

*Full Length Research Paper*

# The effect of purchasing situation and conformity behavior on young students' impulse buying

Wu-Chung Wu<sup>1</sup> and Tzung-Cheng Huan<sup>2\*</sup>

<sup>1</sup>Office of International Affairs, National Kaohsiung Hospitality University,  
1 Sung-Ho Road, Hsiao-Kang, Kaohsiung City, Taiwan 812.

<sup>2</sup>College of Management, National Chiayi University, 580 Hsin-Ming Road, Chiayi, Taiwan 600.

Accepted 07 October, 2019

The objective of this research is to explore the effects of purchasing situations (time pressure, economic pressure) and personal characteristics (impulse, conformity, gender) on students' impulse buying behavior. This study employed a two-way factor 2 (time pressure) x 2 (economic pressure) experiment design by two scenarios in Paris, France and Prague, Czech Republic, resulting in eight manipulation treatments. This research found that respondents with high time pressure (limited time) or low economic pressure (larger budget) are significantly more likely to engage in impulse buying behavior. This study also found that female respondents' impulsivity and conformity are higher than that of male respondents.

**Key words:** Purchasing situation, conformity behavior, impulse buying.

## INTRODUCTION

Generally speaking, a consumer goes through five stages in the decision-making process, including motivation, needs or problem recognition, information search, alternative evaluations, and final purchase (Engel et al., 1993). During the decision-making process, consumers use rational thinking. However, there can be factors, such as time and the encouragement of peers that cause consumers to abbreviate the decision-making process to make purchase decisions and therefore exhibit irrational consumption behavior, called "impulse buying" (Mowen and Minor, 1998). This behavior is more prevalent when consumers are traveling. When tourists visit some attractions, they not only appreciate the local culture and experience the traditions, but also are drawn to the merchandise that is representative and characteristic of the local culture. The decision-making is brief under the influence of being in a foreign place and the encouragement of companions during the trip. Without planning, tourists often make unneeded purchases or ones exceeding their budgets.

According to Welles (1986), 90 percent of consumers admit to impulse buying. Contributing factors include consumer personality traits, such as self-control (Hoch and Loewenstein, 1991), demographic variables (Richins and Dawson, 1992; Dittmar et al., 1995; Rindfleisch et al., 1997; Wood, 1998; Kollat, 1969), situational factors, such as time-inconsistence preference (Hoch and Loewenstein, 1991), and conformity effect (Wilkie, 1994; Luo, 2005; Peck and Childers, 2006). Consumers may perceive that peers, who are likely to reward spontaneity and to pursue immediate, hedonic goals, consider impulsive purchasing to be desirable. The research examines whether the presence of peers influences the consumers. When consumers make purchases with others, they might want to obtain group identity and meet the expectations of others and therefore behave or think in a way similar to other group members (Wilkie, 1994). Research on impulse buying mainly explores the pure factors or the merchandise display and its attraction in the store. This research employs psychometrics tests to explore whether college students will exhibit impulse buying behavior under time and economic pressure. The study also explores whether impulse buying will vary depending on purchasing contexts and consumer traits, such as impulsiveness and conformity.

\*Corresponding author. E-mail: [tchuan@mail.ncyu.edu.tw](mailto:tchuan@mail.ncyu.edu.tw). Tel: 886-(0)5-2732801.

## LITERATURE REVIEW AND RESEARCH HYPOTHESES

### Impulse buying behavior

Researchers present different views on impulse buying. Stern (1962) proposed that impulse buying is unplanned buying. The difference is the level of impulsivity. Stern (1962) argues that external factors, such as economy, personality, time, location and culture influence impulse buying. According to Weinberg and Gottwald (1982), impulse buying is spontaneous and sudden response to a desire, incorporating affective, cognitive and reactive factors. Mowen and Minor (1998) define impulse buying as an uncontrollable reaction, a desire to obtain and possess. Wood (1998) proposes that impulse buying is unplanned, lacks thought and is accompanied by intense emotion. He also identifies two types of impulse buying: an akratic impulse, in which consumers do not have enough will power, and compulsive impulse buying. Iyer (1989) finds that both the shopping environment and time pressure affect consumers' impulse buying. Impulse buying often results from external stimuli which arouse consumers' new or perceived potential needs and form a strong and sudden urge. The consumers purchase immediately and uncontrollably, without thinking of the results (Rook and Hoch, 1985; Rook, 1987; Piron, 1991; Weun et al., 1998; Wood, 1998).

