketing	<p>Message themes for anti smoking ads:</p> <ul style="list-style-type: none"> ▪ Selling disease and death ▪ Endangers others ▪ Cosmetics ▪ Smokers' negative life circumstances ▪ Refusal skills role model industry's marketing tactics <p>Influence strategies / desired outcomes (based on the Protection Motivation Theory)</p> <ul style="list-style-type: none"> ▪ Physical risk severity ▪ Social risk severity ▪ Self efficacy at refusing cigarette offers ▪ Resistance to tobacco ads

Ultimately, our items cover the issues mentioned by the Protection Motivation Theory and by the official typologies proposed by Pechmann et al (2003) as well as by Goldman and Glantz (1998). We then complemented our efforts by brainstorming and by

discussing this issue with teenagers. While brainstorming helped us generate some specific items, our consultation with teens truly opened our eyes to newfound avenues regarding social ad skepticism, namely the impact of the perceived importance or severity of the risk being advertised. The teens mentioned that they would be more likely to positively respond to a social ad that attempted to cover “severe” issues such as drinking and driving, since, in their eyes, this type of behaviour was truly dangerous. On the other hand, the teens stated that they would more than likely to dismiss ads that addressed issues pertaining to smoking since this type of behaviour was less risky and related to a personal choice that affected only the smoker himself. Such observations significantly helped us to provide more accurate items in an attempt to measure health-related social ad skepticism.

4.1.2) Item refinement

Having completed some first steps in our scale construction, we handed our list of 32 generated items to a panel of experts - composed of 4 graduate students in marketing – in order to begin our item refinement stage. The four judges were first given the definition of social ad skepticism, namely *the tendency toward the disbelief of health related social ads*. The experts were asked to review and/or rate the 32 items in order to state the degree to which they believed the given items would successfully measure social ad skepticism among adolescents. All four experts agreed that certain items should be removed due to their lack of discriminant validity. Indeed, they all felt that a certain item pertaining to the need for further truth in today’s social campaigns would measure a subject’s attitude toward social ads rather than the subject’s skeptical views toward such ads. Further items were also called into question by all four judges, namely due to their

wordiness, their redundancy or their lack of exclusiveness. Nevertheless, the judges all showed agreement on the use of the majority of the items, with specific agreement on at least five items.

On the basis of the expert responses and after further deliberation, 13 items were added for a total of 43 items. In order to ensure the reliability and the validity of our scale, we decided to run a pilot study: the 43 items were arranged in a random order, with 37 items in a negative direction and 6 in a positive direction. The scale was administered to 144 cegep-level students and to 66 second-year undergraduate students. To ensure that both the pilot study and the main study samples weren't too distinct in terms of age and education level, only respondents who were 21 years of age and younger were included in the data analysis, yielding a usable sample of 162 (modal age of 17, mean age of 18.14). The students were told that the survey was measuring their attitude towards social ads, and were advised to fill out the survey during the beginning of their class period.

Before running a factor analysis on the collected data, the item-to-remaining total correlations scores were tallied. All items that had correlations of less than 0.50 were dropped from further analysis (Obermiller and Spangenberg 1998). In this respect, eleven items were included in the factor analysis, using a Principle Component analysis with a Varimax rotation. After evaluating the eigen values (larger than 1) and the scree plot, it was found that the included items all cleanly loaded onto one underlying factor – namely *Social Ad Skepticism* - that explained 44% of the total variance. In order to

assess its degree of consistency, the social ad skepticism scale's internal reliability was assessed. The inter-item correlations as well as the cronbach alpha ($\alpha = .870$) confirmed the scale's internal reliability. Items of the resulting scale, their respective factor loadings and their item-to-remaining total correlations are shown in table 4 below.

Table 4 - Social Ad Skepticism, Dimensionality and Reliability

<i>Items</i>	<i>Factor Loadings</i>	<i>Items – Total Correlation</i>
Health-related Social Ads do not show the whole picture: only the extreme consequences of a given behaviour are shown	.730	.648
Health-related ads exaggerate the impact my health-related choices have on other people.	.703	.613
In general, health-related ads do not present a true picture of the risks associated with certain behaviours.	.3673	.582
I feel I've been accurately informed after viewing health-related ads.	.535	.451
The messages conveyed in health-related ads do not show life as it really is.	.686	.596
The consequences shown in most health-related ads are not realistic	.617	.525
Health-related ads over dramatize the likelihood that others will suffer as a result of an individual's behaviour.	.700	.610
The picture painted in most health-related ads is unnecessarily grim.	.700	.610
My personal choices do not affect others as much as the health-related ads claim that they do.	.624	.534
Health-related ads have unrealistic expectations with regards to the type of healthy behaviours I should practice.	.624	.537
Health-related ads are nothing more than guilt-trips.	.675	.590
Cronbach's Coefficient α		.870

4.2) MAIN STUDY

In order to test our research hypotheses, a questionnaire was produced and distributed to high school students. This type of procedure was deemed as the most appropriate means of gathering research data since the studies that we were attempting to replicate and to extend used this same type of methodology. For instance, Mangleburg and Bristol (1998) used high school students to test their hypotheses regarding socialization agents and ad skepticism. Likewise, Boush, Friedstad and Rose (1994) used middle-school students (grade 8) to test their propositions in regards to the antecedent variables of ad skepticism.

The survey instrument specifications as well as the sampling procedures are mentioned below.

4.2.1) Survey Instrument and Measures

Questionnaire description

Having developed an appropriate scale to measure health-related social ad skepticism, we were able to produce a main questionnaire that would enable us to test our nine research hypotheses. The eight-page questionnaire was divided into three sections. A first section entitled “Advertising in General” was oriented toward commercial advertising and thus contained Obermiller and Spangenberg’s (1998) measure for commercial ad skepticism. On the second page we found the subsequent 2-page section labelled “Health-Related Social Advertising”, whereby respondents were asked about their attitudes towards social ad (*specifically, health-related social ads*). The measures for social ad skepticism, attitude towards social ads and risk perceptions were included in this section. Finally, the third and last section took up the remainder of the questionnaire to respectively measure sensation-seeking, materialism, peer influence (normative and informational), parental influence (socio-oriented and concept-oriented), self-esteem, reactance, cynicism and demographic data. To avoid order bias (Aaker, Kumar, Day 2001), questions in this last section entitled “General Perceptions” were regrouped, whereby various scales were intertwined together to produce a given subsection. For example, the scales sensation-seeking and materialism were grouped together under the subsection entitled “How you feel about consumption and recreation”. Furthermore, both peer influence measures were grouped in the subsection “Your relationship with your friends”, etc. In each subsection, scale-items were randomly stated in order to, yet again, avoid any type of response bias.

The questionnaire was first developed in English, and then translated twice over for its distribution within the French school: the bilingual principal investigator proposed a translated version of the questionnaire to a professional translator in the city of Ottawa. The professional translator, for her part, took into account both the initially translated version of the questionnaire and the English version of the questionnaire, in order to ultimately provide a final draft of the French survey instrument. This draft was then verified by French speaking colleagues and approved for distribution to the French high school by the bilingual principal investigator. The complete version of both the English and the French questionnaires appear in appendices 1 and 2, respectively. Additionally, the final items for our new Social Ad Skepticism Scale as well as our adapted Attitude toward Social Ads scale are correspondingly summarized in both French and English in appendices 3 and 4. Finally, the self-report items used to measure every construct are listed in table 9 and table 10 (below).

Dependent Measures

All of the measures used in the questionnaire were taken or adapted from past research, except for the measure of *social ad skepticism*, which, as previously mentioned, was developed during our scale development study. As stated beforehand, we considered *commercial ad skepticism* to be a one dimensional construct, similarly to Obermiller and Spangenberg's (1998) view. Thus, *commercial ad skepticism* was measured using Obermiller and Spangenberg's (1998) 9-item SKEP scale (alpha 0.85). Items concentrated on the ad's message, with statements such "we can depend on getting the

truth in most advertising” and “most advertising provides consumers with essential information”. This scale has also been used by other authors in past who ultimately found the measure to be reliable and valid (Hardesty, Carlson and Bearden 2002).

In order to establish discriminant validity of our social ad skepticism scale, we included an improvised measure of *general attitude toward social ads*. We constructed a six-item scale using 3 items from Obermiller and Spangenberg’s measure of attitude toward advertising (specific to credibility in the general attitude scale) and three items from Muehling’s (1987) polar-scale of attitude towards advertising in general. For obvious reasons, all six of these items were altered in order to assess the respondents’ view of social ads (scale reliabilities will be assessed in section 5.2.2). We also included a 3-item measure of cynicism (alpha 0.61), as proposed by Boush et al (1993) to provide further evidence of discriminant validity and replicate power.

Independent Measures

(a) *Parental and Peer Influence*. Parental communication style was measured using Austin’s (1993) six-item concept-orientation index (alpha 0.74) and five-item socio-orientation index (alpha 0.81). These scales re-iterated the usual family communication pattern questions, asking respondents on a seven point scale (1= never and 7 = very often) how often parents, for instance “say that you should look at both sides of an issue” (*concept-orientation*) or “say that you shouldn’t argue with adults” (*socio-orientation*).

The measures for peer influence were taken from Mangleburg and Bristol (1998). The scales used in their study were initially developed and validated by Bearden, Netemeyer and Teel (1989). These scales were intended to view consumer susceptibility to interpersonal influence as a two-dimension construct that discriminated informational peer influence (4-item scale; composite reliability 0.74) from normative peer influence (3-item scale; composite reliability 0.84). Both measures assessed peer influence on a 7-point scale with items ranging from “I often get information about a product from friends before I buy” (*informational peer influence*) to “it is important that my friends like the products and the brands that I buy” (*normative peer influence*).

(b) *Personality Variables.* *Sensation-seeking* was measured using a 4-item version of Zuckerman’s 40-item sensation-seeking scale (alpha 0.62), as used by Chassin, Pressson and Sherman (1989). All four items were assessed on a seven-point scale (1 = definitely do not agree and 7 = definitely agree). In a similar fashion, *materialism* was evaluated using Moschis’s 1981 six-item, seven-point scale. Respondents were asked the extent to which they agreed with statements such as “I want to have a lot of things”, etc. *Self-esteem* was assessed using Rosenberg’s (1965) general self-esteem scale (alpha 0.9 – see Cramer 2003). Again, respondents were asked their agreement levels in accordance to this seven-point, ten-item scale. Finally reactance was measured using Donnell, Thomas and Buboltz’s (2001) Factor Pattern of the Questionnaire for the Measurement of Psychosocial Reactance (QMPR). The items of the questionnaire, initially proposed by Merz (1983 – see Donnell, Thomas and Buboltz 2001), were reduced via factor analyses

to produce a 13 item, seven-point scale that measured respondents' agreement with such statements as "I seldom behave according to others' standards" (alpha 0.76).

(c) *Risk Perceptions.* To rate the participants' *perceptions of risky activities*, we listed activities used in Smith and Rosenthal's (1995) research on adolescent risk perceptions. Three of Smith and Rosenthal's (1995) ten activities, namely smoking, drinking and drinking & driving, were chosen in accordance to their risk levels. In their study, Smith and Rosenthal's (1995) factor analysis results showed that students found drinking to be a low risk activity, smoking as a moderately risky activity and drinking and driving as a high risk activity. We asked the participants to *anonymously* rate these activities on two 7-point scales (1 = not at all risky and 7 = very risky). One scale rated the extent to which they found the activity to be risky to themselves while the other scale rated the degree to which the activity was risky to others.

(d) *Demographics and other measures.* Respondents were asked to include their age, grade, sex, media literacy and perceived GPA. Furthermore, various questions regarding their language preferences (e.g: language most often used with friends, with parents, etc) as well as their extra curricular activities (time spent with parents, with friends, etc.) were also posed in their questionnaire. All of these additional measures were included in order to account for some informal propositions and to help explain some of the anticipated outcomes.

4.2.2) Sample and Procedures

Respondents were students from two high schools (grades 9 – 12), including one French high school from a medium-sized city in Eastern Canada, and another English high school from a metropolitan city in Eastern Canada. Participation in the research was voluntary and questionnaires were completed anonymously. Students were only permitted to participate in the research process once their parent or legal guardian had completed a pre-specified consent form. Students were also asked to complete a personal consent form if they wished to partake in the study.

Although both high schools were approached in a like manner, the English high school sample did encounter some unforeseen events which inevitably influenced its final number of participants. Namely, the day of the data collection, a terrible snow storm affected student attendance, and ultimately, rendered the sample to be smaller than expected. In all, 232 respondents filled-out the questionnaire ($n = 165$ and response rate = 0.21 for French School; $n = 67$ and response rate = 0.08 for English school). Six questionnaires were first screened-out due to incomplete survey responses. Furthermore, due to outlying observations that were also linked to inappropriate responses (*discussed further in section 5.1.2*), ten additional questionnaires were omitted from further analysis. In total, 216 questionnaires were processed. The age range was from 13 to 19 (mean age 15.29, $SD = 1.01$, mode of 16). The sample was not entirely representative of the high school population since more girls (61.1%) than boys (38%) participated in the study. Tables 5 and 6 below give the sample statistics for our final pool of respondents.

Table 5 – Frequencies and sample statistics – (a) School and (b) Gender

<i>School</i>				
	Frequency	Percent	Valid Percent	Cumulative Percent
English High School	64	29.6	29.6	29.6
French High School	152	70.4	70.4	100.0
TOTAL	216	100.0	100.0	100.0

<i>Gender</i>				
	Frequency	Percent	Valid Percent	Cumulative Percent
Male	82	38.0	38.3	38.3
Female	132	61.1	61.7	100.0
Missing	2	.9		
TOTAL	216	100.0	100.0	100.0

Table 6 – Descriptive Statistics – Age and Grade

	N	Minimum	Maximum	Mean	Std. Deviation
Grade	214	9	12	10.28	.97
Age	214	13	18	15.29	1.01
Valid N (listwise)	214				

The questionnaires were administered by the main researcher to students (who had returned the appropriate consent forms) at the beginning of a given course period during their school day. Teachers and school administrators helped with the survey distribution. However, in order to avoid researcher bias, the principal investigator coordinated the entire survey instruction process. Students were told that their attitudes and perceptions toward advertising in general as well as toward health-related social advertising were to be measured. They were given a complete definition of the researcher's view of health-related social advertising, namely "ads that focus on the risks associated with such health-related behaviours as smoking, drinking, drinking and driving, etc." The survey process required approximately 30 minutes of the students' class time.

(5) RESULTS

5.1) DATA PREPARATION

5.1.1) Data Coding and Scoring

Most constructs, with the exception of the demographic variables, were measured on multiple-item, interval scales. Some scale items needed to be reversed in order to follow the overall direction of the scale. Notably, to facilitate its interpretation, the entire commercial ad skepticism scale was reversed, since its direction was opposite to that of the social ad skepticism scale. In Table 7 below, find the reversed scale items. Once the proper coding was in place, all of the dependent and independent measures were tallied in order to obtain a sum score for each construct.

Table 7 – Reversed Scale Items

<i>Scale</i>	<i>Items</i>	<i>Reversed Item Coding</i>
Skepticism scale	▪ We can depend on getting the truth in most advertising	⇒ rskep1
	▪ Advertising's aim is to inform the consumer	⇒ rskep2
	▪ I believe advertising is informative	⇒ rskep3
	▪ Advertising is generally truthful	⇒ rskep4
	▪ Advertising is a reliable source of information	⇒ rskep5
	▪ Advertising is truth well told	⇒ rskep6
	▪ I feel I've been accurately informed after viewing most advertisements	⇒ rskep7
	▪ Most advertising provides consumers with essential information	⇒ rskep8
	▪ In general, advertising presents a true picture of the product being advertised	⇒ rskep9
Attitude toward social ads	▪ When I'm reading a magazine or watching the television, I generally skip the health-related ad	⇒ rasoca3
Self esteem	▪ All in all, I am inclined to feel that I am a failure	⇒ rse3
	▪ I feel I do not have much to be proud of	⇒ rse5
	▪ I wish I could have more respect for myself	⇒ rse8
	▪ I certainly feel useless at times	⇒ rse9
	▪ At times, I think I am no good at all	⇒ rse10

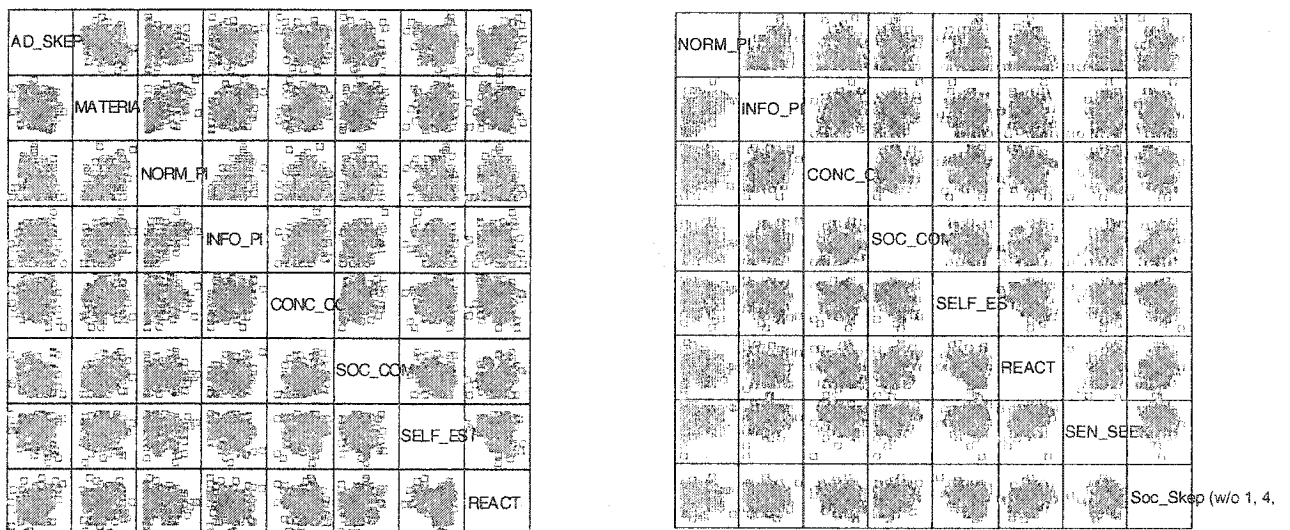
5.1.2) Preliminary Data Analysis

Scatterplot analysis

Careful data analysis should always begin with an accurate inspection of the data. Hence, in order to demonstrate the relevance of the constructs in our model, we chose to first plot the data in a multivariate display, namely using a scatter plot matrix. For each of the two

dependent variables (*Social Ad Skepticism and Commercial Ad Skepticism*), and their adjacent independent variables, a scatter plot matrix was produced in order to attempt to find variables that seemed to show particular tendencies. Specifically, we were looking to identify inappropriate bulges that would indicate that our data required transformations, as per Tukey and Mosteller's "bulging rule" (Fox 1997). However, as seen in figure 3a and 3b, no striking bulges were apparent, and so no adjacent transformation were deemed necessary.

