

Investigating the Impact of Self-Esteem and Materialism on the Rate of Compulsive Buying

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Abstract: For most consumers, buying is a part of daily life that makes them happy and satisfies their needs. But compulsive buying is chronic, repetitive purchasing behavior in response to negative events and/or feelings that is difficult to stop and results in harmful consequences. Compulsive buying is one of the important aspects and less paid attention in researches related to consumer it is considered as the dark side of consumer behavior. This study aims to assess the impact of self-esteem and materialism on the rate of compulsive buying. The statistical population comprises Iranian members of social networks in July 2014. The results indicate that materialism directly and self-esteem inversely affect the rate of compulsive buying.

Key words: Compulsive buying, self-esteem, materialism, consumer, behavior

INTRODUCTION

Consumer research on compulsive buying began with research by Faber *et al.* (1987), Faber and O'Guinn (1988, 1989), O'Guinn and Faber (1989) and Valence *et al.* (1988). Faber and O'Guinn (1989) defined compulsive buying as chronic, repetitive purchasing behavior in response to negative events and/or feelings that is difficult to stop and results in harmful consequences. Edwards defined compulsive buying behavior as a chronic, abnormal form of shopping and spending characterized in the extreme by an overpowering, uncontrollable and repetitive urge to buy with disregard for the consequences.

Research on compulsive consumption reveals a number of consistent findings. As discussed by Faber, compulsive consumption behaviors are associated with low levels of self-esteem, high levels of depression and high levels of anxiety. In their summary of the literature, DeSarbo and Edwards linked compulsive consumption to a number of psychological traits including dependence, denial, depression, lack of impulsive control, low self-esteem, approval seeking, anxiety, escape coping tendencies, general compulsiveness, materialism (envy), isolation, excitement seeking and perfectionism.

Reasons and factors affecting on compulsive buying in the conducted studies (Faber and O'Guinn, 1989; Schlosser *et al.*, 1994; Scherhorn *et al.*, 1990; Koran *et al.*, 2002; Monahan *et al.*, 1996; Valence *et al.*, 1988) included prestige-power caused by money, anxiety resulting

from money, self-esteem, fantasy, obsession, family environment? (awareness of parents' compulsive buying behavior), depression, fashion? and materialism, credit card, understanding the social position and so on.

Compulsive buying is described as an addictive process through which the patient seeks to escape the stress and anxiety caused by compulsive buying or an addictive process which provides the ground for escape from anxiety and stress by engaging the person's mind. This induced by the destruction of self-esteem is the way to deal with the challenges of life (Scherhorn, 1990). Buying addiction gradually occurs and starts when the impulse buyer who may occasionally go buying and spend money as a way of escape, finds the experienced satisfaction as a simple and satisfying way to deal with stress and negative emotions. Then, he targets the crisis caused by great anxiety and stress for compulsive buying. This person who gradually experiences less comfort with any extravagance needs to do it over and over and turns to buying and spending as the main tool to cope with anxiety and stress. Compulsive buying which is seen as a kind of addiction can be considered a progression from normal to compulsive spending and a means of escaping stress and anxiety and eventually an apparent addiction to this experience.

Compulsive buying has been associated with psychological characteristics of the individual such as dependence, denial, depression, lack of impulsive control, low self-esteem, anxiety, escape coping tendencies, general compulsiveness, materialism, isolation, excitement

seeking and perfectionism (Faber, 1992; Faber and O'Guinn, 1988; Hanley and Wilhelm, 1992; Faber and O'Guinn, 1989; Scherhorn *et al.*, 1990; Valence *et al.*, 1988).

According to the previous researches about the compulsive buying and identifying destructive effects that this kind of purchase has on individual's life and society welfare the importance of knowing and the need for research, especially in Iran where there are not research about this can be gotten better. Compulsive buying like the other addictions in terms of economic, social and mental has destructive aspects and most of the time makes a person with mental health crisis. Compulsive buyers have fragile self-confidence and others' ideas are very effective on their way of thinking and decision-making.