In summary, we can divide factors causing impulse buying into external and internal factors. External factors are situational, such as store environment, time pressure and peer pressure. Research indicates that time available will affect consumers' decisions directly. When consumers have less time, or when they are becoming impatient with the shopping experience, then the time pressure is a substantial factor, and consumers will exhibit impulse buying behavior. Also, if consumers have limited disposable income, that is, there is considerable economic pressure, consumers will act rationally and will not exhibit impulse buying easily (Beatty and Ferrell, 1998). Regarding external factors, the following hypotheses are proposed:

H<sub>1</sub>: Time pressure and budget pressure will interact with impulse buying in students' group package tours.

H<sub>2</sub>: Time available for purchasing will affect consumers' buying behavior. That is, the greater the time pressure, the greater the impulse buying behavior.

H<sub>3</sub>: Economic pressure will affect consumer buying behavior. That is, the greater the economic pressure, the less impulsive the buying behavior.

Internal factors affect consumer impulsivity. Values and normative factors play a mediating role in impulse buying behavior. If the consumers view impulse buying as positive, the correlation between impulsivity and behavior will strengthen. If the behavior is deemed as inappropriate, the correlation between impulsivity and behavior will

weaken (Hoch and Loewenstein, 1991; Dittmar et al., 1995; Rook and Fisher, 1995; Puri, 1996; Weun et al., 1998; Beatty and Ferrell, 1998; Dholakia, 2000). If one desires materialism and has weak self-control or will-power, one shows more impulse buying behavior (Hoch and Loewenstein, 1991). Some other external factors specific to the individual, such as family background, socio-economic status, lifestyle, and gender, also affect impulse buying behavior. Consumers who are single, of a low socio-economic status, materialistic and/or female tend to exhibit impulse buying (Richins and Dawson, 1992; Dittmar et al., 1995; Rindfleisch, Burroughs et al., 1997; Wood, 1998). Regarding internal factors, the following hypothesis is proposed:

H<sub>4</sub>: Consumers with different impulsivity levels will exhibit different levels of impulse buying. That is, the higher the impulsivity, the greater the impulse buying behavior.

### Conformity behavior

The research on conformity first appeared in social psychologist Ash's research (1951). He proposes that conformity results from the influence of members of a society upon individuals within that society. Allen (1965) categorized conformity into public compliance and private acceptance. Public compliance means that people comply with the group in order to get rewards or avoid punishments and do not change their own thoughts. Private acceptance means that beliefs and behavior are influenced by the group; that is, they voluntarily accept the group's attitudes, beliefs, values and expectations and change their thoughts to be compatible with the group (Mowen and Minor, 1998). People desire to be accepted and liked, and therefore are conditioned by social influences. Deutsch and Gerard (1955) have identified two types of social influences: normative and informational. Normative influence is the pressure to conform to the positive expectations of others. Normative influence can be achieved through compliance and identification. Compliance is the acceptance of normative influences in order to get affirmative responses from others, such as being-rewarded and avoiding punishment (Ross et al., 1976). Identification is the maintenance of good relationships with the group members and making the same decisions as the group to achieve conformity (Lascu and Zinkhan, 1999). Informational influence is the tendency to accept information from others as guidance when people face complicated information and want to simplify the decision-making process (Lascu and Zinkhan, 1999). Regarding external factors, the following hypotheses are proposed:

H<sub>5</sub>: Consumers with different conformity traits vary in the level of their impulse buying. That is, consumers with high conformity traits will be more impulsive when making purchases.