Figure 3 - Scatterplots of a) Commercial Ad skepticism & b) Social Ad skepticism



Boxplots and QQ plots

In order to better assess the relevance of our data, we produced a series of individual boxplots and QQ plots for each of our independent variables as well as both of our dependent variables. Only the dichotomous data sets were excluded from this analysis procedure, since the use of such plots for these types of dummy variables render useless results. Nevertheless, a total of ten boxplots and ten normal QQ plots were produced and

assessed in order to accurately verify the data's distribution, more specifically to detect whether or not skewness was a problem.

A first look at the boxplots immediately showed that six of the ten distribution sets were skewed (see figures 4 and figures 5). Namely, skewed distributions were found for the variables: *sensation-seeking* (*SEN_SEEK*), *materialism* (*MATERIAL*), *normative peer influence* (*NORM_PI*), *socio-oriented communication* (*SOC_COM*), *self-esteem* (*SELF_EST*) and *reactance* (*REACT*). Knowing that skewed distributions could yield an inaccurate summary of Y's center, - or in this case, of the means of the dependent variables - then, a closer look at the source of the problem seemed necessary. A review of the six boxplots, in parallel with a review of the five variables' QQ plots showed that the skewed distributions were mostly caused by outlying data.

Figure 4 – Boxplots SEN-SEEK, MATERIAL, NORM_PI, SOC_COM, SELF_EST, REACT

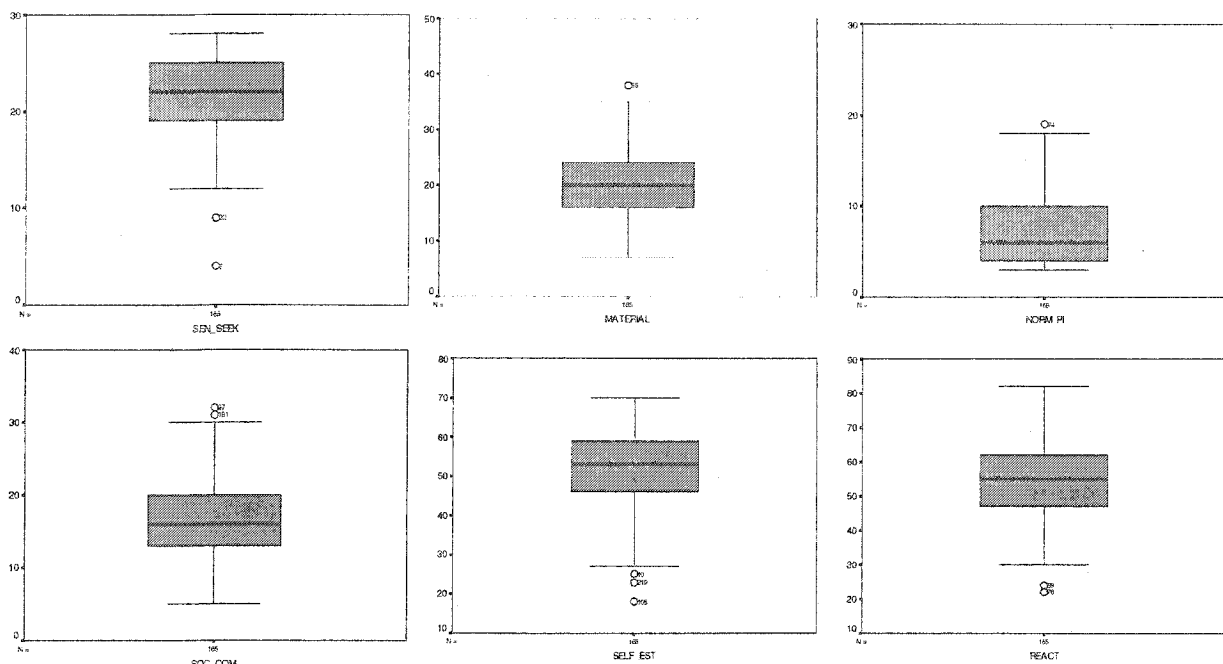
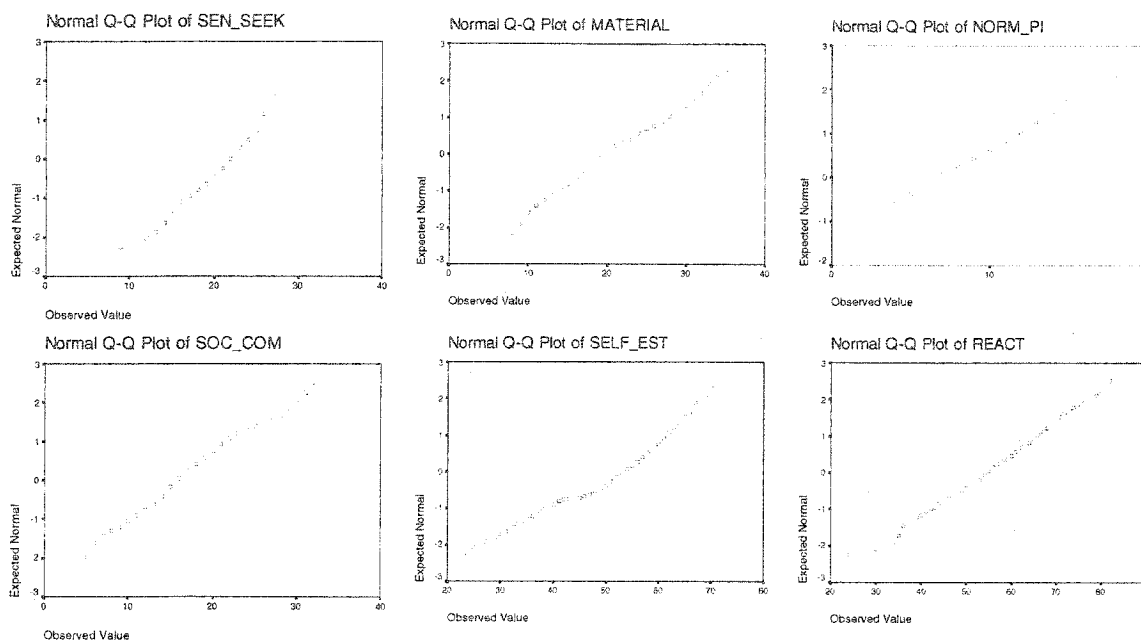


Figure 5 –QQ plots SEN-SEEK, MATERIAL, NORM_PI, SOC_COM, SELF_EST, REACT



Indeed, the above-mentioned normality problems were attributed to the outliers identified in the distribution. In these situations, a thorough evaluation of the nature of the outlier can solely yield the appropriate measures to take in regards to their occurrence (Fox 1997). Hence, a rigorous review of the questionnaire responses was performed. The items involved in the measure of each variable were reviewed for possible data entry errors. While no data entry errors were identified, during this analysis we found that at least ten of the respondents had incorrectly filled-out the questionnaire. These inconsistencies were apparent due to the visible pattern in the responses (i.e.: respondents continuously answering at the extreme polar of the scales presented in the questionnaire or respondents following a number pattern for their responses). The decision was thus made to delete these cases from further analyses. Thus, after adding the deleted outlying cases to those cases taken out during the data entry process, a total of 16 questionnaires

were screened out. Table 8 (below) summarises the eliminated cases, giving a brief description of the main reasons why the cases were screened-out from further analyses.

Table 8 – Summary of screened-out cases

<i>Cases noticed for screening during data entry</i>	
<u>Case number</u>	<u>Reason for screening</u>
11	Either incomplete responses or noticeable response bias during data collection process (i.e.: participant obviously not answering questionnaire appropriately during data collection, as noticed by principal investigator)
12	
13	
15	
55	
152	
<i>Cases noticed for screening due to outliers</i>	
<u>Case number</u>	<u>Reason for screening</u>
5	Extreme response pattern
10	Extreme response pattern
22	Extreme response pattern
39	Extreme response pattern
74	Incomplete questionnaire
76	Extreme response pattern
97	Extreme response pattern
105	Numbered response pattern
181	Numbered response pattern
219	Extreme response pattern

5.2) ASSESSMENT OF MEASURES

5.2.1) Factor Structure: Social Ad Skepticism Scale

We first re-tested the reliability of our novel measure of social ad skepticism. Although the alpha was very high with a value of 0.8702, we decided to verify the accuracy of our item scale by running another factor analysis. Such a procedure would ensure that our view regarding the dimensionality of social ad skepticism would remain correct across various samples and over time. Thus, in a similar fashion as our scale building study, we first eliminated items that had item-to-total correlation values of less than 0.50 (Obermiller and Spangenberg 1998). In this regard, eight items were included in this second attempt toward data reduction, using a Principle Component analysis with a Varimax rotation (Fox 1997; Agresti and Finley 1986; Obermiller and Spangenberg 1998). Indeed, it was reassuring to find that the item (*namely* “I feel I’ve been accurately

informed after viewing health-related ads") that had been accepted during our first factor analysis using Cegep students, regardless of the fact that it had the lowest item-to-total correlation value (0.451) at that time, was obligatorily dropped in this second analysis due to its, again, low item-to-total correlation value (0.4723). The two other eliminated items (i.e.: *"Health-related social ads do not show the whole picture; only the extreme consequences of a given behaviour are shown"* and *"The picture painted in most health-related social ads is unnecessarily grim"*) most likely had low item-to-total correlation values, respectively 0.3582 and 0.4204, due to their similar nature (that is, their use of the word "picture") as well as due to their wordiness.

After evaluating the Eigen values (larger than 1), it was reconfirmed that social ad skepticism was indeed one dimension, with all eight items clearly loading onto one factor, which in turn explained 42.94% of the total variance. Ultimately, the reliability of this eight-item scale was maintained with an alpha of 0.8065. In light of these factor results, this updated version of the social ad skepticism scale was used for the remainder of the analysis. Table 9 (below) confirms the main statistics of this 8-items scale.

Table 9 - Reviewed Scale for Social Ad Skepticism, Dimensionality and Reliability

<i>Items</i>	<i>Factor Loadings</i>	<i>Item-Total Correlations</i>	<i>Mean</i>	<i>SD</i>
Health-related ads exaggerate the impact my health-related choices have on other people.	.635	.509	4.00	1.56
In general, health-related ads do not present a true picture of the risks associated with certain behaviours.	.626	.485	3.53	1.57
The messages conveyed in health-related ads do not show life as it really is.	.698	.564	3.87	1.45
The consequences shown in most health-related ads are not realistic.	.704	.571	3.13	1.49
Health-related ads over dramatize the likelihood that others will suffer as a result of an individual's behaviour.	.649	.514	4.11	1.62
My personal choices do not affect others as much as the health-related ads claim that they do.	.595	.466	4.03	1.81
Health-related ads have unrealistic expectations with regards to the type of healthy behaviours I should practice.	.691	.557	3.84	1.53
Health-related ads are nothing more than guilt trips.	.636	.507	3.33	1.66
Cronbach's Coefficient α			.8065	
Scale mean			29.85	
Scale variance			68.58	
Scale Standard Deviation			8.28	

5.2.2) Construct reliability

As shown in Table 10 (below), measures of reliability were calculated to assess the internal consistency of the scales we included in our research, namely Attitude toward social ads, commercial ad skepticism, sensation-seeking, materialism, peer influence, parental communication style, self-esteem, reactance and cynicism. All reliabilities exceeded the 0.6 minimum suggested in past studies (Boush et al 1993).

Table 10 – Measurement Items and Reliabilities

	<i>Mean</i>	<i>SD</i>	<i>Cronbach Alpha</i>
<u><i>Attitude Toward Social Ads</i></u>			.8067
I enjoy watching health-related ads on the television	3.20	1.73	
I like health related ads	6.55	1.78	
When I'm reading a magazine or watching the television, I generally skip the health-related ads	4.91	1.34	
My attitude toward health-related ads is bad (1) vs. good (7)	4.87	1.40	
My attitude toward health-related ads is negative (1) vs. positive (7)	4.90	1.45	
My attitude toward health-related ads is unfavourable (1) vs. favourable (7)	4.13	1.99	
<u><i>Commercial Ad Skepticism</i></u>			.9047
We can depend on getting the truth in most advertising	4.53	1.45	
Advertising's aim is to inform the consumer	3.34	1.59	
I believe advertising is informative	3.72	1.41	
Advertising is generally truthful	4.49	1.43	
Advertising is a reliable source of information	4.83	1.55	
Advertising is truth well told	4.99	1.46	
I feel I've been accurately informed after viewing most advertisements	4.32	1.44	
Most advertising provides consumers with essential information	3.91	1.53	
In general, advertising presents a true picture of the product being advertised	4.17	1.64	
<u><i>Sensation Seeking</i></u>			.6411
I like work that has lots of excitement	5.76	1.33	
I like being where there is something going on all the time	5.18	1.44	
I like wild parties	5.43	1.66	
I like to have new and exciting experiences, even if they are a little unconventional	5.30	1.54	
<u><i>Materialism</i></u>			.6839
I want to have a lot of things	5.21	1.54	
It is important to me that my friends have a lot of things	3.61	1.86	
It is important that my friends have cool things	2.65	1.62	
I think people like or do not like me based on the things I have	2.69	1.74	
When I buy or ask my parents to buy something for me, I hope that will impress other people	2.98	1.75	
Money makes people happy	3.77	2.10	
<u><i>Normative Peer Influence</i></u>			.8148
When buying products, I usually buy the ones I think I my friends will approve of	2.95	1.67	
It is important that my friends like the products and brands I buy	2.24	1.45	
I like to know what products and brands make a good impression on my friends	2.57	1.58	
<u><i>Informational Peer Influence</i></u>			.7367
To make sure that I buy the right product or brand, I often look at what my friends are buying and using	2.97	1.74	
If I don't have a lot of experience with a product, I often ask my friends about it	4.37	1.83	
I often get information about a product from friends before I buy	3.52	1.81	
I often ask my friends to help me choose the best product	3.50	1.69	
<u><i>Concept-Oriented Parental Communication</i></u>			.6722
In your home, how often does a parent:			
... say that you should look at both sides of an issue	3.73	1.80	
... say that getting your idea across is important even if others don't like it	4.03	1.79	
... say that every member of the family should have a say in family matters	4.53	1.90	
... admit that kids know more about some things than adults do	3.73	1.95	
... ask for your opinion when the family is discussing something	4.73	1.79	
... encourage you to question other people's opinions	3.63	1.67	

Table 10 (cont'd) – Measurement Items and Reliabilities

	<i>Mean</i>	<i>Std. Dev.</i>	<i>Cronbach alpha</i>
<u><i>Socio-Oriented Parental Communication</i></u>			.6270
In your home, how often does a parent:			
... say there are some things that just shouldn't be talked about.	2.31	1.60	
... tell you not to say things that make people angry	3.85	1.86	
... say that his or her ideas are correct and you shouldn't argue with them	3.27	1.97	
... answer your arguments by saying you'll know better when you grow up.	3.28	1.84	
... say that you shouldn't argue with adults	3.79	2.01	
<u><i>Self-esteem</i></u>			.8649
I feel I am a person of worth, at least on an equal basis with others	5.32	1.56	
I feel that I have a number of good qualities	5.64	1.33	
All in all, I am inclined to feel that I am a failure	5.68	1.46	
I am able to do things as well as most other people	5.49	1.33	
I feel I do not have much to be proud of	5.41	1.66	
I take a positive attitude toward myself	5.13	1.57	
On the whole, I am satisfied with myself	5.31	1.47	
I wish I could have more respect for myself	4.12	1.97	
I certainly feel useless at times	4.26	1.98	
At times, I think I am no good at all	4.73	2.03	
<u><i>Reactance</i></u>			.7431
It makes me angry when someone points out something that I already know	4.03	1.84	
Suggestions and advice often make me do the opposite	3.33	1.56	
When I am pushed to do something, I often tell myself "For sure I won't do it"	3.47	1.70	
Often, I lose enthusiasm for doing something just because others expect me to do it	4.05	2.60	
I get annoyed when someone else is put up as an example for me	4.73	1.77	
I get very irritated when somebody tells me what I must or must not do	5.03	1.50	
The thought of being dependent on others is very unpleasant to me	4.80	1.66	
When I get advice, I take it more as a demand	3.35	1.67	
I get very irritated when someone tries to interfere with my freedom to make decisions	5.13	1.54	
The thought of being free and independent is more important to me than to most people	4.70	1.45	
I get a "kick" from contradicting others	3.87	1.87	
It pleases me when I see how others disobey social norms and obligations	3.75	1.56	
I seldom behave according to others' standards.	4.15	1.49	
<u><i>Cynicism</i></u>			.6955
People don't really care what happens to the next person	4.00	1.49	
People are too selfish these days	5.12	1.49	
Most people are selfish	4.51	1.47	

Seeing that each of our measures were adapted from scales used in past studies, our interest here was seeing whether the scales' past reliabilities were comparable to the alpha value we had obtained in our research. Not only would this type of comparison help us to prove our construct reliability, but in a context of presenting replicate results, it would offer a testimony to the reliability of certain scales across samples and over time. Table 11 presents a summary of the reliability scores for each of these measures, showing

a contrast between the Cronbach values obtained in the past with the ones obtained in our study.