Literature review

Compulsive buying: It has been defined as chronic, repetitive purchasing that becomes a primary response to negative feelings and that provides immediate short-term gratification but which ultimately causes harm to the individual and/or others. Similarly, Edwards labeled it a chronic, abnormal form of shopping and spending, characterized by overpowering uncontrollable and repetitive urges to buy. Thoughts of shopping are intrusive and accompanied by powerful urges. It also is experienced as a continual and repetitive problem.

Defining criteria for this disorder also include the fact that the urges are perceived as undesirable and that the behavior interferes with the individuals life functioning. For example, Goldsmith and McElroy propose three criteria for someone to be diagnosed as having compulsive buying disorder. These include:

- Frequent preoccupations with buying or actual buying that is viewed as excessive intrusive or senseless
- These impulses or behaviors cause marked distress and significantly interfere with social or occupational functioning and/or result in serious financial problems
- The buying or shopping does not only occur during periods of hypomania or mania

Self-esteem: It has been defined as a global, personal judgment of one's own worth. Compulsive buyers are more likely to possess low levels of self-esteem (D'Astous, 1990; Scherhorn *et al.*, 1990). The most common personality characteristic of people with compulsive spending is low self-esteem which is

defined as an individual's self-assessment (approval or disapproval) and the degree to which a person believes himself to be worthy. Compulsive buyers are looking for self-esteem, self-confidence and a sense of personal power through buying and spending. Finally, as the compulsive buying moves towards addiction, self-esteem not only can be prior to addictive buying but also it can be the result of addiction cycle. Ultimately, the individual experiences fear and guilt for failing to control his purchasing behavior.

Materialism: Materialistic values as one's personal goals lead individuals to a greater commitment to buying and having material goods. Based on both common sense and expert representations of materialism, a person with highly materialistic values believes that the acquisition of material goods is a central life goal, prime indicator of success and key to happiness and self-definition. Richins and Dawson defined materialism as "the importance a person places on possessions and their acquisition as a necessary or desirable form of conduct to reach desired end states including happiness". According to the research, materialistic values have three sides which are acquiring material possessions as a sign of success, placing material objects in the center of life and acquisition material things as a means of being happy through possession of a key for life satisfaction and well-being. When viewed from this aspect, compulsive buyers may buy material things because obtaining material possessions means success, life itself and happiness as well as enjoyment. Many similar researches indicate that compulsive buyers have high materialistic tendencies than non-compulsive buyers (Mowen and Spears, 1999). Materialism can easily be correlated with the compulsive buying that is said to be a helper for mood repair and identity development (Dittmar, 2005).

Materialistic values have constantly been correlated to compulsive buying in various researches (Mowen and Spears, 1999; Dittmar, 2005).

Research hypotheses:

- Self-esteem affects the rate of compulsive buying
- Materialism affects the rate of compulsive buying

MATERIALS AND METHODS

Current methodology in terms of goal is functional and in terms of nature is descriptive survey. Statistical population includes Iranians that were a member of social networks such as Facebook, Google plus and Tweeter in July 2014. According to 2014 statistics that published

world internet stats base, 43.3% of Iranian people are Internet users but because of filtering Facebook in Iran and Facebook mutual action in removing the name of Iran from the list of countries that gives services to them, finding accurate statics of Iranian users of this network is impossible but unofficially even show 2 million active and professional users and 12-17 million other users. Using Morgan table sample volume was determined as 397 people and the method of sampling was snowballing. Distributing questionnaire was done online. For evaluating the variable of compulsive buying standard questionnaire by Faber and O'Quinn was used. This scale includes 7 questions that in this research because of different culture of Iran with American countries one of questions was omitted. As a result this scale includes 6 questions that its dichotomy is from absolutely disagreeing to absolutely agree and never to always for evaluating the variable of self-esteem standard questionnaire by Rosenberg was used. This scale includes 10 questions that its dichotomy is from strongly disagree to strongly agree and for materialism standard questionnaire by Richins and Dawson was used. This scale includes 18 questions that in this research because of low reliability (Cronbach's alpha), 6 of questions were omitted. As a result this scale includes 12 questions that its dichotomy is from never to always. For analyzing data two variables regression test by SPSS 19 Software was used.