H<sub>6</sub>: Male and female consumers will vary in compulsiveness and conformity.

## RESEARCH METHODS

The study explores whether consumers with different personal traits in different purchasing contexts will exhibit different levels of impulse buying behavior. The rationale of the research is based on the hypothetical constructs presented by Howard and Seth (1969). The input is stimuli from the marketing and social environment. The output is the variety of responses which the buyer is likely to manifest, based on the interaction between the stimuli and his internal state. The goal of the research is to explore how situational factors (time and economy pressure) influence the consumers' personality traits (impulsiveness and conformity) in terms of consumers' impulse buying behavior.

### Variables

Independent variables are purchasing contexts, the evaluation of consumers' impulsiveness traits and conformity. Purchasing contexts (time pressure and economic pressure) are manipulated independent variables. Personal traits were assessed with a measure of impulsivity and conformity. Dependent variable is the impulsivity of purchasing behavior.

### Time pressure

The time pressure for purchasing is categorized as either long or short. The definitions of the manipulated variables are as follows:

(a) Length of time: Short, defined as a stay of 70 min or less. In this context, the consumers are forced to make decisions quickly under time pressure.

(b) Length of time: Long, defined as a stay of at least 130 min. In this context, the consumers are allowed ample time to make purchases.

### Economic pressure

The questionnaire in the study is based in France and the Czech Republic as simulation locations. The economic pressure is divided into high budgets and low budgets for purchases. As for the currency rate, 1 US\$ (US dollar) is around 32 TW\$ (New Taiwan dollar) on September 9, 2010.

(a) Low budgets: The lowest budget is set to TW\$100,000 in France and TW\$60,000 in the Czech Republic. The mood is set to make purchase decisions with a limited budget.

(b) High budgets: The highest budget is set to TW\$180,000 in France and TW\$80,000 in the Czech Republic. The mood is set to make purchase decisions without the constraint of a limited budget.

### Impulse buying

According to Rook (1987), there are 35 items that make up the trait of impulsiveness. 9 out of the 35 items were selected as question items to measure impulsiveness (Rook, 1995). Responses were evaluated on a multi-item Likert scale that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*) about their shopping experience and attitude. In order to increase the validity of the test, item 8 is designed as opposite scale from 1 (*strongly agree*) to 5 (*strongly disagree*). The questions are as follows:

1. I usually make purchases out of impulsive needs.
2. "Just do it" can describe my purchase attitude.
3. I usually make purchases without too much thinking.
4. I'll buy what I want.
5. My shopping habit is –buy first and think later.
6. I usually make purchases on impulse.
7. I'll decide what to buy according to my shopping moods.
8. Most of my purchase behavior is pre-planned.
9. I usually feel that my purchases are impulsive.

### Conformity

The study adopts Jackson's personality inventory of conformity as the method of measuring conformity. There are six paired items (Jackson, 1976): agree/disagree, comply/resist, try to adjust/resist strongly, willing to cooperate/not willing to cooperate, hold the same view/hold a completely different view. The study uses situational contexts to guide the individual toward the level of conformity. The study employs Likert scale ranging from 1 to 7 to measure the tendency of individuals toward conformity behavior.

### The level of impulse buying behavior

According to the definition of impulse buying behavior in the study, at the same tourist attraction but in a different purchasing context (time pressure and economic pressure), three items are designed to measure the level of the impulse buying behavior. The study employs Likert scale ranging from 1 to 5 to measure shopping experience and attitude. The questions are as follows:

1. I will purchase the souvenirs I want immediately without hesitation.
2. I will spend all my money.
3. If I don't have enough money, I will borrow money from classmates to buy souvenirs.