Table 11 – Reliabilities Table: Past vs. Present Study

<i>Construct</i>	<i>Operational Definition</i>	<i>Reference</i>	<i>Cronbach Alpha in past study</i>	<i>Cronbach Alpha in present study</i>
Attitude Toward Social Ads	Consumer's overall attitude towards social ads.	Adapted from Obermiller and Spangenberg (1998) and Muehling (1987)	n/a	.81
Social Ad Skepticism	Consumer's tendency toward the disbelief of the social ad claim.	n/a	n/a	.81
Commercial Ad Skepticism	Consumer's "tendency toward the disbelief advertising claims" (as per Obermiller and Spangenberg 1998)	Obermiller and Spangenberg (1998)	.85	.90
Sensation-seeking	"the need for varied, novel and complex sensations and experiences and the willingness to take physical and social risks for the sake of such experiences" (Hoyle et al 2002.)	4-item version of Zuckerman's 40-item scale, as used by Chassin, Presson and Sherman (1988)	.62	.64
Materialism	"Orientation emphasizing possessions and money for personal happiness and social progress" (Moschis 1981)	Moschis (1981)	.60	.68
Normative Peer Influence	"The tendency to learn about products and brands by observing others and/or seeking information from others" (Mangleburg and Bristol 1998)	Mangleburg and Bristol (1998)	.84	.81
Informational Peer Influence	"The need to identify or enhance one's image with significant others through the acquisition and use of products and brands [and] willingness to conform to the expectations of others regarding purchase decisions" (Mangleburg and Bristol 1998)	Mangleburg and Bristol (1998)	.74	.74
Concept-Oriented Parental Communication (Index)	"The extent to which the questioning of ideas are stressed"	Austin (1993)	.74*	.67
Socio-Oriented Parental Communication (Index)	"The extent to which deference and conformity are stressed" (Austin 1993)	Austin (1993)	.81*	.63
Self-esteem	"involves feelings of self-worth and belief in one's own abilities" (Boush Friedstad and Rose 1994)	Rosenberg (1965) (with reference to Cramer 2003 for reliability)	.90 (or .88)	.87
Reactance	"A counterforce that is roused when an individual's freedom is threatened or eliminated" (Hellman and McMillin 1997)	Donnell, Thomas and Buboltz's (2001) Factor Pattern of the QMPR	.76	.74
Cynicism	"Mistrust of the motives of others [that can be seen] as a component of hostility" (Boush et al 1993)	Boush, Kim Kahle and Batra (1993)	.61	.70

* Note that only these scores represent composite reliability, and not the Cronbach Alpha, and so cannot be directly compared to Cronbach alpha scores found in this study.

It is noticeable that most of the constructs have maintained their adequate levels of reliability. Some constructs even show greater reliability values in our study namely commercial ad skepticism, sensation-seeking, materialism, informational peer influence and cynicism. Furthermore, those alpha values that have a smaller reliability score still show values which exceed the 0.6 minimum (see Boush et al 1993). In all, the measures used in our study prove to be quite reliable.

5.3) CORRELATIONS

Before formally testing our hypotheses, we decided to evaluate various correlations in order to both assess the validity of our measure of social ad skepticism, and quickly verify the direction as well as the significance of some of our proposed relations. Below find various tables and written reports that address these issues.

5.3.1) Validity of Social Ad Skepticism

Table 12 (below) presents the correlations among social ad skepticism, commercial ad skepticism, attitude toward social ads, cynicism and risk perceptions. These correlations helped us to assess the extent to which our measures were valid since a “measure has validity if it measures what it is supposed to measure” (Aaker, Kumar, Day 2000). In this sense, the correlations among these constructs help us to show evidence of both discriminant and nomological validity.

Table 12 – Correlations among social ad skepticism, commercial ad skepticism, attitude toward social ads, cynicism and risk perceptions items

	<i>Social Ad Skepticism</i>	<i>Attitude toward Social Ads</i>
<i>Social Ad Skepticism</i>	1.00	-
<i>Attitude Toward Social Ads</i>	-.383**	1.00
<i>Commercial Ad Skepticism</i>	-.223**	-.303**
<i>Cynicism</i>	.338**	-.195**
<i>Risk to self – smoking</i>	-.196**	-.011
<i>Risk to self – drinking and driving</i>	-.160*	.017
<i>Risk to self – excessive drinking</i>	-.147*	.040

** Correlation is significant at the .01 level

*Correlation is significant at the .05 level

On a first note, it becomes obvious that social ad skepticism and commercial ad skepticism are, as suspected, two constructs that entail opposite outcomes. The significant negative correlation ($r = -.223$, $p < .01$) between both variables confirms our initial proposition regarding the contradictory effects of each of these variables. Indeed, while commercial ad skepticism is a positive attitudinal result which reaffirms a consumer's critical ways of thinking (Boush et al 1993), we had proposed that social ad skepticism was a negative attitudinal outcome, one that social marketers should try to avoid. In any case, this significant negative correlation between both constructs is a first indicator of the *discriminant validity* of our social ad skepticism measure.

We also found a negative correlation between social ad skepticism and attitude toward social ads ($r = -.383$, $p < .01$). Recall that a low score on the attitude toward social ad scale represented a more negative attitude. In this sense, this negative correlation stresses that the more skeptical students held more negative attitudes toward social ads. This is not surprising since there is bound to be some overlap between a person's attitude toward social ads and their level of social ad skepticism. In fact, Obermiller and Spangenberg (1998) also found a significant, negative correlation between ad skepticism and attitude

toward advertising ($r = .48$, $p < .01$; where attitude toward advertising items were recoded so that higher numbers reflected more negative attitudes). This shows some degree of consistency between our correlation results and their findings. In spite of these correlation results, we still contend that attitude toward social ads and social ad skepticism are two different constructs. Perhaps our use of an improvised measure of attitude toward social ads encouraged such correlation results. In any case, seeing that Obermiller and Spangenberg (1998) had justified their results by stating that “ad skepticism [is] one of the bases for attitude toward advertising in general”, the extension of such correlation results into the social marketing arena is not surprising. While pursuing our analyses of the correlations, we additionally found a significant positive correlation between social ad skepticism and cynicism ($r = .338$, $p < .01$). Again, this positive correlation was not surprising since past research has indeed found links between cynicism and skepticism, while maintaining that both constructs remain distinct from one another (Boush et al 1993).

Lastly, evidence of *nomological validity* was found after evaluating the correlations among social ad skepticism and risk perception ($r = -.196$, $p < .01$ for risk to self - smoking; $r = -.160$, $p < 0.05$ for risk to self - drinking and driving; $r = -.147$, $p < .05$ for risk to self-excessive drinking). The correlations among these variables are as expected, namely that more skeptical students perceive certain risky behaviours to be not so risky. The appropriateness of these correlations is amplified when observing the non-significant relationships that exist between attitude toward social ads and risk perceptions. Indeed, a student who is skeptical of social ads is expected to find smoking and drinking to be less

risky. However, a student who merely does not like social ads should not necessarily find such activities to be of less risk to them. In all, these results provide evidence of both discriminant and nomological validity.

5.3.2) Correlations between main variables

Boush, Friedstad and Rose (1994) explicitly used correlations to test their hypotheses regarding the effects self esteem and interpersonal influence on commercial ad skepticism. Although we do not wish to test our hypotheses by solely using correlations results, it was interesting to first look at such outcomes in order to see the direction and the significance of certain correlations before starting our regression analyses.

In this sense, a preliminary look at the correlations table (see table 13 below) showed some significant relationships, most of which were in the hypothesised direction. Significant results demonstrate that socio-oriented communication was negatively correlated to commercial ad skepticism (as per H1b; $r = .186$, $p < 0.01$) and positively correlated to social ad skepticism (as per H2b; $r = -.198$, $p < 0.01$). We also found that normative peer influence was negatively correlated with commercial ad skepticism, as expected by H3b ($r = -.337$, $p < 0.01$). Additionally, we saw that sensation-seeking was positively correlated with social ad skepticism ($r = .207$, $p < 0.01$), while having no hint of a relationship with commercial ad skepticism, providing additional evidence of *nomological validity* and showing coherence with H5. Finally, we uncovered positive correlations between reactance and social ad skepticism ($r = .314$, $p < 0.01$) as well as commercial ad skepticism ($r = .230$, $p < 0.01$), as hypothesised in H8a and H8b.

Table 13- Correlations among dependent and independent variables

	<i>Social Ad Skepticism</i>	<i>Commercial Ad skepticism</i>
<i>Concept-oriented communication</i>	-.131	.003
<i>Socio-oriented communication</i>	.186**	-.198**
<i>Informational peer influence</i>	-.054	-.086
<i>Normative peer influence</i>	.134	-.337**
<i>Sensation-seeking</i>	.207**	-.022
<i>Materialism</i>	.258**	-.293**
<i>Self-esteem</i>	-.220**	-.061
<i>Reactance</i>	.314**	.230**

** Correlation is significant at the .01 level

*Correlation is significant at the .05 level

Surprisingly significant correlations were found between self-esteem and social ad skepticism as well as materialism and commercial ad skepticism, with both correlations showing opposite directions to those posited in the hypotheses. While H7b proposed a positive relation between self-esteem and social ad skepticism, the correlations between these two variables turned out to be negative. Similarly, the relation between materialism and commercial ad skepticism was posited to be positive, while the results show negative correlations between these two constructs. In any case, no definite conclusion should (nor could) be drawn after this correlation analysis. Only our last hypothesis, H9, will be fully tested using correlations analysis, as seen in a later section. However, in order to more legitimately test the remainder of our hypotheses, we needed to perform further analyses, namely using sequential multiple regression.

5.4) HYPOTHESES TESTING

5.4.1) Regression Results : Test of H1 – H8

We used regression models to test most of the hypothesized effects. Two sets of multiple regressions were run separately: one to test the effects of communication style, peer influence, materialism, self-esteem and reactance on commercial ad skepticism, the other

to test the effects of these same variables on social ad skepticism, excluding materialism and adding sensation-seeking.

Table 14 – Regression Model 1 – Commercial Ad Skepticism as Dependent Variable

14a) Summary of Model 1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.469 ^a	.220	.188	8.9034	1.986

a. predictors: (constant), materialism, reactance, concept communication, informational peer influence, self-esteem, socio communication, normative peer influence

14b) ANOVA table of Regression Model 1

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3779.494	7	539.928	6.811	.000 ^a
Residual	13398.756	169	79.271		
TOTAL	17176.250	176			

a. predictors: (constant), materialism, reactance, concept communication, informational peer influence, self-esteem, socio communication, normative peer influence

14c) Table of Coefficients for Model 1

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	37.527	6.700		5.601	.000		
Concept Communication	2.910E-02	.106	.019	.273	.785	.934	1.071
Socio Communication	-.372	.128	-.217	-2.917	.004	.834	1.200
Normative Peer Influence	-.737	.248	-.284	-2.975	.003	.505	1.980
Informational Peer Influence	.262	.158	.137	1.657	.099	.678	1.474
Self-esteem	-2.52E-02	.068	-.027	-.368	.713	.847	1.181
Reactance	.234	.069	.253	.3388	.001	.829	1.207
Materialism	-.172	.130	-.113	-1.319	.189	.632	1.583

We tested H1a, H1b H3a, H3b, H6, H7a and H8a using our first regression model (see Tables 14a, 14b and 14c - above). The model was able to explain 22% of the variance ($R^2 = .220$). By referring to the coefficient table, we found that socio-oriented parental communication ($\beta = -.217$, $p < 0.01$) and normative peer influence ($\beta = -.284$, $p < 0.01$)

were both negatively related to commercial ad skepticism, contradicting the results of past studies and providing support for H1b and H3b. Furthermore, teens' reactance levels were positively related to commercial ad skepticism, as posited by H8a ($\beta = .2.53$, $p < 0.01$). Hence, H1b, H3b and H8a were supported. However, concept-oriented communication, informational peer influence, self-esteem and materialism each had insignificant relationships with commercial ad skepticism, thus disconfirming past study results and rejecting H1a, H3a, H6 and H7a.

Table 15 - Regression Model 2 – Social Ad Skepticism as Dependent Variable

15a) Summary of Model 2

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.440 ^a	.193	.160	7.5271	1.886

a. predictors: (constant), sensation-seeking, concept communication, normative peer influence, self-esteem, socio-communication, reactance, informational peer influence

15b) ANOVA table of Regression Model 2

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2297.177	7	328.168	5.792	.000 ^a
Residual	9575.163	169	56.658		
TOTAL	11872.340	176			

a. predictors: (constant), sensation-seeking, concept communication, normative peer influence, self-esteem, socio-communication, reactance, informational peer influence

15c) Table of Coefficients for Model 2

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	20.441	5.856		3.490	.001		
Concept Communication	-.998E-02	.090	-.079	-1.111	.268	.936	1.068
Socio Communication	.105	.106	.074	.991	.323	.863	1.159
Normative Peer Influence	.503	.180	.233	2.794	.006	.684	1.462
Informational Peer Influence	-.292	.134	-.183	-2.186	.030	.680	1.470
Self-esteem	-.103	.058	-.134	-1.790	.075	.850	1.177
Reactance	.178	.061	.232	2.933	.004	.763	1.311
Sensation-seeking	.265	.156	.125	1.691	.093	.872	1.147

A second regression model (see Table 15a, 15b and 15c above) tested H2a, H2b, H4a, H4b, H5, H7b and H8b. The model explained 19.3% of the total variance ($R^2 = .193$). The coefficient table demonstrates that informational peer influence ($\beta = -.183$, $p < 0.01$) was indeed negatively related to social ad skepticism, as posited by H4a. Additionally, normative peer influence ($\beta = .233$, $p < 0.05$) and reactance ($\beta = .232$, $SD = .061$, $t = 2.933$, $p < 0.01$) were found to be positively related to teens' skepticism toward social advertising, supporting H4b and H8b. Nevertheless, neither type of parental communication styles (socio-oriented and concept-oriented) were significantly related to social ad skepticism, rejecting both H2a and H2b. Further, coefficients for both self-esteem and sensation-seeking were not significant, yet again challenging past research results and rejecting H5 and H7b.

Collinearity Verification

Following the thorough regression analysis, further assessment had to be completed in order to check for collinearity. A first look in the ANOVA Tables for the regression models used (see Tables 14c and 15c) showed that none of the variable's *tolerance* levels were close to zero, thereby indicating that there is no collinearity among the independent variables (Fox 1997). Hence, the beta coefficients are stable. Then, a second look at these same tables permitted a verification of the Variation Inflation Factor (VIF). The VIF is simply the reciprocal of tolerance. Therefore, when VIF is high, there is accordingly high multicollinearity and instability among beta coefficients. It was observed in the ANOVA Tables that the inflation factors for the coefficients are less than

2, which is very low (Fox 1997). In all, this confirms our initial suspicion that there exists little or no collinearity among our independent constructs.

Residuals Analysis

In order to finalise the use of the two proposed models, it is imperative to study their overall residuals. We verified the residuals in order to ensure that the multiple regression assumptions are indeed respected by both our models.

Linearity. First, we constructed scatterplots of standardized predicted values vs. observed values (see figures 6a and 6b). We noticed that most of the residuals are found between the values of 2 and -2, with a few exceptions. In this sense, the scatterplots for the final models show that approximately 95% of the residuals fall between -2 and +2, which supports the assumption of linearity in regression modeling (Fox 1997).

We extended our evidence of linearity by producing PP normality plots for each of our independent variables (see figures 7a and 7b). We plotted each of the dependent variables' cumulative proportions against the cumulative proportions of the test distributions in order to determine whether the distribution of the variables matches its given distribution. Both graphs clearly show that each dependent variable matches its test distribution since the points cluster around a straight line, thus providing further evidence of linearity.

Figure 6 – Scatterplots of standardized predicted values vs. observed values for

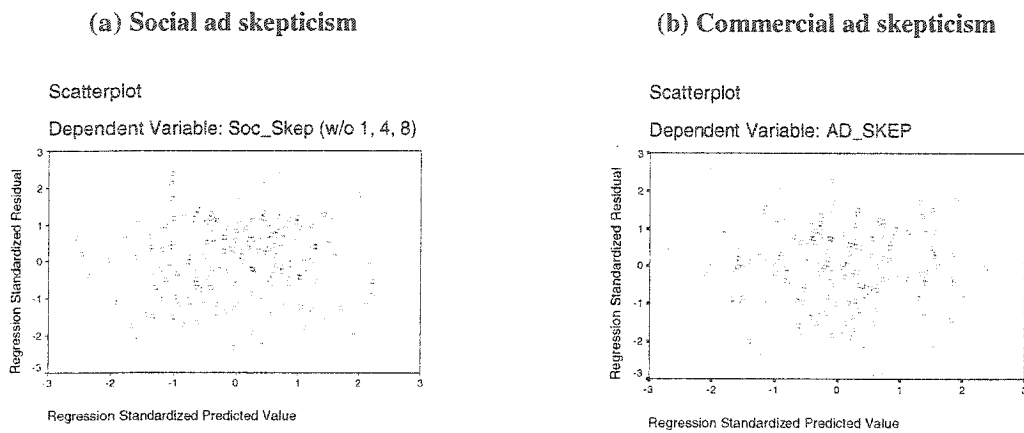
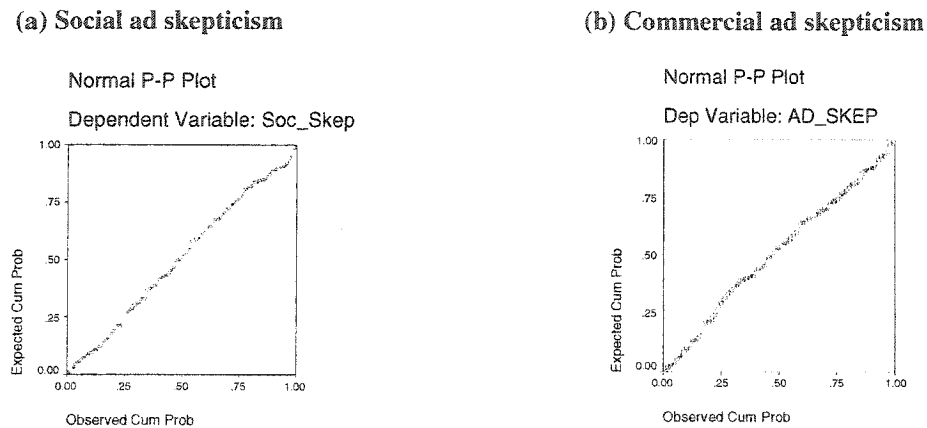


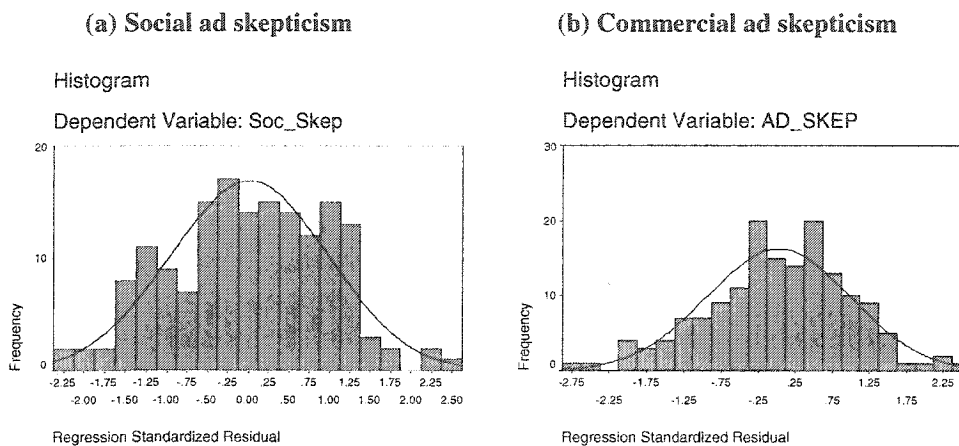
Figure 7 – PP Normality plots for



Constant variance: We first assessed the constancy of the model's variance by, again, referring to the scatterplots seen in figures 6a and 6b. We wanted to make certain that the prediction interval was appropriate, and hence was not too wide or narrow for the 95% confidence interval. Further, a review of these scatterplots confirmed that no recurrent pattern was noticeable among the plotted residuals and thus no transformations (of the dependent variable) were necessary. Furthermore, partial regression plots, as shown in the scatterplot matrices in figures 3a and 3b (*see Section 5.1.2*) also show no recurrent patterns, thus reiterating the fact that transformations (of the independent variables) are not necessary.