RESULTS AND DISCUSSION

Compulsive buying: Results of the following table shows that regarding the first question, i.e., if I have money left at the end of the pay period, I just have to spend it most of the respondents (45.8%) chose the option "rarely" and (18.4%) selected the option "Most of the times" and (17.6%) chose the option "sometimes". Thus, most of the respondents claimed that they rarely feel that if they have money left at the end of the pay period, they just have to spend it.

Regarding the second question, i.e., I felt others would be horrified if they knew my spending habits, most of the respondents (41.6%) chose the option "rarely", 24.2% selected the option "never" and 22.2% chose the option "sometimes". Thus, most of the respondents claimed that they rarely or never feel that felt others would be horrified if they knew my spending habits.

Concerning the third question, i.e., I have bought things thought I couldn't afford them? most of the respondents (38.8%) chose the option "rarely", 25.4% selected the option "never" and 31.7% chose the option

"sometimes". Therefore, most of the respondents claimed that they have rarely or sometimes have bought things thought they couldn't afford them.

Regarding the fourth question, i.e., I wrote a check when I knew I didn't have enough money in the bank to cover it most of the respondents (88.2%) chose the option "never", 6.8% selected the option "rarely" and 4.3% chose the option "sometimes". So, most of the respondents claimed that they rarely or never wrote a check when they knew they didn't have enough money in the bank to cover it.

In relation to the fifth question, i.e., I bought something in order to make myself feel better most of the respondents (46.3%) chose the option "sometimes", 20.7% selected the option "rarely" and 15.6% chose the option "most of the time". Thus, most of the respondents claimed that they rarely or sometimes bought something in order to make themselves feel better.

Regarding the sixth question, i.e., I felt anxious or nervous on days I didn't go shopping, responses are as follows: most of the respondents (63%) = never, 25.2% = rarely and 10.3% = sometimes. Accordingly, most of the respondents stated that they never or rarely felt anxious or nervous on days they didn't go shopping (Table 1).

Respondents' self-esteem: Results of the following table indicate that regarding the first question, i.e., I feel that I am a person of worth, at least on an equal plane with others, responses are as follows: most of the respondents (70.8%) = agree, 15.9% = disagree and 12.1% = strongly agree. Thus, most of the respondents agree that they feel that they are worth, at least on an equal plane with others. As to the second question, i.e., I feel that I have a number of good qualities, most of the respondents (77.1%) chose the option "agree", 16.4% selected the option "strongly agree" and 6.3% chose the option "disagree". Thus, most of the respondents agree or strongly agree that they feel they have a number of good qualities.

Concerning the third question, i.e., all in all, I am inclined to feel that I am a failure, responses are as follows: most of the respondents (54.9%) = disagree, 29.7% = strongly disagree and 13.6 = agree. Therefore, most of the respondents disagree or strongly disagree that they are inclined to feel that they ate a failure.

As regards the fourth question, i.e., I am able to do things as well as most other people, responses are as follows: most of the respondents (70.3%) = agree, 24.4% = strongly agree and 4.8 = disagree. So, most of the respondents agree or strongly agree that they are able to do things as well as others.

Table 1: Frequency distribution of respondents in terms of compulsive buying questions

Items	Never	Rarely	Sometimes	Most of the time	Always	Total
If I have money left at the end of the pay period, I just have to spend it						
Frequency	57.0	182.0	70.0	73.0	15.0	397
Percentage	14.4	45.8	17.6	18.4	3.8	100
I felt others would be horrified if they knew my spending habits						
Frequency	96.0	165.0	88.0	44.0	4.0	397
Percentage	24.2	41.6	22.2	11.1	1.0	100
I have bought things thought I couldn't afford them						
Frequency	101.0	154.0	126.0	14.0	2.0	397
Percentage	25.4	38.8	31.7	3.5	0.5	100
I wrote a check when I knew I didn't have enough money in bank to cover it						
Frequency	350.0	27.0	17.0	2.0	1.0	397
Percentage	88.2	6.8	4.3	0.5	0.3	100
I bought something in order to make myself feel better						
Frequency	44.0	82.0	184.0	62.0	25.0	397
Percentage	11.1	20.7	46.3	15.6	6.3	100
I felt anxious or nervous on days I didn't go shopping						
Frequency	250.0	100.0	41.0	5.0	1.0	397
Percentage	63.0	25.2	10.3	1.3	0.3	100