### Questionnaire design

The study uses cells comprising a 2 (Time Pressure) × 2 (Economic Pressure) experimental designs and develops eight contexts. The study will examine the level of impulse buying behavior given the same time frame (70 or 130 min) but different budgets, and also given the same budgets (TW\$100,000 or TW\$180,000 in France and TW\$60,000 and TW\$80,000 in the Czech Republic) but different time frame. There are four parts to the questionnaire: 1) in eight purchasing contexts, the purchase and time and economic situation, 2) the subjects' impulsivity, 3) subjects' conformity, 4) basic information. In designing the purchase context, with the same story line, in two different countries and under time and economic pressure, the study adopts a scenario method to measure the impulsivity of purchasing behavior in eight different purchasing contexts. The basic information is mainly the demographics, experience traveling abroad and behavior of the participants.

### Samples

Participants were senior college students who had been on over-seas group tours. The questionnaires were distributed at random. In order to help the participants to be more involved in the scenario, the questionnaires were distributed randomly and anonymously and participants were to complete only one questionnaire. There are 240 questionnaires in total. For the scenario in France, there are four contexts, with budgets of TW\$100,000 and TW\$180,000 for the time frame of 70 and 130 min. For each context, 30 questionnaires

**Table 1.** Demographics of the respondents.

Characteristic	France (n = 120)		Czech Republic (n = 120)	
	n	%	n	%
<b>Gender</b>				
Male	52	43.3	52	43.3
Female	68	56.7	68	56.7
<b>Average monthly expenses; excluding rent (TW \$)</b>				
Under 3,999	28	23.3	30	25.0
4,000 ~ 4,999	31	25.8	24	20.0
5,000 ~ 5,999	17	14.2	18	15.0
6,000 ~ 6,999	14	11.7	15	12.5
7,000 ~ 7,999	12	10.0	11	9.2
8,000 ~ 8,999	4	3.3	6	5.0
9,000 ~ 9,999	7	5.8	4	3.3
Over 10,000	7	5.8	12	10.0
<b>Allowance source</b>				
Family support	72	60.0	61	50.8
Part-time jobs	11	9.2	15	13.3
Mainly family support, partly part-time jobs	27	22.5	22	18.3
Mainly part-time jobs, partly family support	5	4.2	9	7.5
Family support and part-time Jobs	5	4.2	8	6.7
Scholarship/Student aid	0	0	2	1.7
Other sources	0	0	2	1.7
<b>Been travelling abroad</b>				
Yes	82	68.3	86	71.7
No	38	31.7	34	28.3
<b>Travel type</b>				
Group	55	45.8	46	38.3
Backpack	37	30.4	42	35.0
Vacation package	21	17.5	11	9.2
<b>Travel mate</b>				
Myself	5	4.1	9	7.5
Family/relatives	37	30.8	41	34.2
Friends	36	30.0	28	23.2
Classmates	26	21.7	10	8.3
Colleagues	1	0.8	1	0.8
Others	2	1.7	7	5.8

\*1 US\$ (US dollar) is around 32 TW\$ (New Taiwan dollars) on 2010/9/9.

30 questionnaires were given, for a total of 120 questionnaires for the scenario in France. For the scenario in the Czech Republic, there are four contexts, with budgets of TW \$60,000 and TW\$80,000 for the time frame of 70 and 130 min. For each context, 30 questionnaires were given for a total of 120 questionnaires. The sample data are shown in Table 1.