Normality: The studentized residuals histograms seen in figures 8a and 8b provide a visual way of assessing whether the assumption of a normally distributed residual error is met. Although both histograms show some disparity, the overall shape of the distribution can be considered normal.

Figure 8 – Studentized Residuals Histograms for:



5.4.2) Correlation Results: Test of H9

A last hypothesis that required to be tested was H9. Recall that this hypothesis posited that social ad skepticism was negatively (cor)related with risky behaviour perceptions. We proposed - based on past literature - that the more skeptical students would also be more likely to find certain activities to be less risky. However, before starting our analyses, we noticed some problems with our measures of risk perceptions. Recall that to rate the participants' perceptions of risky activities, we listed activities used in Smith and Rosenthal's (1995) research on adolescent risk perceptions, namely drinking, smoking and drinking & driving (i.e.: respectively low risk activities and a higher-risk activity).

Participants were then asked to rate the extent to which they found each activity to be risky to themselves and to be risky to others. During the survey distribution process, the main researcher noticed that this latter measure posed a problem for many participants which, in turn, might have created an overall response bias. Many participants were confused as to which perspective they needed to take in order to appropriately answer the questions regarding the degree to which certain activities were risky to others. The way in which the question was formulated led some participants to evaluate the risk levels toward others in terms of the hindrance *their own participation* in the activity would have on others. In contrast, other participants rather answered this question by thinking they were assessing the perceived risk associated with *other people engaging* in the risky activity, and the risk that entailed to these other people as well as to themselves. Even though the main researcher intervened in order to thoroughly explain the way in which this question should be interpreted (namely, that students should consider “risk to others” in the context of other people engaging in a risky activity, and the effects that had on these people, *as per Smith and Rosenthal 1995*), it remained that not all of the participants answered the question in the same way. This in turn altered the overall validity of our measure of “risk to others”, since we could not be certain that our “measure was measuring what it was supposed to measure” (Aaker, Kumar, Day 2000). Thus, in order to avoid any inconsistencies brought upon by this design issue, we decided to drop this measure from any further analysis. Hypothesis 9 was, in turn, tested using only the measures that assessed the degree to which drinking, smoking and drinking and driving would be directly risky to the participants themselves (i.e.: “risk to self”).

Having dealt with this response and measurement issue, we could now proceed to evaluate the correlations that existed between the students' risk perceptions and their level of social ad skepticism. Table 16 (below) shows significant negative correlations between social ad skepticism and the perceptions of all three risky activities. Indeed, the more skeptical student also believed smoking, drinking and drinking and driving to be less risky, providing full support for H9.

Table 16 – Correlation between risk perceptions and social ad skepticism

	Social Ad Skepticism
Risk to self – smoking	-.196**
Risk to self – drinking and driving	-.160*
Risk to self – excessive drinking	-.147*

*** Correlation is significant at the .01 level*

**Correlation is significant at the .05 level*

5.4) ADDITIONAL ANALYSES

5.5.1) Age, Gender and Language Differences

After testing our hypotheses, we thought it would be important to run some additional tests in order to verify for gender differences, language differences or even age differences. Smith and Rosenthal (1995) found significant differences in adolescent risk perceptions due to age and gender while contending that “given the different socialization of boys and girls with respect to (...) [risky] activities (...) the differences noted are not unexpected”. Other researchers, such as Tomori et al (2000) similarly reported such gender differences with regards to adolescents and risk perceptions. These authors actually explained the gender differences by stating that male and female adolescents deal with emotional distress differently and perceive their family dynamics in dissimilar ways. Furthermore, some studies found that language could be a factor explaining response differences among research participants (Toffoli and Laroche 2002; Laroche et al 2002,

etc.). In any case, we found that in order to be thorough in our analysis, we should evaluate whether or not gender, language and age differences had an impact on our final results. More specifically, we wanted to evaluate the extent to which such differences affected the adolescents' evaluations of risky activities as well as their skeptical attitudes (be it toward social or commercial ads).

To this end, we ran a series of univariate analyses of variance (Anovas). To test for language differences, we used the respondents' answer to the question: "What is the language you use most often at home?" This measure was deemed appropriate since past research regarding language differences often used this type of evaluation to appraise a subject's mother tongue (Laroche et al 2002). To verify differences due to age, we decided it would be more appropriate to re-code the sample into two age categories namely one category entitled "younger teens", that included all respondents aged 13 to 15 and a second category named "older teens", including respondents of 16 to 19 years of age (AGE_CAT). Both these measures (i.e.: for language and for age) also permitted us to evaluate samples based on an equal number of respondents. However, this was not the case for gender: we quickly noticed that due to our disproportioned gender distribution, tests to compare means were inappropriate. Not surprisingly, each time we attempted to run our analyses, the Levene's test for equality of variance showed significant results, thus underlining the inappropriateness of our analyses. We fixed this problem by randomly selecting cases from our sample distribution in an attempt to obtain an equal number of boys and girls in our sample, without altering the distributions for language or

age. Using SPSS, we were able to obtain an evenly distributed sample that permitted us to run appropriate mean comparison tests (see table 17 below).

Table 17 – Descriptive Statistics of new sample: age, gender and language

<i>Age</i>				
	Frequency	Percent	Valid Percent	Cumulative Percent
13 to 15 years of age	90	51.4	51.4	51.4
16 to 19 years of age	85	48.6	48.6	100.0
TOTAL	175	100.0	100.0	

<i>Gender</i>				
	Frequency	Percent	Valid Percent	Cumulative Percent
Male	88	50.3	50.3	50.3
Female	87	49.7	49.7	100.0
TOTAL	175	100.0	100.0	

<i>Language most often used at home</i>				
	Frequency	Percent	Valid Percent	Cumulative Percent
English	87	49.7	49.7	49.7
French	85	48.6	48.6	98.3
Other	3	1.7	1.7	100.0
TOTAL	175	100.0	100.0	

We first ran one-way Anovas for 3 two-level factors, namely language, age and gender and included social ad skepticism, commercial ad skepticism as well as each type of risk perception (smoking, drinking and drinking and driving) in the dependent list. The Levene's tests showed that such analyses were appropriate in all cases with the exception of "risk to self- drinking and driving" for the oneway including gender as a factor (Levene statistic = 4.533, $p < 0.05$). After evaluating the Anova tables as well as the descriptive statistics, we found three significant differences (see table 18 below).

Table 18 – Oneway ANOVA results: Gender, Age and Language

	<i>mean</i>	<i>s.d.</i>	<i>F-stat</i>	<i>p-value</i>
<i>Risk to self – smoking</i>				
Male	5.36	2.03	.10	.921
Female	5.33	2.10		
Younger teens	5.37	2.14	.22	.883
Older teens	5.33	1.99		
French	5.32	1.97	2.128	.122
English	5.47	2.08		
<i>Risk to self –drinking and driving</i>				
Male	6.05	1.83	.621	.432
Female	5.80	2.26		
Younger teens	5.84	2.21	.304	.582
Older teens	6.01	1.88		
French	6.09	1.92	.804	.449
English	5.78	2.15		
<i>Risk to self – drinking</i>				
Male	4.91	1.80	.106	.746
Female	5.00	1.95		
Younger teens	5.15	1.97	1.985	.161
Older teens	4.75	1.75		
French	4.76	1.81	1.192	3.06
English	5.11	1.94		
<i>Commercial Ad Skepticism</i>				
Male	38.86	10.20	.014	.906
Female	38.67	10.31		
Younger teens	36.80	10.69	6.927	0.09
Older teens	40.90	9.29		
French	41.00	9.78	10.065	.000
English	35.76	9.52		
<i>Social Ad Skepticism</i>				
Male	29.82	8.08	.291	.590
Female	28.14	8.40		
Younger teens	29.70	8.02	.126	.723
Older teens	29.25	8.48		
French	30.99	7.92	3.459	.034
English	27.78	8.38		

Firstly, the means for the two language groups significantly differed from one another when evaluating commercial ad skepticism ($F = 10.065$, $p < 0.01$) as well as social ad skepticism ($F = 3.459$, $p < 0.05$). Indeed, English students seem to be more skeptical of both commercial and social ads than French students. This finding could be easily explained by the different curriculums offered in the schools used for this study. It was brought to the main researcher's attention that the English high school offered a media literacy class of sorts, which taught student how to thoroughly process information from

the media, including ads. Indeed, cross-tabulations confirm that, of those students who followed media literacy classes, the majority came from the English high school (see table 19 below).

Table 19 – Cross tabulation: language and media literacy class

		English High School	French High School	TOTAL
Media literacy class	Yes	27	11	38
	No	16	100	116
	Not Certain	23	46	69
TOTAL		66	157	223

Further variations were found between the two age groups and skeptical views of commercial ads ($F = 6.927$, $p < 0.01$). Younger viewers were found to be less skeptical of commercial ads than were the older teens. This can be explained when considering the teens' processing abilities: the more a teen learns about advertiser tactics and media programs, the more they question ad claims. This finding comes to no surprise when considering the age of students who can take the afore-mentioned media literacy class in the English school. The researcher was told that such a class is offered only to older students. Cross tabulations confirm this statement, since it was mostly the older teens that had followed a media literacy class (see table 20 below). This explains why older students in our sample could have more advertising knowledge (i.e.: via the media literacy class) and would, in turn, be more skeptical than younger teens when viewing commercial ads.

Table 20 – Cross tabulations: age and media literacy class

		13 – 15 years of age	16 to 19 years of age	TOTAL
Media literacy class	Yes	14	24	38
	No	63	52	115
	Not Certain	40	29	69
TOTAL		117	105	222

As seen in the cross tabulation table (see table 19 and 20 above) a measure was included in the questionnaire to evaluate the number of students who had taken a media literacy class. Although it would be interesting to see whether or not there are differences between those students who took a media literacy class ($n = 38$) and those who did not ($n=115$), too few students confirmed their enrollment in such a class, creating a sample that is too disproportioned for an Anova test (i.e.: the Levene statistic would be significant and it would be inappropriate to interpret such findings).

However, we found that it would be interesting to see if any interactions existed among our factors. While the oneway Anovas (*equivalent to a t-test*) permitted us to see whether any factor - on their own - would produce different means in each group, two-way Anovas would help us to detect interactions among these factors. We thus ran a two-way Anova for each variable on our dependent list, namely social ad skepticism, commercial ad skepticism and each type of risk perception (smoking, drinking, drinking and driving). Although, the two-way Anovas for “risk to self – smoking” and “risk to self – drinking and driving” showed some significant interactions, the Levene’s statistic for each of these evaluations was significant, rendering the interpretation of any of these results to be inappropriate. On the other hand, the Levene’s test was insignificant for the remainder of dependent variables, namely “risk to self – drinking”, social ad skepticism and

commercial ad skepticism. To this end, of the three remaining ANOVAS, no significant interactions were found to exist.

5.5.2) Peers vs. Parents

Our survey included various additional questions that attempted to address issues drawn from past studies. For instance, we mentioned earlier that Tomori et al (2000) had found that the way in which adolescents viewed their relationship with their parents would in turn affect their risk perceptions or even the relationships they had with their peers. Informally, one could suspect that teens who foster a better relationship with their parents would most likely be more mature in their interpretations of ads and in their assessment of certain risks. For these reasons, we included two questions to measure the extent to which the respondents preferred their parents over their peers, namely “I talk much more openly with my friends than I do with my parents” and “For personal advice, I rely much more on my friends than I do on my parents”. Both questions were rated on a 7-point Likert-type scale (1 = definitely do not agree and 7 = definitely agree). We decided to verify whether or not the teens’ responses to these two questions were correlated with both our dependent variables (social ad skepticism and commercial ad skepticism) as well as with parental communication style and peer influence (see table 21 below).

Table 21 – Correlations to assess adolescents' preferences of parents vs. peers

	<i>More open with peers than with parents? (Peer vs. parent 1) $\mu = 5.40$</i>	<i>To get personal info, will more likely consult friends over parents? (Peer vs. parent 2)</i>
<i>MEAN (μ) of peer vs. parent measure</i>	5.40	4.73
<i>Social Ad Skepticism</i>	.263**	.284**
<i>Commercial Ad skepticism</i>	-.057	-.040
<i>Normative peer influence</i>	.053	.086
<i>Informational peer influence</i>	.173*	.126
<i>Concept-oriented communication</i>	-.140*	-.202**
<i>Socio-oriented communication</i>	.197**	.231**

** Correlation is significant at the .01 level

*Correlation is significant at the .05 level

Interestingly, teens who were more open with their peers than with their parents ($r = .263$, $p < 0.01$) as well as those who preferred getting personal information from their peers ($R = .284$, $p < 0.01$) were more skeptical of social ads, since we found a significant, positive correlation among these constructs. Also interesting are the correlations found between both “peer vs. parent” measures and socio-oriented communication as well as concept-oriented communication. Recall that parents who adopt a socio-oriented communication style usually monitor and control their child’s consumption activities, thus leaving the child with less freedom to learn from experience (Boush 2001). This is coherent with the positive correlation we found between socio-oriented communication and both the “peer vs. parent” measures (peer vs. parent 1: $r = .197$, $P < 0.01$; peer vs. parent 2: $r = .231$, $P < 0.01$). Indeed, teens who are merely told what to do by their parents will more than likely be more open with their friends and consult them for advice in order to not be judged or to avoid the one-minded views of their parents. On the other hand, concept-orientation is seen as “the extent to which the questioning of ideas is stressed” (Austin 1993). A negative correlation between this construct and the “peer vs. parents” measure is thus easily comprehensible (peer vs. parent 1: $r = -.140$, $P < 0.05$; peer vs. parent 2: $r = -.202$,

$P < 0.01$), since the more the parents are open to their kids' ideas, the more the kids will feel free to share their thoughts and ideas with their parents (rather than with their friends).

5.5.3) Media Consumption

In addition to peers and parents, the mass media is another major socialisation agent in an adolescent's life. To this end, past research has provided numerous findings regarding the salience of the mass media's role in an adolescent's *social learning* (Psychosocial Paediatrics Committee 2003; Larson, Kubey and Colletti 1989; Mangleburg and Bristol 1998, etc). Many studies even assessed the media's impact on adolescent risky behaviours. For instance, Strasburger and Donnerstein (1999) attested that "television and other media represent one of the most important and unrecognised influences on children and adolescents' health and behaviour". Their review of past studies proved that media exposure was in fact linked with an adolescent's violent, sexual and drug-related behaviours (Strasburger and Donnerstein 1999).

For their part, Mangleburg and Bristol's (1998) established a significant link between the number of hours of television watched by teens and their levels of skepticism towards commercial ads. This link was found to be *positive*, that is the more television teens consumed, the more they developed a skeptical view of such ads. The authors explain it as such: "The more ads one sees, the more likely one may be to recognise differences among ads in truthfulness, for example, and hence to become more skeptical towards ads" (Mangleburg and Bristol 1998). In this sense, it was presumed that as teens watch

more television, they gain more advertising experience and thus become more skeptical of the ads.

In our study, we followed the work of Mangleburg and Bristol (1998) and included a direct measure of media consumption: we asked respondents to indicate the number of hours per week, on average, they spent watching television. We decided to correlate our measure of media consumption with both our dependent measures, namely social ad skepticism and commercial ad skepticism, in order to see whether or not Mangleburg and Bristol's (1998) results would hold true in our research context. Surprisingly, our results show no significant correlations, neither between social ad skepticism and media consumption nor between commercial ad skepticism and media consumption. Even though these results contradict Mangleburg and Bristol (1998), they remain intuitive since it is unlikely that exposure to more television entices (or not) more skeptical views of ads, be they social or commercial. Although Mangleburg and Bristol's (1998) hypothesis was significantly supported, one cannot help but notice the counter-intuitive nature of the proposition, namely that the root of the problem (i.e.: television and media manipulation) is at the same time the solution to the problem (i.e.: gaining media experience in order to develop skeptical attitudes).

(6) DISCUSSION

Table 22 – Summary of hypotheses results

	<i>Hypothesis</i>	<i>Result</i>	<i>Statistics</i>
H1	(a) Concept-oriented communication is <i>positively</i> related to commercial advertising skepticism	✗ Rejected	
	(b) Socio-oriented communication is <i>negatively</i> related to commercial advertising skepticism.	✓ Supported	* $\beta = -.217, p < 0.01$
H2	(a) Concept-oriented communication is <i>negatively</i> related to social advertising skepticism.	✗ Rejected	
	(b) Socio-oriented communication is <i>positively</i> related to social advertising skepticism.	✗ Rejected	
H3	(a) Adolescent susceptibility to <i>informational</i> peer influence is <i>positively</i> related to commercial advertising skepticism.	✗ Rejected	
	(b) Adolescent susceptibility to <i>normative</i> peer influence is <i>negatively</i> related to commercial advertising skepticism.	✓ Supported	* $\beta = -.284, p < 0.01$
H4	(a) Adolescent susceptibility to <i>informational</i> peer influence is <i>negatively</i> related to social advertising skepticism.	✓ Supported	* $\beta = -.183, p < 0.05$
	(b) Adolescent susceptibility to <i>normative</i> peer influence is <i>positively</i> related to social advertising skepticism.	✓ Supported	* $\beta = .233, p < 0.01$
H5	Sensation seeking is <i>positively</i> related to social advertising skepticism.	✗ Rejected	
H6	Materialism is <i>negatively</i> related to commercial advertising skepticism.	✗ Rejected	
H7	(a) Self-esteem is <i>positively</i> related to commercial advertising skepticism.	✗ Rejected	
	(b) Self-esteem is <i>positively</i> related to social advertising skepticism.	✗ Rejected	
H8	(a) Reactance is <i>positively</i> related to commercial advertising skepticism.	✓ Supported	* $\beta = .253, p < 0.01$
	(b) Reactance is <i>positively</i> related to social advertising skepticism.	✓ Supported	* $\beta = .232, p < 0.05$
H9	Social ad skepticism is negatively (cor)related with risky behaviour perceptions	✓ Supported	Risk to self -smoking $\rightarrow r = -.196, p < 0.01$ Risk to self – drinking $\rightarrow r = -.147, p < 0.05$ Risk to self – D&D $\rightarrow r = -.160, P < 0.05$

*Unstandardized Beta Coefficient

Two studies permitted us to test whether or not the widely known concept of ad skepticism could be extended into a social arena. Firstly, in a “pre-test” context, we developed a reliable measure of social ad skepticism by distributing a survey to Cegep and undergraduate students. Having developed a reliable scale for social ad skepticism, we tested our hypotheses concerning both commercial and social ad skepticism among adolescents by distributing a survey to students from two separate high schools (one

French, one English). Table 22 (above) presents a summary of our research findings. Let us discuss the results of each hypothesis, firstly by reviewing the contributions of our replicate hypotheses, then by reviewing our extensions of past studies and lastly by referring to the results of our additional tests.