In relation to the fifth question, i.e., I feel I do not have much to be proud of, most of the respondents (54.7%) chose the option "agree", 23.9% selected the option "disagree" and 18.4% chose the option "strongly agree". Thus, most of the respondents agree that they not have much to be proud of.

With regard to the sixth question, i.e., I take a positive attitude toward myself, responses are as follows: most of the respondents (58.2%) = agree, 18.9% = disagree and 18.6 = strongly agree. So, most of the respondents agree that they take a positive attitude toward themselves.

Concerning the seventh question, i.e., on the whole, I am satisfied with myself, most of the respondents (67%) chose the option "agree", 20.2% selected the option "disagree" and 9.6% chose the option "strongly agree". Accordingly, most of the respondents agree that they are satisfied with themselves.

Regarding the eighth question, i.e., I wish I could have more respect for myself, responses are as follows: most of the respondents (55.7%) = agree, 24.9% = disagree and 15.1% = strongly agree. Hence, most of the respondents agree that they wish they could have more respect for themselves.

As regards the ninth question, i.e., I certainly feel useless at times, responses are as follows: most of the respondents (46.9%) = disagree, 39.8% = strongly disagree and 11.3% = agree. So, most of the respondents disagree or strongly disagree that they feel they are useless people.

As to the tenth question, i.e., at times I think I am no good at all, most of the respondents (45.6%) chose the option "agree", 33% selected the option "disagree" and 13.9% chose the option "strongly disagree". Accordingly, most of the respondents agree that sometimes they think they are not good at all (Table 2).

Respondents' materialism: As can be seen from the results of the following table, regarding the first question, i.e., I admire people who own expensive homes, cars and clothes, responses are as follows: most of the respondents (30%) = sometimes, 29.2% = rarely and 23.9% = never. Thus, most of the respondents claimed that they rarely or sometimes admire the people who own expensive homes, cars and clothes.

In relation to the second question, i.e., some of the most important achievements in life include acquiring material possessions, most of the respondents (40.6%) chose the option "sometimes", 29% selected the option "most of the time" and 14.9% chose the option "rarely". Thus, most of the respondents claimed that sometimes or most of the time, some of the most important achievements in life include acquiring material possessions.

Concerning the third question, i.e., I don't place much emphasis on the amount of material objects people own as a sign of success, responses are as follows: most of the respondents (38.3%) = sometimes, 33.2% = rarely and 14.9 = never. Therefore, most of the respondents stated that they rarely or sometimes don't place much emphasis on the amount of material objects people own as a sign of success.

As regards the fourth question, i.e., I do not pay much attention to the material objects other people own, responses are as follows: most of the respondents (38.3%) = sometimes, 31.7% = most of the time and 18.1 = rarely. So, most of the respondents claimed that sometimes or most of the time they do not pay much attention to the material objects other people own.

In relation to the fifth question, i.e., I usually buy only the things I need, most of the respondents (65%) chose the option "most of the time", 20.2% selected the option "always" and 12.8% chose the option

Table 2: Frequency distribution of respondents in terms of self-esteem questions

Items	Strongly disagree	Disagree	Agree	Strongly agree	Total
I feel that I am a person of worth, at least on an equal plane with others					
Frequency	5.0	63.0	281.0	48.0	397
Percentage	1.3	15.9	70.8	12.1	100
I feel that I have a number of good qualities					
Frequency	1.0	25.0	306.0	65.0	397
Percentage	0.3	6.3	77.1	16.4	100
All in all, I am inclined to feel that I am a failure					
Frequency	118.0	218.0	54.0	7.0	397
Percentage	29.7	54.9	13.6	1.8	100
I am able to do things as well as most other people					
Frequency	2.0	19.0	279.0	97.0	397
Percentage	0.5	4.8	70.3	24.4	100
I feel I do not have much to be proud of					
Frequency	12.0	95.0	217.0	73.0	397
Percentage	3.0	23.9	54.7	18.4	100
I take a positive attitude toward myself					
Frequency	17.0	75.0	231.0	74.0	397
Percentage	4.3	18.9	58.2	18.6	100
On the whole, I am satisfied with myself					
Frequency	13.0	80.0	266.0	38.0	397
Percentage	3.3	20.2	67.0	9.6	100
I wish I could have more respect for myself					
Frequency	17.0	99.0	221.0	60.0	397
Percentage	4.3	24.9	55.7	15.1	100
I certainly feel useless at times					
Frequency	158.0	186.0	45.0	8.0	397
Percentage	39.8	46.9	11.3	2.0	100
At times I think I am no good at all					
Frequency	55.0	131.0	181.0	30.0	397
Percentage	13.9	33.0	45.6	7.6	100

“sometimes”. Thus, most of the respondents claimed that they always or most of the time buy only the things that they need.

With regard to the sixth question, i.e., I enjoy buying a lot, responses are as follows: most of the respondents (30.5%) = most of the time, 30% = sometimes and 24.2 = always. So, most of the respondents claimed that they sometimes or most of the time enjoy buying a lot.

Concerning the seventh question, i.e., I like a lot of luxury in my life, most of the respondents (31.2%) chose the option “sometimes”, 29.7% selected the option “rarely” and 29.7% chose the option “never”. Accordingly, most of the respondents claimed that they rarely or sometimes like a lot of luxury in their life.

Regarding the eighth question, i.e., I put less emphasis on material things than most people I know, responses are as follows: most of the respondents (40.8%) = sometimes, 38% = most of the time and 11.3% = always. Hence, most of the respondents stated that they sometimes or most of the time put less emphasis on material things compared to other people they know.

As regards the ninth question, i.e., my life would be better if I owned certain things I dont have responses are as follows: most of the respondents (34%) = sometimes, 24.4% = rarely and 22.2% = most of the time. So, most of the respondents claimed that rarely or sometimes if their life would be better? if they owned certain things dont have.

As to the tenth question, i.e., I have all the things I really need to enjoy life, most of the respondents (37.3%) chose the option “most of the time”, 34.5% selected the option “sometimes” and 14.1% chose the option “rarely”. Accordingly, most of the respondents claimed that sometimes or most of the time, they have all the things I really need to enjoy life.

Respecting the eleventh question, i.e., I would be happier if I could afford to buy more things, responses are as follows: most of the respondents (29%) = most of the time, 27.5% = sometimes and 25.7% = always. Therefore, most of the respondents claimed that sometimes or most of the time if they would be happier if I could afford to buy more things (Table 3).

Concerning the twelfth question, I can’t imagine happiness without material things, responses are as follows: most of the respondents (32.5%) = sometimes, 30.5% = rarely and 17.4% = never. Therefore, most of the respondents claimed that rarely or sometimes they can’t imagine happiness without material things.

Overall distribution of respondents: As seen in the Table 3, of 397 people who have completed the questionnaire, 243 were female and 154 were male. Thus, most of those who completed the questionnaire have been women. The 4.8% had a diploma or were below diploma, 5.5% had an associate degree, 39.5% had a bachelor’s degree, 39.3% had a master’s degree and 10.1