6.1) REPLICATION OF PAST FINDINGS

In our study, we attempted to replicate a total of five hypotheses (H1a, H1b, H3a, H3b and H7a). The mere fact of proposing to test past findings in a different research context presents a contribution in itself; however, let us review the results of our attempts. Firstly, in accordance to past literature as proposed by Austin (1993) as well as by Mangleburg and Bristol (1998), we posited that concept-oriented parental communication was positively related to commercial ad skepticism (H1a) while socio-oriented communication was negatively related to commercial ad skepticism (H1b). Recall that both studies had proved the latter to be true, finding significant evidence that parents who communicate messages of autonomy to their children (i.e.: *concept-oriented parents*) will in turn, help their kids to develop better skills as a consumer and to become more skeptical of commercial ads. Nonetheless, neither one of the studies was able to provide significant support for the former hypothesis, namely that parents who mostly monitor or control their children (i.e.: *socio-oriented parents*) will likely discourage their teens to be actively skeptical of ads. In our case, the opposite occurred: we found significant support for a negative link between socio-oriented communication and commercial ad skepticism while finding no support for a positive link between concept-oriented communication and commercial ad skepticism.

Our results do not necessarily contradict Austin (1993) nor Mangleburg and Bristol (1998) since these authors had indeed fostered the contention that there should be a link between socio-orientation and commercial ad skepticism. Therefore, we were able to successfully establish this link, thus filling a gap in past research. However, our failure to ascertain a positive link between concept-orientation and commercial ad skepticism brings into question the reliability of the measures used in past studies. Recall that we treated commercial ad skepticism as a one dimensional construct. On the other hand, Mangleburg and Bristol (1998) rather used Gaski and Etzel's (1986) measure of sentiment toward advertising. Our position is that such measures take into account a subject's *attitude* toward commercial ads as opposed to their *skeptical views* of such ads. Indeed, by seeing that in their study, items such as "most television advertising is very annoying" were used to measure ad skepticism (Mangleburg and Bristol 1998), we can immediately notice how problems of construct validity can arise. In any case, we explain our varying results by our use of a more conceptually sound measure of commercial ad skepticism.

The same can be said to explain our failure to fully replicate Mangleburg and Bristol's (1998) extension of Boush, Friedstad and Rose's (1994) links between peer influence and commercial ad skepticism. We found evidence that a teen's susceptibility to normative peer influence was negatively related to commercial ad skepticism (H3b). This makes intuitive sense since teens that merely follow their peers in order to be socially accepted would also be less likely to make use of their critical judgment, thus exerting less skepticism toward commercial ads. However, we were not able to produce significant

results to support the positive relationship between an adolescent's susceptibility to informational peer influence and commercial advertising skepticism (H3a). To explain this we must first stress, yet again, that our conceptualization of commercial ad skepticism differed from that of Mangleburg and Bristol's (1998). However, our findings should not underestimate the power of peers. As previously discussed in section 5.5.2, peers will influence a teen's skeptical views of ads, especially if adolescents prefer their peers over their parents (see section 6.3. for further discussions on this issue).

Perhaps a better conceptualization of peer influence should have been utilized in our study as well as in past research since the transparency of certain items in the peer influence scales might explain why some students did not want to admit to always relying on their friends for information. In fact, this hypothesis (H3a) assumed that those students who made use of informational peer influence were also those who were more likely to make their own judgments (*and thus make use of their critical processing abilities in order to be more skeptical of commercial ads*). Indeed, a teen's independence and autonomy is what makes them tick: adolescents appreciate autonomy since it permits them to be "directed by a set of internal values and standards" (Chassin, Presson and Sherman 1989). It is thus unlikely that such independent students will openly and truthfully respond to questions in a survey that ask them, in a sense, to admit to not being autonomous, that is, to being rather dependent on their friends. Such issues should be considered in future research that attempts to study interpersonal peer influence.

Finally, we were also not able to replicate Boush, Friedstad and Rose's (1994) hypothesis regarding the existence of a positive link between self-esteem and commercial ad skepticism. Although our conceptualisation of commercial ad skepticism differed from theirs, further explanations could be used to justify our lack of consistent results. Firstly, these authors tested their hypothesis by merely using correlation results: seeing that they found a positive correlation between ad skepticism and self-esteem, they gave complete support to their assumptions. Perhaps if Boush, Friedstad and Rose (1994) would have used more thorough means of analysis (namely regression) in order to test their hypothesis, their results would have been different. Furthermore, they could have been more accurate in their choice of measures. While we employed Rosenberg's (1965) widely used measure of self-esteem, Boush et al (1994) rather used a three-item measure of self-esteem which they admitted had a "reliability coefficient [that fell] below acceptable range". In this sense, our failure to replicate their hypothesis highlighted the ambiguity of this past study, thus providing further contributions to the academic community.

6.2) EXTENSIONS OF PAST RESEARCH AND NEW FINDINGS

A main goal of our research was to see whether or not we would be able to extend past findings regarding commercial ad skepticism into a social arena. We first confirmed the need for a separate measure of advertising skepticism, one that would solely measure skeptical attitudes toward social ads. After reviewing correlations and establishing the validity of our measure, we noticed that social ad skepticism was in fact, different from commercial ad skepticism and that it also stimulated opposite outcomes: while

commercial ad skepticism was regarded as a positive attitude for teens to have, social ad skepticism was seen as an attitudinal outcome that one should try to avoid.

Second, we attempted to extend past research findings to see whether or not the variables that had been posited to affect commercial ad skepticism would also influence social ad skepticism. We posited, as per Mangleburg and Bristol (1998), that parental communication style would affect social ad skepticism, hypothesizing that it would have the opposite effects to those proposed for commercial ad skepticism. Namely, we contended that concept-oriented communication was negatively related to social advertising skepticism (H2a) while socio-oriented communication was positively related to social ad skepticism (H2b). We were unable to find support for both of these hypotheses.

Our rejection of H2a and H2b could be due to the fact that we focused our study on social ads that dealt with health-related risky behaviours. Past studies have shown that kids are more prone to adopt such risky behaviours during their teenage years, mainly due to unrealistic optimism (Smith and Rosenthal 1995; Cohn et al 1995). We also found, in coherence with past studies (Akers and Lee 1996; Cooper and Cooper 1992; Roedder-John 1999), that adolescents are more likely to listen to or to prefer communicating with their peers rather than with their parents. As mentioned by the social learning theory (see section 2.4.1), parents and peers acts as sources of information for teens but “when these sources are in conflict, adolescents will most often behave similarly close to peers” (Akers and Lee 1996). In all, we can easily realise why parental communication style

would not have an effect on social ad skepticism: teens are less likely to communicate with their parents about risky behaviours, which includes discussing the content of social ads. They are more likely to discuss such issues with their friends than with their parents. This realisation, in turn, helps us explain our successful extensions of Mangleburg and Bristol's (1998) work regarding peer influence and ad skepticism.

We had posited that susceptibility to informational peer influence was negatively related to social advertising skepticism (H4a) and that susceptibility to normative peer influence would be positively related to social ad skepticism (H4b). The fact that we found full support for both of these hypotheses simply stresses, yet again, the important role peers play in an adolescent's life. Indeed, those teens who only rely on friends for straightforward information (*informational peer influence*) will be more likely to dismiss their peers' claims regarding risky behaviours and to listen to a professional's views, namely a social marketer. On the other hand, teens who want to fit in (*normative peer influence*) will be more likely to follow the flock and be pressured into dismissing social advertising claims.

In a final attempt to extend past research, we reviewed Boush, Friedstad and Rose's (1994) findings regarding self-esteem and ad skepticism. We posited that adolescents with higher self-esteem levels would be more likely to challenge any form of authority, including social marketers, thus proposing a positive relation between social ad skepticism and self esteem (H7b). We found no support for this link. An explanation of this hypothesis rejection lies in the alternate view of adolescent self-esteem: self-esteem

does not necessarily increase teens' propensity to argue, but rather renders them to be "autonomous without being uncooperative" (Inkeles and Leiderman 1998). In this sense, teens that have higher levels of self-esteem might actually be confident enough to believe in the system, go against their peer's wishes and not necessarily become skeptical of social ads. Indeed, our review of the correlations among the main variables showed just this: a significant negative correlation between self-esteem and social ad skepticism ($r = -.220$, $P < 0.01$). Interestingly, the regression coefficient for self-esteem (*with social ad skepticism as the dependent variable*), although insignificant, was negative, thus respecting the direction of our alternative explanation ($\beta = -.134$). In any case, future research in this area should consider this type of link between self-esteem and social ad skepticism.

Finally, in addition to our replications and our extensions, we proposed further links to explain both social ad skepticism and commercial ad skepticism. For the latter, we had posited that sensation-seeking adolescents would be more likely to be skeptical of social ads (H5), since sensation-seekers usually enjoy participating in risky activities even though such conduct is discouraged in health-related social advertising. Although we had found a significant positive correlation between sensation-seeking and social ad skepticism, our regression results rejected this hypothesis. A similar outcome happened during our assessment of materialism and commercial ad skepticism. Based on past literature, we assumed that those teens who were more concerned with material goods would be more likely to appreciate commercial ads due to their material nature, thus making them less skeptical of such ads (H6). Although we were able to find a significant

negative correlation between materialism and commercial ad skepticism, this link was not supported by our regression results. Perhaps our research design or our sample size played a role in these insignificant results. An experimental design might have more accurately measured our participants' views. Furthermore, keeping in mind that the significant correlations were somewhat small, it becomes evident that in the presence of other constructs, these relationships could become insignificant. In any case, further research should try to reproduce these analyses in order to see whether or not our sample or our research design is at the root of these rejected hypotheses.

We also tested the possible relationships between reactance, social ad skepticism and commercial ad skepticism. Our contention was that all ads, be they social or commercial, try to bring about change in teens' behaviours and thus could be perceived as manipulative. In turn, this could trigger some reactive behaviour on the part of the teens. We thus posited that reactance was positively related to both social ad skepticism (H8a) as well as commercial ad skepticism (H8b) and found full support for both our hypotheses. This contributes to the academic community since past studies have never included a measure of reactance when attempting to assess ad skepticism issues. Last of all, we attempted to see whether or not social ad skepticism was related to a youth's perceptions of risky behaviours. In accordance with past research regarding fear appeals and social marketing, we posited that social ad skepticism was negatively (cor)related with risky behaviour perceptions (H9). We were able to fully support our assumptions with significant correlation results: all three types of risk perceptions (smoking, drinking and drinking and driving) were indeed negatively correlated with social ad skepticism.

This provides further support to those academics who advise marketers to use fear appeals with caution, stating that boomerang effects might occur when using such marketing tactics among youth (Pechmann et al 2003).

6.3) ADDITIONAL FINDINGS

Recall that we extended our analyses to test whether or not gender, age or language differences had an impact on our ultimate findings. We first found that English students seemed to be more skeptical of both social and commercial ads than were the French students. Also, we noticed that older students were more skeptical of commercial ads than were the younger students. After our cross-tabulations analyses, we noticed that more English students as well as older teens had attested to having receiving a media literacy class, which easily explained these variations.

This brings us to consider the role of persuasion knowledge: “such knowledge should enhance youth’s perception of (...) marketers’ persuasion attempts (...) [because] when a person understands that an agent’s action is a persuasion attempt, a change in meaning occurs” (Pechmann et al 2003). As such, if adolescents increase their persuasion knowledge, they will be more likely to put into question the true meanings behind television ads. If and when teenagers are able to expand their persuasion knowledge, we can coin them as being more media literate. Media literacy, for its part, emphasizes that the adolescent has gained more skills and has become more self-efficient when it comes to resisting various marketing tactics (Pechmann et al 2003).

Many education curriculums in Canada now include a media education course in order to teach students about the media and to help them “learn to use media resources critically and thoughtfully” (Media Awareness Network 2003). In any case, the fact that students coming from the English school had access to media literacy classes explains why more English students were skeptical of advertising, be it social or commercial. They were taught to question the roots of any media message and so would be more likely to develop skeptical attitudes toward ads. Furthermore, age differences among the youths’ skeptical attitudes toward commercial ads finds support when considering that a greater number of older students had received media literacy classes. This finding is not surprising since, in their longitudinal study, Boush, Friedstad and Rose (1994) found that students became generally more disbelieving of advertising claims as they became older (i.e.: as the school year progressed).

Let us quickly discuss the insignificance of the gender variables. Although some past studies had found gender to be a differential factor when considering adolescents and risk perceptions (Vanatta 1996), this type of finding remained controversial. Indeed other researchers, for their part, consistently found insignificant results when considering gender differences. For instance, in their study of substance abuse among youth, Young et al (2002) found that although “gender differences [were] often pronounced in large-scale epidemiological studies of adults, [they] were not pronounced in [their] adolescent sample”. Furthermore, Storvoll and Wichstrom (2002) also found no significant gender differences to exist in the associations between risk factors and covert behaviours among youth. In all, it is evident that a debate persists in the academic community in regards

whether or not there are gender differences when assessing youth and risk perceptions. Thus, our results simply add to this debate and provide further evidence, albeit informal, of the non-existence of gender variations.

Finally, let us briefly comment on our findings vis-à-vis the relation between teens' preferences of their peers over their parents and their skeptical attitude towards both social and commercial ads. We discovered that teens who preferred their peers were more skeptical of social ads. One could easily explain this result by referring to literature regarding peer pressure and social norms (Akers and Lee 1996; Cooper and Cooper 1992; Roedder-John 1999). As stated in section 2.4, peer influence is a big part of an adolescent's life. Teens will often go to their peers for advice, even though their peers will sometimes influence them in a wrong direction (Roedder-John 1999). This fact is expressed via the positive correlation we found between informational peer influence and teens' openness with their peers ($r = .173$, $p < 0.05$). Recall, however, that some authors believe that "*peers are bad* [since] they foster undesirable qualities (...) such as aggression, early sexual involvement and drug use" (Cooper and Cooper 1992). With this line of reasoning, one could understand why adolescents who rely more on their peers for information, will also be more skeptical of social ads that tell them that certain risky behaviours are bad for them. If their peers do not believe the advertised behaviours to be risky, then it is likely that students will not believe anyone who tells them different, be it a social marketer or a parent. It is simply interesting to find that in the context of social and commercial ad skepticism, peer vs. parents preferences become salient factors to consider.

(7) LIMITATIONS AND FUTURE RESEARCH

Although our study is of great contribution to both the academic and the professional community, some research limitations need to be addressed. Firstly, it becomes obvious that our uneven sample distribution could have caused some imbalance in our research results. Not only did we have an uneven number of girls and boys in our sample, but the French school had a much greater participation rate than did the English school. A greater number of respondents should have been sought out in order to account for these sampling problems.

Secondly, we did not use actual social ads in our research: that is, our respondents did not concretely see social ads or pictures of the health-risk activities nor did they see commercial ads depicting actual material goods. Thus, we had no control over what type of mental image the participants were referring to when they were asked to think about these types of ads. Although our research design followed those designs used in past studies (Obermiller and Spangenberg 1998; Boush Friedstad and Rose 1994; Mangleburg and Bristol 19988), it could be beneficial to conduct an experimental research to test our hypotheses. Had we asked our questions in an experimental setting, presenting the respondents with specific referral ads, perhaps our participants would have been able answer the questions in a more distinct fashion, thus permitting some of the regression results to be statistically significant. Indeed, such issues should be resolved in future studies.

Further limitations refer to the areas of social marketing we addressed in our study. We concentrated our efforts on the evaluation of health-related social ads. Perhaps our

results will not be replicated in different social marketing contexts (i.e.: sponsorships, etc.). However, we believe that our embodiment of health-related social ads could actually be easily generalizable to other types of social marketing efforts seeing that it not only accounted for ads dealing with healthy behaviours, but it also included the assessment of *health-risk* activities, such as drinking and driving. Likewise, our health-related topics actually ranged on both ends of Rothschild's *social response involvement spectrum* (Rothschild 1979), confirming that, at the least, our scale accurately represents the true reality of this social marketing continuum (*see section 4.1.1 for further discussions*). Moreover, we acknowledge that our conceptualisation of health-related social ads did not include the description of drug-related ads. This decision was made due to the sensitive nature of the topic. However, future studies should also attempt to assess whether or not adolescents' perceptions of drug-related activities alter their view of social ads.

Furthermore, we only assessed our measure of social ad skepticism among adolescents. We believe our choices are grounded (*see section 4.1.1*), since adolescents are, as previously mentioned, of great importance to social and commercial marketers alike. For instance, recall that Mintz et al (1997) actually recommended that social ads regarding anti-smoking should specifically be targeted at teens rather than adults in order to ensure the efficacy of the campaign. Nevertheless, additional studies should attempt to address these sampling limitations.

We also attempted to measure the relation between social ad skepticism and risky behaviours. However, we only measured the teens' risky behaviour *perceptions*. Past studies have rather measured risky behaviour *intentions* (Pechmann et al 2003). Obtaining risky behaviour intentions would have permitted us to draw a better link between an adolescent's risky activity choices and their skeptical attitudes towards social ads. Our decision to only include risk perception measures again was due to the sensitive nature of the topic. Some adolescents might not have felt comfortable admitting to partaking in illegal activities (i.e. underage drinking). Due to our fear our response bias, we did not include behaviour intention measures. However, future studies should try to draw a more explicit link between adolescent risky behaviour and social ad skepticism. Moreover, future experimental studies should try to assess the causality of such a relationship.

Finally, we must address our questionnaire design issue. Only after having started the survey distribution process did the researcher realise the ambiguous nature of the risk perception questions. Recall that participants were confused when asked to rate the extent to which they found certain activities to be risky to others. The way in which the question was formulated led some participants to evaluate how *their own participation* in the activity would impact others while other participants rather answered this question by thinking they were assessing the perceived risk associated with *other people engaging* in the risky activity. In any case, this type of questionnaire design error should have been resolved via a pre-test. Although we had pre-tested some of the measures during our scale development study, and that we had already done some troubleshooting of a similar

nature (i.e.: correcting ambiguous questions), we had not noticed this design flaw. A more proper pre-test should have been executed in order to fully evaluate the adequacy of our main survey. Although this design problem did not affect the bulk of our results, future research should account for the ambiguity of our questions in order to see whether or not the extent to which teens find activities to be risky to others correlates with their skeptical attitudes toward ads.