Table 3: Frequency distribution of respondents in terms of materialism questions

Items	Never	Rarely	Sometimes	Most of the time	Always	Unanswered	Total
I admire people who own expensive homes, cars and clothes							
Frequency	95.0	116.0	119.0	43.0	21.0	3.0	397
Percentage	23.9	29.2	30.0	10.8	5.3	0.8	100
Some of the most important achievements in life include acquiring material possessions							
Frequency	15.0	59.0	161.0	115.0	47.0	0.0	397
Percentage	3.8	14.9	40.6	29.0	11.8	0.0	100
I don't place much emphasis on the amount of material objects people own as a sign of success							
Frequency	35.0	132.0	152.0	59.0	19.0	0.0	397
Percentage	8.8	33.2	38.3	14.9	4.8	0.0	100
I do not pay much attention to the material objects other people own							
Frequency	11.0	72.0	152.0	126.0	36.0	0.0	397
Percentage	2.8	18.1	38.3	31.7	9.1	0.0	100
I usually buy only the things I need							
Frequency	1.0	7.0	51.0	258.0	80.0	0.0	397
Percentage	0.3	1.8	12.8	65.0	20.2	0.0	100
I enjoy buying a lot							
Frequency	12.0	49.0	119.0	121.0	96.0	0.0	397
Percentage	3.0	12.3	30.0	30.5	24.2	0.0	100
I like a lot of luxury in my life							
Frequency	118.0	118.0	124.0	55.0	25.0	0.0	397
Percentage	29.7	29.7	31.2	13.9	6.3	0.0	100
I put less emphasis on material things than most people I know							
Frequency	4.0	35.0	162.0	151.0	45.0	0.0	397
Percentage	1.0	8.8	40.8	38.0	11.3	0.0	100
My life would be better? if I owned certain things I dont have							
Frequency	34.0	97.0	135.0	88.0	43.0	0.0	397
Percentage	8.6	24.4	34.0	22.2	10.8	0.0	100
I have all the things I really need to enjoy life							
Frequency	12.0	56.0	137.0	148.0	44.0	0.0	397
Percentage	3.0	14.1	34.5	37.3	11.1	0.0	100
I would be happier if I could afford to buy more things							
Frequency	18.0	53.0	109.0	115.0	102.0	0.0	397
Percentage	4.5	13.4	27.5	29.0	25.7	0.0	100
I can't imagine happiness without material things							
Frequency	69.0	121.0	129.0	58.0	20.0	0.0	397
Percentage	17.4	30.5	32.5	14.6	5.0	0.0	100

Table 4: Results from bivariate regression test of the third hypothesis

Test value	Significance	Beta coefficient
5.30	0.01	-0.25

had a Ph.D. So, most of these individuals hold a bachelor's degree. Of this number, 250 were employed and 145 were unemployed. Therefore, most of these people are employed.

Regression testing

Hypothesis (self-esteem affects the rate of compulsive buying): To test the above hypothesis, bivariate regression was used. The test results showed that considering the test value (5.30) with the significance of 0.01, it can be mentioned that the research hypothesis was confirmed so that given the impact coefficient of -0.25, it is concluded that self-esteem inversely affects compulsive buying (Table 4).

Hypothesis (materialism affects the rate of compulsive buying): To test the above hypothesis, bivariate regression was applied. The test results showed that

Table 5: Results from bivariate regression test of the fourth hypothesis

Test value	Significance	Beta coefficient
8.03	0.01	0.37

considering the test value (8.03) with the significance of 0.01 it can be said that the research hypothesis was confirmed so that given the impact coefficient of 0.37, it is concluded that materialism directly affects compulsive buying (Table 5).

CONCLUSION

One of the main objectives of marketing is discipline which is theoretically and empirically responsible for analyzing and predicting consumer behavior in the market. Consumer behavior like other human activities is not merely the result of his rational decision and may be affected by short-term emotional factors. So, consumer behavior is discussed as irrational, unnatural and even abnormal behavior.

Despite growing concerns about increasing the rate of compulsive buying in the world, very little attention

has been focused by Iranian researchers on this dark side of consumer behavior. The purpose of this study is to examine compulsive buying behavior and identify the factors affecting it.

As shown in the fourth chapter, the results indicated that the hypothesis has been confirmed. That is self-esteem inversely affects compulsive buying. Self-esteem refers to the amount of value that a person places on himself. Indeed, self-esteem is an individual's assessment of himself and is feedback on acceptability and unacceptability; the extent to which an individual see himself as capable, important, successful and worthy. Findings of this research are consistent with the results obtained by Roberts (1998) and D' Astous (1990).