(8) CONTRIBUTIONS

This research is of great contribution, not only to academics but also to marketers and public policy makers. Recall that the research objectives of this project were to accurately identify the most salient contributing factors to consider when assessing an adolescent's skeptical attitudes toward advertising. In this sense this study first filled a gap in past advertising research by distinguishing social ad skepticism from commercial ad skepticism to more specifically detect the roots of this issue. By extending past research efforts into social marketing arenas, we were not only able to expand past ad skepticism theory, but also to provide more practical recommendations for the everyday marketer.

Although many academics devote endless efforts in the evaluation of various marketing areas, past theory in the social marketing sector remains scarce. It is for these reasons that "the effectiveness of such campaigns, especially those that rely primarily on television, is unknown [and] (...) [that we] have had shortcomings in campaign execution [as well as] evaluation" (Palmgreen et al 2001). One great breakthrough in social marketing research, however, is the Protection Motivation theory. As previously discussed, the protection motivation model helped researchers better grasp the intricacies that surrounds the use of fear appeals, with specific attention to those social campaigns - such as anti-smoking ads - that use fear appeals (Pechmann et al 2003). Still, no additional theoretical contribution of this magnitude has been introduced to the social sector. Hence, this research provides academics with further theoretical grounds to evaluate the effectiveness of a social ad campaign, that is, by assessing the degree to which social ad skepticism interfered with the campaign's objectives.

In this sense, a first theoretical contribution of this study stems from the notion that we successfully identified two distinct types of skeptical advertising attitudes: *commercial* ad skepticism and *social* ad skepticism. As mentioned earlier, the former type of skepticism is commonly perceived as a positive adolescent attitude since it indicates that teens use critical judgements to review the thousands of ads that surround them every day (Obermiller and Spangenberg 1998; Mangleburg and Bristol 1998). On the other hand, we propose that the latter type of ad skepticism should be viewed as a negative outcome since it would encourage a teen to doubt the intentions of those campaign messages that truly aim at informing and protecting them. In all, this distinction brings a theoretical contribution not only to the marketing field, but more specifically to the social marketing arena, since it stresses the importance of an additional construct in the social field, that of *social* ad skepticism.

Seeing that we are striving to present a new construct to the social marketing field, a second contribution of this paper lies in its first attempt to measure social ad skepticism. Our novel measure of social ad skepticism - confirmed via pre-tests and factor analyses - provides a stepping stone for academics who consider this line of research for their future endeavours. Although our scale was tested using health-related items and was targeted toward adolescents, we firmly believe that it is generalizable to other areas of social marketing and to other audiences. For instance, ads targeting risky behaviours related to racism, social pressures or sexual promiscuity could easily be tested with the social ad skepticism scale. Additionally, the wording used to describe the items of our scale

remains consistent across sample types, making it generalizable to adult audiences. Furthermore, our assessment of the discriminant and nomological validity of our scale (*as discussed in section 5.3.1*) extends the strength of this measure. While further use of this measure would be needed in order to thoroughly assess its robustness, it remains that this research served as a valid scale development study that, without a doubt, contributes to the entire marketing community.

Thirdly, not only are we introducing a new measurement scale for this equally new construct, but we also provide a specific theoretical framework to help identify its antecedent variables. Indeed, this study becomes much more than an extension of past efforts, it truly provides a framework for the concrete evaluation of social ad skepticism. Fourth, this paper also assesses the reliability and validity of past research. By comparing scale reliabilities (see Table 8) we were able to test the legitimacy of past measures. Furthermore, by realising and discussing the different outcomes that occurred when attempting to replicate past hypotheses (see Section 6.1), we could verify the robustness of past construct relations. Although this type of analysis is sometimes tedious and oftentimes goes unnoticed, it is essential since it ensures that the replicated marketing theories can be used more practically in our everyday lives with no worry of methodological backlash.

As a last note regarding the theoretical contributions of this paper, it is noticeable that the research not only contributed to social marketing literature, but it also adds to the sparse literature regarding advertising skepticism as a whole. Researchers have noticed that

“scholars have devoted very little attention to understanding the consequences of mistrust of the media (...) [and] skepticism has been particularly ignored when it comes to theories” (Tsfati 2003). As such, this paper adds more depth to this line of research, by providing specific theories regarding the antecedents of both social and commercial skeptical attitudes toward advertising.

Marketers and public policy makers alike will also greatly benefit from this study’s findings. For their part, marketers will be able to better understand the intricate adolescent market. Such an in depth-comprehension is indeed important for marketers since “adolescent consumers are being recognised today as an increasingly important group in terms of their purchasing behaviours, attitudes and their impact on the (...) economy”(Clark, Martin and Bush 2001). Our findings thus help marketers to understand the influential variables to consider – namely parents, peers and personality types – when attempting to target teenagers. For instance, some advertisers already tried to reach sensation-seeking teenagers with campaigns (e.g.: SENTAR approaches) specifically designed to not only grab the teens’ attention, but to make adolescents be less skeptical of their motives as marketers (Palmgreen et al 2001).

For their part, social marketers can likewise benefit from this research. Seeing that non-profit organisations face strict financial restrictions in regards to their business decisions, a better understanding of what makes a teen view ads in a skeptical manner would help avoid needless expenses towards ineffective social campaigns. We have already been in contact with officials from Health Canada in an attempt to draw a link between our research findings and public campaigns. Indeed, this study could help Health Canada

marketers to explain past campaign failures (*or successes*) in terms of the guidelines our framework proposes, thus preventing mistakes from re-occurring. In all, we believe the findings of this research will help those seeking to communicate positive messages to teenagers, in that they will be able to develop more effective social campaigns.

BIBLIOGRAPHY

- Aaker, David A., V. Kumar and George S. Day, *Marketing Research, Seventh Edition*, New York, John Wiley & Sons, Inc. 2001.
- Abraham, Magid M. and Leonard M. Lodish "Getting the Most Out of Advertising and Promotion" *Havard Business Review*, May June, 1990.
- Adams, Gerald R., James Côté, Sheila Marshall, "Parent/Adolescent Relationships and Identity Development: A Literature Review and Policy Statement", Report to Division of Childhood and Adolescence, Health Canada, Oct 2001.
- Adrian, Manuella, Neville Layne and Robert Williams, "Canadian Youth and Drugs: A Health Promotion and Social Marketing Resource Guide", Health Canada, 1995.
- Agresti, Alan and Barbara Finley *Statistical Methods For the Social Sciences, Second Edition*, Library of Congress Catalogue-in-Publication Data, Dellen Publication Co. 1986.
- Akers, Ronald L. and Gang Lee, "A Longitudinal Test of Social Learning Theory: Adolescent Smoking", *Journal of Drug Issues*, Spring 1996, Number 26, Issue 2, Spring 1996 p.317-341.
- Andrews, J. Craig, "The Dimensionality of Beliefs Toward Advertising in General", *Journal of Advertising*, Volume 18, Number 1, 1989, p 26-35.
- Austin, Erica (Weintraub), "Exploring the Effects of Active Parental Mediation of Television Content", *Journal of Broadcasting & Electronic Media*, Spring 1993, p. 147-157.
- Barnea, Zipora, Meir Teichman and Giora Rahav, "Personality, Cognitive, and Interpersonal Factors in Adolescent Substance Use: A Longitudinal Test of an Integrative Model", *Journal of Youth and Adolescence*, Vol, 21, No. 2, 1992, p. 187-201.
- Boone, Margaret S., John U. Farley and Steven Joshua Samuel, "A Cross-Country Study of Contraceptive Sales Programs: Factors that Lead to Success", *Studies in Family Planning*, Volume 16, Issue 1, Jan-Feb 1985.
- Boush, David M. "Chapter 19: Mediating Advertising Effects" in *Television and the American Family, 2nd Edition*, Bryant Jennings and J. Alison Bryant, ed. Lawrence Erlbaum Associates, New Jersey, 2001.
- Boush, David M., Chuang-Hyun Kim, Lynn R. Kahle and Rajeev Batra, "Cynicism and Conformity as Correlates of Trust in Product Information Sources", *Journal of Current Issues and Research in Advertising*, Volume 15, Number 2, Fall 1993, p. 71-79.

Boush, David, M., Marian Friedstad and Gregory Rose, "Adolescent Skepticism toward TV Advertising and Knowledge of Advertiser Tactics", *Journal of Consumer Research*, Volume 21, June 1994, p. 165-175.

Brewer, Paul R., "Framing, Value Words, and Citizens' Explanation of Their Issue Opinions", *Political Communication*, Volume 19, 2002, p. 303-316.

Brucks, Merrie, Gary M. Armstrong, Marvin E. Goldberg, "Children's Use of Cognitive Defences Against TV Advertising: A Cognitive Response Approach", *Journal of Consumer Research*, Vol 14, March 1988, p. 417-482.

Bruner II, Gordon C. and Paul J. Hensel, "Marketing Scales Handbook: A Compilation of Multi-Item Measures, Volume II", American Marketing Association, 1996.

Calfee, John E. "The Historical Significance of Joe Camel", *Journal of Public Policy and Marketing*, Vol, 19, Issue 2, Fall 2000, p. 168-182.

Canadian Teachers' Federation, "A Report on the Realities, Concerns, Expectations and Barriers Experienced by Adolescent Women in Canada", November 1990.

Chassin, Laurie, Clark C. Presson and Steven J. Sherman, " "Constructive" vs. "Destructive" Deviance in Adolescent Health-Related Behaviors", *Journal of Youth and Adolescence*, Volume 18, No. 3 1989, p. 245-262.

Clark, Paul W., Craig A. Martin and Alan J. Bush, "The Effect of Role Model Influence on Adolescents' Materialism and Marketplace Knowledge", *The Journal of Marketing theory and Practice*, Number 9, Issue 4, Fall 2001, p. 27 -36

Cohn, Lawrence D., Susan MacFarlane, Claudia Yanez and Walter K. Imai, "Risk-Perception: Differences Between Adolescents and Adults", *Health Psychology*, Volume 14, No. 3, 1995, p. 217-222.

Comeau, Nancy, Sherry H. Stewart and Pamela Loba, "The Relations of Trait Anxiety, Anxiety Sensitivity and Sensation Seeking to Adolescents' Motivations for Alcohol, Cigarette and Marijuana Use", *Addictive Behaviours*, Volume 26, 2001, p. 803-825.

Cooper, Catherine R. and Robert G. Cooper Jr., "Links Between Adolescents' Relationships with their Parents and Peers: Models, Evidence, and Mechanisms" in *Family Peer Relationships: Media Linkage*, Parker, Ross D and Gary W. Ladd, ed. Lawrence Erlbaum Associates, New Jersey, 1992.

Cramer, Duncan, "Facilitativeness, Conflict, Demand for Approval, Self Esteem and Satisfaction With Romantic Relationships", *The Journal of Psychology*, Jan 2003, Vol 137, Issue 1, pg. 85

Crane, Andrew and John Desmond, "Societal Marketing and Morality", *European Journal of Marketing*, Vol 36, No. 5/6, 2002.

Davies, Mark, Diane Preston and John Wilson "Elements of Not-for-Profit Services: A Case of University Student Accommodation", *European Journal of Marketing*, Volume 26, Issue 12, 1992, p. 56-71.

Dittmar, Helga and Lucy Pepper, "To Have is To Be: Materialism and Person Perception in Working-class and Middle-class British Adolescents", *Journal of Economic Psychology*, Volume 15, 1994, p. 233-251.

Donnell, Alison J., Adrian Thomas and Walter C. Buboltz Jr. "Psychological Reactance: Factor Structure and Internal Consistency of the Questionnaire for the Measurement of Psychological Reactance", *The Journal of Social Psychology*, 2001, Vol 141, Issue 5, 2001. p. 679-687.

Donovan, Robert J. and Susan Leivers, "Using Paid Advertising to Modify Racial Stereotype Beliefs", *Public Opinion Quarterly*, Vol 57, Issue 2, Summer 1993.

Dubow, Joel S. "Advertising Recognition and Recall by Age – Including Teens", *Journal of Advertising Research*, September/October 1995, p. 55-59.

Environics Research Group Limited, "Anti-Tobacco Benchmark Surveys of Canadian Adults and Youth" report prepared for Health Canada, November 2001.

Ford, Gary T., Darlene B. Smith and John L. Swasy, "Consumer Skepticism of Advertising Claims: Testing Hypotheses from Economics of Information", *The Journal of Consumer Research*, Volume 16, Issue 4, (March 1990), p. 433-441.

Fox, John "Applied Regression Analysis, Linear Models, and Related Methods, Thousand Oaks, Calif., Sage Publications 1997.

Garceau, Susan – Canadian Gallup Poll Limited, "Advertising Summary Report on Tobacco, Alcohol and Marijuana Campaigns" Report prepared for Health Canada, March 1985.

Goldman, Lisa K. and Stanton A. Glantz, "Evaluation of Antismoking Advertising Campaigns", *JAMA*, Volume 279, No. 10, March 11 1998, p. 772-777.

Golfarb Consultants "Attitudes of Teens Toward Second-Hand Smoke" Report prepared for Health Canada, March 28, 2002.

Grant, Christina, "Teens, Sex and the Media: Is there a Connection?", *Paediatrics Child Health*, Volume 8, Number 5, May/June 2003, p. 285-286.

Grier, Sonya A. "The Federal Trade Commission's Report on the Marketing of Violent Entertainment to Youths: Developing Policy-Tuned Research", *Journal of Public Policy and Marketing*, Vol 20, Issue 1, spring 2001, p. 123-132

Griffin, Kenneth W., Gilbert Botvin, Tracy R. Nichols and Margaret M. Doyle "Effectiveness of a Universal Drug Abuse Prevention Approach for Youth at Risk for Substance Use Initiation", *Preventive Medicine*, Volume 36, 2003, p. 1-7.

Hair, Joseph F. Jr., Rolph E. Anderson, Ronald L. Tatham, William C. Black, *Multivariate Data Analysis with Readings*, New Jersey, Prentice Hall, 1995.

Hardesty, David M., Jay P. Carlson and William O. Bearden "Brand Familiarity and Invoice Price Effects on Consumer Evaluations: The Moderating Role of Skepticism Toward Advertising", *Journal of Advertising*, Volume XXXI, Number 2, Summer 2002, p. 1-15.

Health Canada – Social Marketing Network:

<http://www.hc-sc.gc.ca/hppb/socialmarketing/sm.html>

Hellman, Chan M. and Wayne L. McMillin "The Relationship Between Psychological Reactance and Self-Esteem", *The Journal of Social Psychology*, 1997, Volume 137, Issue 1, p. 135-138.

Hoyle, Rick H., Michael T. Stephenson, Philip Palmgreen, Elizabeth Pugzles-Lorch and R. Lewis Donohew, "Reliability and Validity of a Brief Measure of Sensation Seeking", *Personality and Individual Differences*, Volume 32, 2002, p. 410-414.

Inkeles, Alex, Herbert Leiderman, "An Approach to the Study of Psychosocial Maturity: The Development of a Cross-National Scale for Adolescent", *International Journal of Comparative Sociology*, Volume 39, Issue 1, Feb 1998, p. 52-76.

Johnson, Jeffrey G., Patricia Cohen, Elizabeth M. Smailes, Stephanie Kasen and Judith S. Brook, "Television Viewing and Aggressive Behavior during Adolescence and Adulthood", *Science*: www.sciencemag.org, Volume 295, March 29, 2002, p. 2468-2471.

Keller, Punam Anand and Lauren Goldberg-Block "Increasing the Persuasiveness of Fear Appeals: The Effect of Arousal and Elaboration" *Journal of Consumer Research*, Volume 22, Issue 4, March 1996, p. 448 – 459.

Kelly, Kathleen J., Michael D. Slater and David Karan, "Image Advertisements' Influence on Adolescents' Perceptions of the Desirability of Beer and Cigarettes", *Journal of Public policy and Marketing*, Vol. 21, Issue 2, Fall 2002, p. 295-304.

Kraak, Vivica and David L. Pelletier "How Marketers Reach Young Consumers: Implications for Nutrition Education and Health Promotion Campaigns" *Family Economics and Nutrition Review*, Volume 11, No. 4, 1998, p. 31 – 41.

Larkin, Ernest F. "A Factor Analysis of College Student Attitudes toward Advertising", *Journal of Advertising*, Spring 1977, Volume 6, Issue 2, p. 42-48.

Laroche, Michel, Jasmin Bergeron, Marc-Alexandre Tomiuk and Guido Barbaro-Forleo, "Cultural Differences in Environmental Knowledge, Attitudes and Behaviours of Canadian Consumers", *Canadian Journal of Administrative Sciences*, 2002, 19(3), p. 1-16.

Larson, Reed, Robert Kubey and Joseph Colletti, "Changing Channels: Early Adolescent Media Choices and Shifting Investments in Family and Friends" *Journal of Youth and Adolescence*, Volume 18, Number 6, 1989, p. 583-599.

Mainous III, Arch G, Catherine A. Martin, Michael J. Oler, Eric T. Richardson and Amy S. Haney, "Substance Use Among Adolescents: Fulfilling a Need State", *Adolescence*, Vol 31, Number 124, Winter 1996, p. 807-815.

Mangleburg, Tamara F. and Terry Bristol "Socialization and Adolescents' Skepticism toward Advertising". *Journal of Advertising*, Volume XXII, Number 3, Fall 1998 p. 12-20.

Media Awareness Network: www.media-awareness.com

Merrill, Jeffrey C., Herbert D. Kleber, Michael Shwartz, Hong Liu and Susan R. Lewis, "Cigarettes, Alcohol, Marijuana, Other Risk Behaviours and American Youth", *Drug and Alcohol Dependence*, Volume 56, 1999, p. 205-212.

Mintz, James H., Layne Neville, Rachel Ladouceur, Jane Hazel and Monique Desrosiers (Health Canada), "Social Advertising and Tobacco Demand Reduction in Canada" in *Social Marketing: Theoretical and Practical Perspectives*, Goldberg, Marvin E., Martin Fishbein and Susan E. Middlestadt, Lawrence Elbaum Associates, New Jersey, 1997.

Moore, Jesse N., Mary Ann Raymond, John D. Mittelstaedt and John F. Tanner Jr. "Age and Consumer Socialisation Agent Influences on Adolescents' Sexual knowledge, Attitudes, and Behaviour: Implications for Social Marketing Initiatives and Public Policy", *Journal of Public Policy and Marketing*, Volume 21, Issue 1, Spring 2002, p. 37-52.

Moore, Roy L and George P. Moschis "Teenager's Reactions to Advertising", *Journal of Advertising*, Fall 1978, Volume 17, Issue 4, p. 24 – 30.

Moore, Susan and Eleonora Gullone "Predicting Adolescent Risk Behaviour Using a Personalized Cost-Benefit Analysis" *Journal of Youth and Adolescence*, Number 25, Issue 5, June 1996 p. 343-359/

Morris, Anne M. and Debra K. Katzman, "The Impact of the Media on Eating Disorders in Children and Adolescents", *Paediatric Child Health*, Volume 8, No. 5, May/June 2003, p. 287-289.

Moschis, George P. "Patterns of Consumer Learning", *Academy of Marketing Science*, Winter/Spring 1981, 9, pg. 110

Muehling, Darrel D. "An Investigation of Factors Underlying Attitude-Toward-Advertising-In-General", *Journal of Advertising*, Volume 16, Number 1, 1987, p. 32-40

Muehling, Darrel D. and Michelle McCann "Attitude Toward the Ad: A Review", *Journal of Current Issues and Research in Advertising*, Volume 15, Number 2, Fall 1993, p. 2558

Obermiller, Carl and Eric R. Spangenberg "Development of a Scale to Measure Consumer Skepticism toward Advertising", *Journal of Consumer Psychology*, 7(2), 1998, p. 159-186.

O'Guinn, Thomas C. and L. J. Shrum, "The Role of Television in the Construction of Consumer Reality", *The Journal of Consumer Research*, Volume 23, March 1997, p. 278 – 294.

O'Shaughnessy, Nicholas "Social Propaganda and Social Marketing: A Critical Difference?", *European Journal of Marketing*, Volume 30, Issue 10/11, June 1996, p. 54-67.

Palmgreen, Philip, Lewis Donohew, Elizabeth Pugzles-Lorch, Rich H. Hoyle and Michael T. Stephenson, "Television Campaigns and Adolescent Marijuana Use: Tests of Sensation Seeking Targeting" *American Journal of Public Health*, Volume 91, Issue, 2, February 2001, p. 292-296.

Pechmann, Cornelia, Guangzhi Zhao, Marvin E. Goldberg & Ellen Thomas Reibling, "What to Convey in Antismoking Advertisements for Adolescents: The Use of Protection Motivation Theory to Identify Effective Message Themes", *Journal of Marketing*, Vol 67, April 2003, p. 1-18.

Pechmann, Cornelia and S. Rathneshwar, "The Effects of Antismoking and Cigarette Advertising on Young Adolescents' Perceptions of Peers Who Smoke", *The Journal of Consumer Research*, Volume 21, Issue 2, September 1994, p. 236-251.

Peracchio, Laura A. and David Luna, "The Development of an Advertising Campaign to Discourage Smoking Initiation among Children and Youth", *Journal of Advertising*, Volume XXVII, Number 3, Fall 1998, p. 49-56.

Psychosocial Paediatrics Committee, "Impact of Media Use on Children and Youth" *Paediatrics and Child Health*, Volume 8, Issue 5, 2003, p. 301-306

Quinn, Valerie, Tony Meehaghan and Teresa Brannick "Fear Appeals: Segmentation Is the Way to Go" *International Journal of Advertising*, Volume 11, Issue 4, 1992, p. 355-366.

Reichert, Tom, Susan E. Heckler and Sally Jackson "The Effects of Sexual Social Marketing Appeals on Cognitive Processing and Persuasion", *Journal of Advertising*, Volume 30, Issue 1, Spring 2001, p. 13-27

Riecken, Glen and A. Coskun Samli "Measuring Children's Attitude toward Television Commercials: Extension and Replication" *Journal of Consumer Research*, Volume 8, June 1981, p. 57 – 61.

Rindfleisch, Aric, and David X. Crockett "Cigarette Smoking and Perceived Risk: A Multidimensional Investigation", *Journal of Public Policy and Marketing*, Volume 18 (2), Fall 1999, p. 159-171.

Ringold, Debra Jones "Boomerang Effect: In Response to Public Health Interventions: Some Unintended Consequences in the Alcoholic Beverage Market", *Journal of Consumer Policy*, 2002, Volume 25, p. 27-63.

Ritson, Mark and Richard Elliot "The Social Uses of Advertising: An Ethnographic Study of Adolescent Advertising Audiences" *Journal of Consumer Research*, Vol 26, December 1999, p. 260-277.

Roedder John, Deborah, "Consumer Socialisation of Children: A Retrospective Look at Twenty-five Years of Research", *The Journal of Consumer Research*, Volume 26, Issue 3, Dec. 1999, p. 183-213.

Rolison, Mary R. and Avraham Scherman "Factors Influencing Adolescents' Decisions to Engage in Risk-Taking Behaviour", *Adolescence*, 37, 147, fall 2002, p. 585 - 596

Rosenberg, Morris, *Society and the Adolescent Sel-Image*, Princeton, NJ, Princeton University Press, 1965.

Rossister, John R. "Reliability of a Short Test Measuring Children's Attitudes toward TV Commercials" *Journal of Consumer Research*, Volume 3, March 1977, p. 179-184.

Rothschild, Michael L. "Marketing Communications in Nonbusiness Situations (or Why It's So Hard To Sell Brotherhood Like Soap)", *Journal of Marketing*, Volume 43, Spring 1979, p. 11-20.

Rummel, Amy, John Howard, Jennifer M. Swinton, D. Bradley Seymour, "You Can't Have That! A Study of Reactance Effects & Children's Consumer Behaviour", *Journal of Marketing Theory and Practice*, Winter 2000, p. 38-45.

Schoenbachler, Denise D. and Tommy E. Whittler, "Adolescent Processing of Social and Physical Threat Communication", *Journal of Advertising*, Volume XXV, Number 4, winter 1996, p. 37-54.

Sheth, Jagdish N. and Gary L. Frazier "A Model of Strategy Mix Choice for Planned Social Change", *Journal of Marketing*, Vol 46, winter 1982.

Sirgy, M. Joseph, Dong-Jin Lee, Rustan Kosento, H. Lee Meadow, Don Rahtz, Muris Cicic, Guang Xi Jin, Duygun Yarsuvat, David L. Blenkhorn and Newell Wright, "Does Television Play a Role in the Perception of Quality of Life?", *Journal of Advertising*, Volume 27, Issue 1, Spring 1998, p. 125 – 142.

Smith, Anthony M. A. and Doreen A. Rosenthal, "Adolescents' Perceptions of Their Risk Environment", *Journal of Adolescence*, Volume 18, 1995, p. 229-245.

Statistics Canada online information: www.statscan.ca

Strasburger, Victor C. and Edward Donnerstein, "Children, Adolescents, and the Media: Issues and Solutions", *Paediatrics*, Volume 103, Number 1, January 1999, p. 129-139.

Storvoll, Elisabet E. and Lars Whichstrom "Do the Risk Factors Associated with Conduct Problems in Adolescents Vary According to Gender?", *Journal of Adolescence*, 2002, vol 25, p. 183-202.

Tanner, John F. Jr, James B. Hunt and David R. Eppright "The Protection Motivation Model: A Normative Model of Fear Appeals" *Journal of Marketing*, Volume 55, Issue 3, July 1991, p. 37-45.

Toffoli, Roy and Michel Laroche, "Cultural and Language Effects on Chinese Bilinguals' and Canadians' Responses to Advertising" *International Journal of Advertising*, 2002, 21, p 505-524.

Tomori, Martina, Bojan Zalar and Blanka Kores Plesnicar "Gender Differences in Psychosocial Risk Factors among Slovenian Adolescents" *Adolescence*, Fall 2000, 35, 139, p. 431-443.

Tsfati, Yariv, "Does Audience Skepticism of the Media Matter in Agenda Setting?", *Journal of Broadcasting and Electronic Media*, Volume 47, Issue 2, 2003, p. 157-176.

Vannatta, Rachel A. "Adolescent Gender Differences in Suicide-Related Behaviours" *Journal of Youth and Adolescence*, 1997, Vol 26, No. 5, p. 559-568.

Ward, Scott and Thomas S. Robertson, "Adolescent Attitudes toward Television Advertising: Preliminary Findings", in *Television and Social Behaviour: Reports & Papers*, Volume IV: *Television in Day-to-Day Life: Patterns of Use*", Rubinstein, Eli A,

George A. Comstock and John. P. Murray, US Department of Health Education and Welfare, 1972.

Young, S.E., R.P. Corley, M.C. Stallings, S.H. Rhee, T.J. Crowley and J.K. Hewitt, "Substance Use, Abuse and Dependence in Adolescence: Prevalence, Symptom Profiles and Correlates" *Drug and Alcohol Dependence*, 2002, Volume 68, p 309-322.

Zinkhan, George M. "Advertising, Materialism and Quality of Life", *Journal of Advertising*, Volume 23, Issue 2, June 1994, p. 1-4.

APPENDIX 1 – ENGLISH QUESTIONNAIRE

Survey Attitude toward Advertising

In this academic study, we are interested in your beliefs about advertising. In our context, the word advertisement (or ad) refers to ads on the television, in magazine, in newspaper, on the radio, on posters and/or in the internet. We value your opinions and would appreciate your cooperation in filling out this short questionnaire, which we believe you will find easy and interesting to answer. There are no right or wrong answers. We are just interested in your honest opinions.

Your answers will remain completely confidential. Your name or any other identifying information does not appear on the questionnaire. Please carefully follow the instructions given below. Please answer ALL the questions even if some of them appear similar to others – this is important for our analysis.

Thank you in advance for your cooperation.

SECTION A – ADVERTISING IN GENERAL

When answering the questions below, please think of all types of commercial ads (e.g.: ads for jeans, shoes, beverages, music, electronics, etc)

I. HOW YOU FEEL ABOUT ADVERTISING IN GENERAL

On a scale from 1 to 7, where 1 is definitely do not agree and 7 is definitely agree, please indicate your level of agreement with the following statements:

	Definitely Do Not Agree			Neither Agree Nor Disagree			Definitely Agree
	1	2	3	4	5	6	7
We can depend on getting the truth in most advertising.	1	2	3	4	5	6	7
Advertising's aim is to inform the consumer.	1	2	3	4	5	6	7
I believe advertising is informative.	1	2	3	4	5	6	7
Advertising is generally truthful.	1	2	3	4	5	6	7
Advertising is a reliable source of information.	1	2	3	4	5	6	7
Advertising is truth well told.	1	2	3	4	5	6	7
I feel I've been accurately informed after viewing most advertisements.	1	2	3	4	5	6	7
Most advertising provides consumers with essential information.	1	2	3	4	5	6	7
In general, advertising presents a true picture of the product being advertised.	1	2	3	4	5	6	7

END OF SECTION A

SECTION B – HEALTH-RELATED SOCIAL ADVERTISING

In this section, we want to assess your attitude regarding a specific sort of advertising designed to discourage or encourage certain health-related behaviours such as those ads done by Health Canada. Hence, by “health-related social ads” we mean ads that focus on the risks associates with such health-related behaviours as smoking, drinking, drinking and driving, etc.

II. ABOUT YOUR ATTITUDE TOWARDS HEALTH-RELATED SOCIAL ADS

On a scale from 1 to 7, where 1 is definitely do not agree and 7 is definitely agree, please indicate your level of agreement with the following statements by circling the number that best reflects your view:

	Definitely Do Not Agree			Neither Agree Nor Disagree			Definitely Agree	
	1	2	3	4	5	6	7	
Health-related social ads do not show the whole picture; only the extreme consequences of a given behaviour are shown.								
Health-related ads exaggerate the impact my health-related choices have on other people.								
In general, health-related ads do not present a true picture of the risks associated with certain behaviours.								
I feel I've been accurately informed after viewing health-related ads.								
The messages conveyed in health-related ads do not show life as it really is.								
The consequences shown in most health-related ads are not realistic.								
Health-related ads over-dramatize the likelihood that others will suffer as a result of an individual's behaviour.								
The picture painted in most health-related ads is unnecessarily grim.								
My personal choices do not affect others as much as the health-related ads claim that they do.								
Health-related ads have unrealistic expectations with regard to the types of healthy behaviours I should practice.								
Health-related ads are nothing more than guilt trips.								

Recall that health-related ads refer to ads that focus on the risks associated with such health-related behaviours as smoking, drinking, drinking and driving, etc. On a scale from 1 to 7, where 1 is definitely do not agree and 7 is definitely agree, please indicate your level of agreement with the following statements:

Please circle the number that best reflects your attitude about health-related ads in general.

Bad	1	2	3	4	5	6	7	Good
Negative	1	2	3	4	5	6	7	Positive
Unfavourable	1	2	3	4	5	6	7	Favourable

Please rate the degree to which the activities stated below would be risky either for you or for others.

END OF SECTION B

SECTION C – GENERAL PERCEPTIONS

V. HOW YOU FEEL ABOUT CONSUMPTION AND RECREATION

Please indicate your level of agreement with the following statements:

	Definitely Do Not Agree			Neither Agree Nor Disagree			Definitely Agree
I like work that has lots of excitement.	1	2	3	4	5	6	7
I want to have a lot of things.	1	2	3	4	5	6	7
It is important to me that my friends have a lot of things.	1	2	3	4	5	6	7
I like being where there is something going on all the time.	1	2	3	4	5	6	7
It is important that my friends have cool things.	1	2	3	4	5	6	7
I think people like or do not like me based on the things I have	1	2	3	4	5	6	7
I like wild parties.	1	2	3	4	5	6	7
When I buy or ask my parents to buy something for me, I hope that will impress other people.	1	2	3	4	5	6	7
Money makes people happy.	1	2	3	4	5	6	7
I like to have new and exciting experiences, even if they are a little unconventional.	1	2	3	4	5	6	7

VI. YOUR RELATIONSHIP WITH YOUR FRIENDS

	Definitely Do Not Agree			Neither Agree Nor Disagree			Definitely Agree
When buying products, I usually buy the ones I think my friends will approve of.	1	2	3	4	5	6	7
To make sure that I buy the right product or brand, I often look at what my friends are buying and using.	1	2	3	4	5	6	7
It is important that my friends like the products and brands I buy.	1	2	3	4	5	6	7
If I don't have a lot of experience with a product, I often ask my friends about it.	1	2	3	4	5	6	7
I like to know what products and brands make a good impression on my friends.	1	2	3	4	5	6	7
I often get information about a product from friends before I buy.	1	2	3	4	5	6	7

I often ask my friends to help me choose the best product.	1	2	3	4	5	6	7
--	---	---	---	---	---	---	---

Most of my friends are of the opposite sex.	1	2	3	4	5	6	7
--	---	---	---	---	---	---	---

I talk much more openly with my friends than with my parents.	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

For personal advice, I rely much more on my friends than I do on my parents.	1	2	3	4	5	6	7
--	---	---	---	---	---	---	---

Outside of school hours, how many hours per week, on average, do you spend with your friends? _____ HOURS

Besides school lunches, how many meals per week, on average, do you eat with friends? _____ MEALS

VII. YOUR RELATIONSHIP WITH YOUR PARENTS

On a scale from 1 to 7, where 1 is never and 7 is very often, please indicate frequency of these events in your household.

	Never			Sometimes			Very Often
In your home, how often does a parent:							
... say that you should look at both sides of an issue.	1	2	3	4	5	6	7
... say there are some things that just shouldn't be talked about.	1	2	3	4	5	6	7
... say that getting your idea across is important even if others don't like it.	1	2	3	4	5	6	7
... tell you not to say things that make people angry.	1	2	3	4	5	6	7
... say that every member of the family should have some say in family matters.	1	2	3	4	5	6	7
... admit that kids know more about some things than adults do.	1	2	3	4	5	6	7
... say that his or her ideas are correct and you shouldn't argue with them.	1	2	3	4	5	6	7
... ask for your opinion when the family is discussing something.	1	2	3	4	5	6	7
... answer your arguments by saying you'll know better when you grow up.	1	2	3	4	5	6	7
... encourage you to question other people's opinions.	1	2	3	4	5	6	7
... say that you shouldn't argue with adults.	1	2	3	4	5	6	7

How many hours per week, on average, do you spend with your parents (i.e.: watching movies, having conversations, eating meals, etc.)?

_____ HOURS

On average, how many hours per week do you spend helping around the house? _____ HOURS

On average, how many meals per week do you eat with your parents? _____ MEALS

VIII. HOW YOU FEEL ABOUT YOURSELF

On a scale from 1 to 7, where 1 is definitely do not agree and 7 is definitely agree, please indicate your level of agreement with the following statements:

	Definitely Do Not Agree			Neither Agree Nor Disagree			Definitely Agree
	1	2	3	4	5	6	7
I feel I am a person of worth, at least on an equal basis with others.							
I feel that I have a number of good qualities.							
All in all, I am inclined to feel that I am a failure.							
I am able to do things as well as most other people.							
I feel I do not have much to be proud of.							
I take a positive attitude toward myself.							
On the whole, I am satisfied with myself.							
I wish I could have more respect for myself.							
I certainly feel useless at times.							
At times, I think I am no good at all.							

IX. HOW YOU FEEL ABOUT OTHERS

	Definitely Do Not Agree			Neither Agree Nor Disagree			Definitely Agree
	1	2	3	4	5	6	7
It makes me angry when someone points out something that I already know.							
Suggestions and advice often make me do the opposite.							
People don't really care what happens to the next person.							
When I am pushed to do something, I often tell myself "For sure I won't do it".							
Often I lose enthusiasm for doing something just because others expect me to do it.							
I get annoyed when someone else is put up as an example for me.							
People are too selfish these days.							

I get very irritated when somebody tells me what I must or must not do.	1	2	3	4	5	6	7
The thought of being dependent on others is very unpleasant to me.	1	2	3	4	5	6	7
Most people are selfish.	1	2	3	4	5	6	7
When I get advice, I take it more as a demand	1	2	3	4	5	6	7
I get very irritated when someone tries to interfere with my freedom to make decisions.	1	2	3	4	5	6	7
The thought of being free and independent is more important to me than to most people.	1	2	3	4	5	6	7
I get a "kick" from contradicting others.	1	2	3	4	5	6	7
It pleases me when I see how others disobey social norms and obligations.	1	2	3	4	5	6	7
I seldom behave according to others' standards.	1	2	3	4	5	6	7

X. CLASSIFICATION

This information, like the rest of the questionnaire, will be kept strictly confidential. We will only use this information to classify and better understand your responses.