Additionally, regarding the hypothesis of "materialism affects compulsive buying", the results suggested that it has been confirmed as shown in the fourth chapter. That is materialism directly affects compulsive buying. Materialism is one of the core values of consumer common culture and internalizing the materialistic values as an individual goal leads to the fact that individuals have a greater commitment to purchasing and owning material goods. A materialistic person pursues happiness through the consumption or possession of material things which induces extravagance and thus buying addiction. Results of this research are consistent with the findings achieved by Mueller *et al.* (2011), Mowen and Spears (1999) and Dittmar (2005).

SUGGESTIONS

- The officials are recommended to strengthen culture-building based on society's demands individuals' style and attitude of life, satisfaction, life expectancy and happiness through citizenship education
- Sellers and marketers are recommended to avoid encouraging and motivating people with compulsive buying properties to buy
- Understanding consumer behavior and identifying the customers are not an easy task. In order to succeed, marketers should surpass various factors that influence buyers and see how consumers make decisions about their own purchase. Marketers should particularly identify the key decision maker, decision-making methods and steps of the buying process. In marketing and consumer behavior, consumer buying decision and behavior are important. This behavior can have both positive and negative effects on the welfare of the individual and society. Thus, identifying the factors affecting compulsive buying can be helpful to sellers and marketers

REFERENCES

- D'Astous, A., 1990. An inquiry into the compulsive side of normal consumers. *J. Consum. Policy*, 13: 15-31.
- Dittmar, H., 2005. Compulsive buying-a growing concern? An examination of gender, age and endorsement of materialistic values as predictors. *Br. J. Psychol.*, 96: 467-491.
- Faber, R.J. and T.C. O'Guinn, 1988. Compulsive consumption and credit abuse. *J. Consumer Policy*, 11: 97-109.
- Faber, R.J. and T.C. O'Guinn, 1989. Classifying compulsive consumers: Advances in the development of a diagnostic tool. *Adv. Consumer Res.*, 16: 738-744.
- Faber, R.J., 1992. Money changes everything Compulsive buying from a biopsychosocial perspective. *Am. Behav. Sci.*, 35: 809-819.
- Faber, R.J., T.C. O'Guinn and R. Krych, 1987. Compulsive consumption. *Adv. Consumer Res.*, 14: 132-135.
- Hanley, A. and M.S. Wilhelm, 1992. Compulsive buying: An exploration into self-esteem and money attitudes. *J. Econ. Psychol.*, 13: 5-18.
- Koran, L.M., K.D. Bullock, H.J. Hartston, M.A. Elliott and V. D'Andrea, 2002. Citalopram treatment of compulsive buying: An open-label study. *J. Clin. Psychiatry*, 63: 704-708.
- Monahan, P., D.W. Black and J. Gabel, 1996. Reliability and validity of a scale to measure change in persons with compulsive buying. *Psychiatry Res.*, 64: 59-67.
- Mowen, J.C. and N. Spears, 1999. Understanding compulsive buying among college students: A hierarchical approach. *J. Consumer Psychol.*, 8: 407-430.
- Mueller, A., J.E. Mitchell, L.A. Peterson, R.J. Faber and K.J. Steffen *et al.*, 2011. Depression, materialism and excessive Internet use in relation to compulsive buying. *Compr. Psychiatry*, 52: 420-424.
- Roberts, J.A., 1998. Compulsive buying among college students: an investigation of its antecedents, consequences and implications for public policy. *J. Consumer Affairs*, 32: 295-319.
- Scherhorn, G., 1990. The addictive trait in buying behaviour. *J. Consumer Policy*, 13: 33-51.
- Scherhorn, G., L.A. Reisch and G. Raab, 1990. Addictive buying in West Germany: An empirical study. *J. Consumer Policy*, 13: 355-387.
- Schlosser, S., D.W. Black, S. Repertinger and D. Freet, 1994. Compulsive buying: Demography, phenomenology and comorbidity in 46 subjects. *Gen. Hosp. Psychiatry*, 16: 205-212.
- Valence, G., A. d'Astous and L. Fortier, 1988. Compulsive buying: Concept and measurement. *J. Consumer Policy*, 11: 419-433.