- a. What is your age? ☐ Under 14 ☐ 14 ☐ 15 ☐ 16
 ☐ 17 ☐ 18 ☐ Over 18
- b. What grade are you in? ☐ Sec 2 ☐ Sec 3
 ☐ Sec 4 ☐ Sec 5
- c. What is your gender? ☐ Male ☐ Female
- d. What is the language you use most often at home? ☐ English ☐ French ☐ Other
- e. What is the language you use most often with your friends? ☐ English ☐ French ☐ Other
- f. On average, how many hours of television do you watch per week: _____HRS
- g. On average, how many hours of English television do you watch? _____HRS
- h. On average, how many hours of French television do you watch? _____HRS
- i. How well do you consider yourself to be doing academically compared to others?
 ☐ Below average
 ☐ Average
 ☐ Above average
 ☐ Exceptional
- j. Have you ever been taught about the media in one of your classes at school? (i.e.media's impact, media literacy, interpretation of the media, etc.)
 ☐ Yes. If yes, how many class hours did you spend on this issue: _____HRS
 ☐ No
 ☐ Not sure

APPENDIX 2 – FRENCH QUESTIONNAIRE

Sondage Attitudes envers des publicités

Dans le cadre de la présente étude académique, nous nous intéressons à tes opinions au sujet des publicités. Il faut noter que, dans notre contexte, le mot publicités (ou pub) se rapporte à toutes formes de publicités, qu'elles soient à la télévision, dans les revues, dans les journaux, à la radio, sur des affiches ou même sur Internet. Nous attribuons beaucoup de valeur à tes opinions et nous comptons donc énormément sur ta bonne collaboration pour répondre au questionnaire suivant. Nous croyons que tu considéreras ce sondage comme étant à la fois intéressant et facile à répondre. Il n'y a aucune bonne ou mauvaise réponse; nous voulons tout simplement comprendre tes opinions de façon honnête. Tes réponses vont demeurer complètement confidentielles. Ton nom et tout autre genre d'information d'identification n'apparaîtront pas sur le questionnaire. **Il faut lire attentivement les directives inscrites ci-bas.** Aussi, on doit répondre à TOUTES les questions, même si quelques-unes d'entre elles ressemblent beaucoup aux autres – ceci est très important pour notre analyse.

Merci d'avance pour votre collaboration.

SECTION A – LES PUBLICITÉS EN GÉNÉRAL

Lorsque tu répondras aux prochaines questions, pense à tous les genres de publicités (par exemple, des publicités pour des pantalons, des souliers, des breuvages, la musique, l'électronique).

I. SENTIMENTS ENVERS LES PUBLICITÉS EN GÉNÉRAL

Sur une échelle de 1 à 7, où 1 est *définitivement pas d'accord* et 7 est *définitivement d'accord*, indique ton opinion envers les déclarations suivantes:

	Définitivement pas d'accord			Ni en accord ni en désaccord		Définitivement d'accord	
On peut s'attendre à ce que la majorité des publicités révèlent la vérité.	1	2	3	4	5	6	7
Le but des publicités est d'informer le consommateur.	1	2	3	4	5	6	7
Je crois que la publicité est informative.	1	2	3	4	5	6	7
En général, la publicité est conforme à la vérité.	1	2	3	4	5	6	7
La publicité est une source fiable d'information.	1	2	3	4	5	6	7
La publicité c'est la vérité bien exprimée.	1	2	3	4	5	6	7
Je sens que j'ai été bien informé(e) par la majorité des publicités.	1	2	3	4	5	6	7
La majorité des publicités fournissent des informations essentielles aux consommateurs.	1	2	3	4	5	6	7
En général, la publicité présente un portrait véritable du produit annoncé.	1	2	3	4	5	6	7

FIN DE LA SECTION A

SECTION B – LES PUBLICITÉS SOCIALES RELIÉES À LA SANTÉ

Dans la présente section, nous voulons mesurer ton attitude envers un genre de publicité spécifique qui sert à décourager ou encourager certains comportements, dont les publicités présentées par Santé Canada. Donc, il est à noter que l'expression « publicités sociales reliées à la santé » décrit toutes les publicités qui visent à informer le public au sujet des risques rattachés à certains choix de santé, tels que le tabagisme et l'alcool au volant.

II. ATTITUDE ENVERS LES PUBLICITÉS SOCIALES RELIÉES À LA SANTÉ

Sur une échelle de 1 à 7, où 1 est *définitivement pas d'accord* et 7 est *définitivement d'accord*, indique ton opinion envers les déclarations suivantes en encerclant le chiffre qui correspond le mieux à ton point de vue (n'encercler qu'un seul chiffre par question).

	Définitivement pas d'accord		Ni en accord ni en désaccord			Définitivement d'accord	
Les publicités sociales reliées à la santé ne décrivent pas un portrait complet; seulement les conséquences extrêmes d'un certain comportement sont illustrées dans ces publicités.	1	2	3	4	5	6	7
Les publicités reliées à la santé exagèrent l'impact que mes choix de santé ont sur les gens.	1	2	3	4	5	6	7
En général, les publicités reliées à la santé ne présentent pas un vrai portrait quant aux risques associés à certains comportements.	1	2	3	4	5	6	7
Je sens que j'ai été bien informé(e) après avoir vu des publicités reliées à la santé.	1	2	3	4	5	6	7
Les messages exprimés dans les publicités reliées à la santé ne démontrent pas la vie comme elle l'est vraiment.	1	2	3	4	5	6	7
Les conséquences présentées dans la majorité des publicités reliées à la santé ne sont pas réalistes.	1	2	3	4	5	6	7
Les publicités reliées à la santé surestiment les probabilités que d'autres gens vont souffrir dû au comportement d'un individu.	1	2	3	4	5	6	7
Le portrait illustré dans la majorité des publicités reliées à la santé est exagérément sinistre (<i>ou triste</i>).	1	2	3	4	5	6	7
Mes choix de santé personnels n'affectent pas les autres autant que le prétendent les publicités reliées à la santé.	1	2	3	4	5	6	7
Les publicités reliées à la santé ont des attentes irréalistes au sujet des comportements « santé » que je devrais pratiquer.	1	2	3	4	5	6	7
Les publicités reliées à la santé servent simplement à me donner des sentiments de culpabilité.	1	2	3	4	5	6	7

SECTION C – PERCEPTIONS GÉNÉRALES

V. SENTIMENTS ENVERS TES HABITUDES DE CONSOMMATION ET TES LOISIRS

Indique ton opinion envers les déclarations suivantes :

	Définitivement pas d'accord			Ni en accord ni en désaccord			Définitivement d'accord	
J'aime faire du travail qui est très stimulant.	1	2	3	4	5	6	7	
Je veux avoir beaucoup de choses.	1	2	3	4	5	6	7	
C'est important pour moi que mes ami(e)s aient beaucoup de choses.	1	2	3	4	5	6	7	
J'aime être là où il y a toujours quelque chose qui se passe.	1	2	3	4	5	6	7	
C'est important que mes ami(e)s aient des choses à la mode.	1	2	3	4	5	6	7	
Je pense que les gens m'aiment ou ne m'aiment pas en fonction des choses je possède.	1	2	3	4	5	6	7	
J'aime les fêtes déchaînées (ou « party(s) »).	1	2	3	4	5	6	7	
Lorsque j'achète ou que je demande à mes parents de m'acheter quelque chose, j'espère impressionner d'autre gens.	1	2	3	4	5	6	7	
L'argent rend les gens heureux.	1	2	3	4	5	6	7	
J'aime avoir des expériences nouvelles et excitantes, même si elles ne sont pas très conventionnelles.	1	2	3	4	5	6	7	

VI. RELATIONS AVEC TES AMI(E)S

	Définitivement pas d'accord			Ni en accord ni en désaccord			Définitivement d'accord	
Lorsque je me procure de nouveaux produits, j'achète habituellement ceux que, selon moi, mes ami(e)s vont approuver.	1	2	3	4	5	6	7	
Afin de m'assurer que j'achète le bon produit ou la bonne marque, je regarde souvent ce que mes ami(e)s achètent et utilisent.	1	2	3	4	5	6	7	
C'est important que mes ami(e)s aiment les produits et les marques que j'achète.	1	2	3	4	5	6	7	
Si je ne connais pas beaucoup un produit, je me renseigne souvent auprès de mes ami(e)s.	1	2	3	4	5	6	7	

J'aime connaître les produits et les marques qui feront une bonne impression sur mes ami(e)s.	1	2	3	4	5	6	7
J'obtiens souvent de l'information au sujet d'un produit auprès de mes ami(e)s avant de l'acheter.	1	2	3	4	5	6	7
Je demande souvent à mes amie(s) de m'aider à choisir le meilleur produit.	1	2	3	4	5	6	7
La plupart de mes ami(e)s sont du sexe opposé .	1	2	3	4	5	6	7
Je discute beaucoup plus ouvertement avec mes ami(e)s qu'avec mes parents.	1	2	3	4	5	6	7
Pour obtenir des conseils personnels, je compte beaucoup plus sur mes ami(e)s que sur mes parents.	1	2	3	4	5	6	7

En dehors des heures d'école, environ combien d'heures par semaine passes-tu avec tes ami(e)s? ____ heures

À part tes dîners à l'école, environ combien de repas par semaine manges-tu avec tes ami(e)s? ____ repas

VII. RELATION AVEC TES PARENTS

Sur une échelle de 1 à 7, où 1 est *jamais* et 7 est *très souvent*, indique comment fréquemment de tels événements se passent à la maison :

	Jamais		Quelquefois			Très souvent	
À la maison, comment souvent un parent :							
... dit-il/elle que tu devrais regarder les deux cotés de la médaille lorsque tu évalues un problème?	1	2	3	4	5	6	7
... dit-il/elle qu'il y a certains sujets dont on ne devrait tout simplement pas discuter?	1	2	3	4	5	6	7
... dit-il/elle qu'il est important de te faire comprendre même si ça déplaît à d'autres?	1	2	3	4	5	6	7
... dit-il/elle que tu ne devrais pas dire des choses qui vont fâcher les gens?	1	2	3	4	5	6	7
... dit-il/elle que chaque membre de la famille devrait avoir son mot à dire concernant les décisions familiales?	1	2	3	4	5	6	7
... avoue-t-il/elle que les enfants connaissent plus de choses sur certains sujets que les adultes?	1	2	3	4	5	6	7
... dit-il/elle que ses idées sont les bonnes et que tu ne devrais pas les remettre en question?	1	2	3	4	5	6	7
...te demande-t-il/elle ton avis lorsque la famille discute de quelque chose?	1	2	3	4	5	6	7
... répond-il/elle à tes commentaires en te disant que tu seras meilleur juge lorsque tu vieilliras?	1	2	3	4	5	6	7

... t'encourage-il/elle à remettre en question les opinions des autres? 1 2 3 4 5 6 7

... te dit-il/elle que tu ne devrais pas te disputer avec des adultes? 1 2 3 4 5 6 7

En moyenne, combien d'heures par semaine passes-tu avec tes parents (par exemple, à regarder des films, à avoir des conversations, à manger des repas)? _____ heures

En moyenne, combien d'heures par semaine passes-tu à aider aux tâches ménagères? _____ heures

En moyenne, environ combien de repas manges-tu avec tes parents? _____ repas

VIII. SENTIMENTS ENVERS TOI-MÊME

Indique dans quelle mesure tu es d'accord avec les déclarations suivantes :

	Définitivement pas d'accord			Ni en accord ni en désaccord		Définitivement d'accord	
Je sens que je suis une personne qui a de la valeur, au moins équivalente aux autres.	1	2	3	4	5	6	7
Je sens que j'ai plusieurs bonnes qualités.	1	2	3	4	5	6	7
En tout et pour tout, je suis porté(e) à croire que je suis un échec.	1	2	3	4	5	6	7
Je suis capable de faire les choses aussi bien que la plupart des autres gens.	1	2	3	4	5	6	7
Je ne crois pas avoir accompli grand-chose dont je puisse être fier/fière.	1	2	3	4	5	6	7
J'ai une attitude positive envers moi-même.	1	2	3	4	5	6	7
Dans l'ensemble, je suis satisfait(e) de moi-même.	1	2	3	4	5	6	7
Je voudrais avoir plus de respect pour moi-même.	1	2	3	4	5	6	7
À certains moments, je me sens tout à fait inutile.	1	2	3	4	5	6	7
Parfois, je me sens bon(ne) à rien.	1	2	3	4	5	6	7

IX. SENTIMENTS ENVERS LES AUTRES

Indique dans quelle mesure tu es d'accord avec les déclarations suivantes :

	Définitivement pas d'accord			Ni en accord ni en désaccord		Définitivement d'accord	
Ça me fâche lorsque quelqu'un me fait observer quelque chose que je connaissais déjà.	1	2	3	4	5	6	7
Les suggestions et les conseils me font souvent agir à l'opposé.	1	2	3	4	5	6	7

Les gens ne se soucient pas vraiment de ce qui peut arriver aux autres.	1	2	3	4	5	6	7
Lorsqu'on me pousse à faire quelque chose, je me dis souvent : « C'est certain que je ne le ferai pas ».	1	2	3	4	5	6	7
Souvent, je perds le goût de faire quelque chose juste par ce que les gens s'attendent à ce que je le fasse.	1	2	3	4	5	6	7
Ça m'agace lorsqu'on me cite l'exemple de quelqu'un d'autre.	1	2	3	4	5	6	7
De nos jours, les gens sont trop égoïstes.	1	2	3	4	5	6	7
Je deviens exaspéré(e) (ou énervé(e)) lorsqu'on me dit ce que je dois ou ne dois pas faire.	1	2	3	4	5	6	7
L'idée d'être dépendant(e) des autres m'est particulièrement déplaisante.	1	2	3	4	5	6	7
La majorité des gens sont égoïstes.	1	2	3	4	5	6	7
Lorsque je reçois des conseils, je les interprète comme des ordres.	1	2	3	4	5	6	7
Je deviens exaspéré(e) (ou énervé(e)) lorsqu'on intervient dans ma liberté de faire mes propres choix.	1	2	3	4	5	6	7
L'idée d'être libre et indépendant(e) est plus importante pour moi que pour la majorité des gens.	1	2	3	4	5	6	7
J'aime contrarier les autres.	1	2	3	4	5	6	7
Ça me plaît lorsque je vois d'autres gens enfreindre les normes et les obligations sociales.	1	2	3	4	5	6	7
J'agis rarement selon les normes des autres.	1	2	3	4	5	6	7

XI. CLASSIFICATION

Ces informations, comme le reste des données au moyen du présent questionnaire, demeureront confidentielles. Nous allons seulement utiliser ces informations pour classer et mieux comprendre tes réponses.

- a. Quel âge as-tu? ☐ Moins de 14 ans ☐ 14 ☐ 15 ☐ 16
 ☐ 17 ☐ 18 ☐ Plus de 18 ans
- b. En quelle année scolaire es-tu présentement? ☐ 9^e année / Secondaire 2
 ☐ 10^e année / Secondaire 3
 ☐ 11^e année / Secondaire 4
 ☐ 12^e année / Secondaire 5
- c. Tu es du sexe...? ☐ Masculin ☐ Féminin

- a. Quelle langue parles-tu le plus souvent à la maison? ☐ Anglais ☐ Français ☐ Autre
- b. Quelle langue parles-tu le plus souvent avec tes ami(e)s? ☐ Anglais ☐ Français ☐ Autre
- c. En moyenne, combien d'heures de télévision regardes-tu par semaine? _____ heures
- d. En moyenne, combien d'heures de télévision ANGLAISE regardes-tu par semaine? _____ heures
- e. En moyenne, combien d'heures de télévision FRANÇAISE regardes-tu par semaine? _____ heures
- f. Par rapport aux autres élèves qui t'entourent, comment évaluerais-tu ton rendement académique?
- ☐ En dessous de la moyenne
 - ☐ Moyen
 - ☐ Au-dessus de la moyenne
 - ☐ Exceptionnel
- g. As-tu déjà suivi des cours au sujet des médias (par exemple, au sujet de l'impact des médias, de la compréhension des médias, de l'interprétation des médias)?
- ☐ Oui.
 - ⇒ Si oui, combien d'heures de cours as-tu consacrées à ce sujet? ____ heures
 - ☐ Non
 - ☐ Incertain(e)

APPENDIX 3 – SOCIAL AD SKEPTICISM ITEMS

Social Ad Skepticism Scale – Final Items used in Analyses

<i>Items in English</i>	<i>Items in French</i>
Health-related ads exaggerate the impact my health-related choices have on other people.	Les publicités reliées à la santé exagèrent l'impact que mes choix de santé ont sur les gens.
In general, health-related ads do not present a true picture of the risks associated with certain behaviours.	En général, les publicités reliées à la santé ne présentent pas un vrai portrait quant aux risques associés à certains comportements.
The messages conveyed in health-related ads do not show life as it really is.	Les messages exprimés dans les publicités reliées à la santé ne démontrent pas la vie comme elle l'est vraiment.
The consequences shown in most health-related ads are not realistic.	Les conséquences présentées dans la majorité des publicités reliées à la santé ne sont pas réalistes.
Health-related ads over dramatize the likelihood that others will suffer as a result of an individual's behaviour.	Les publicités reliées à la santé surestiment les probabilités que d'autres gens vont souffrir dû au comportement d'un individu.
My personal choices do not affect others as much as the health-related ads claim that they do.	Mes choix de santé personnels n'affectent pas les autres autant que le prétendent les publicités reliées à la santé.
Health-related ads have unrealistic expectations with regards to the type of healthy behaviours I should practice.	Les publicités reliées à la santé ont des attentes irréalistes au sujet des comportements "santé" que je devrais pratiquer.
Health-related ads are nothing more than guilt trips.	Les publicités reliées à la santé servent simplement à me donner des sentiments de culpabilité.

APPENDIX 4 – ATTITUDE TOWARD SOCIAL AD ITEMS

Attitude toward Social Advertising Scale – Final Items used in Analyses

<i>Items in English</i>	<i>Items in French</i>
I enjoy watching health-related ads on the television	J'ai du plaisir à regarder, à la télévision, des publicités reliées à la santé
I like health related ads	J'aime les publicités reliées à la santé
When I'm reading a magazine or watching the television, I generally skip the health-related ads	Lorsque je lis une revue ou je regarde la télévision, je sauté les publicités reliées à la santé
My attitude toward heath-related ads is bad (1) vs. good (7)	Mon attitude envers les publicités reliées à la santé est mauvaise (1) vs. bonne (7)
My attitude toward heath-related ads is negative (1) vs. positive (7)	Mon attitude envers les publicités reliées à la santé est négative (1) vs. positive (7)
My attitude toward heath-related ads is unfavourable (1) vs. favourable (7)	Mon attitude envers les publicités reliées à la santé est défavorable (1) vs. favorable (7)