#### Reliability analysis

The study uses "internal consistency" to measure the reliability of questionnaires with Cronbach's alpha. The Cronbach's alpha of purchase decision-making in France is 0.89, impulsivity 0.85, conformity 0.9. They are all greater than 0.7, which means the reliability

**Table 2.** Reliability analysis of purchase decision-making, impulsivity, conformity.

Item	France	Czech Republic
	Item total correlation	
<b>Purchase decision-making</b>	<b>=0.89</b>	<b>=0.91</b>
I will purchase the souvenirs I want immediately without hesitation.	0.72	0.80
I will spend all my money.	0.82	0.81
If I don't have enough money, I will borrow money from classmates to buy souvenirs.	0.82	0.85
<b>Measurement of impulsivity</b>	<b>=0.85</b>	<b>=0.83</b>
I usually make purchases out of impulsive needs.	0.63	0.52
"Just do it" can be described as my purchase attitude.	0.59	0.53
I usually make purchases without too much thinking.	0.67	0.72
I'll buy what I want.	0.63	0.49
My shopping habit is-buy first and think later.	0.62	0.54
I usually make purchases on impulse.	0.75	0.69
I will decide what to buy according to my shopping moods.	0.36	0.32
Most of my purchases are pre-planned.	0.38	0.26
I usually feel that my purchases are impulsive.	0.73	0.73
<b>Measurement of conformity</b>	<b>=0.95</b>	<b>=0.91</b>
Agree - Disagree	0.85	0.75
Comply - Resist	0.87	0.79
Try to adjust - Refuse to adjust	0.83	0.80
Willing to adjust - Resist strongly	0.89	0.83
Willing to cooperate - Not willing to cooperate	0.89	0.80
Hold the same view - Hold a totally different view	0.73	0.63

\* = Cronbach's alpha.

reliability is high. The Cronbach's alpha of purchase decision-making in Czech Republic is 0.91, impulsivity 0.83, conformity 0.91. They are all greater than 0.7, indicating good reliability (Table 2).

## RESULTS

### The analyses of interaction between time and economic pressure

For each scenario, the questionnaire uses two-way ANOVA to test the interaction of independent variables (time pressure and economic pressure) and dependent variables (the level of impulse buying behavior). As illustrated in Table 3, the main effects of both time pressure and economic pressure were significant in both scenarios, and the interaction between time pressure and economic pressure was also significant. That is, time and economic pressure had a significant effect on college seniors on overseas tours. Consequently, the results support  $H_1$ .

### The effect of staying time on the level of impulse buying behavior

The t-value of the effect of time available (70 and 130 min) on impulse buying is 5.40, given that the location

is set in France and the budget is \$100,000. The *value is* smaller than 0.05. There is a significant difference. The t-value of the effect of time available (70 and 130 min) on impulse buying is 2.99, given that the location is set in France and the budget is \$180,000. The *value is* smaller than 0.05. There is a significant difference. The t-value of the effect of time available (70 and 130 min) on impulse buying is 4.97, given that the location is set in the Czech Republic and the budget is \$60,000. The *value is* smaller than 0.05. There is a significant difference. The t-value of the effect of time available (70 and 130 min) on impulse buying is -1.54, given that the location is set in France and the budget is \$80,000. The *value is* greater than 0.05. There is no significant difference as shown in Table 4. As illustrated in Table 4, the effect of time pressure was significant in all but one of eight scenarios, indicating that time pressure does have an effect on impulse buying behavior. Specifically, the greater the time pressure the more consumers engage in impulse buying, which supports  $H_2$ .

### The effect of budget on the level of impulse buying behavior

The t-value of the effect of budgets (\$100,000 and

**Table 3.** Interaction between time pressure and economic pressure.

<b>Effect</b>	<b>F<sub>1,60</sub></b>	<b>(-value)</b>
<b>France</b>		
<b>Main effect</b>		
Time pressure	36.28	0.000*
Economic pressure	37.39	0.000*
<b>Two-way interaction</b>		
Time pressure*economic pressure	4.28	0.041*
<b>Czech Republic</b>		
<b>Main effect</b>		
Time pressure	20.77	0.000*
Economic pressure	44.79	0.000*
<b>Two-way interaction</b>		
Time pressure*economic pressure	5.48	0.021*

\* &lt; 0.05.

**Table 4.** Effect of time available on impulse buying behavior.

<b>Control variable (Time)</b>	<b>Mean (min)</b>	<b>t-value</b>	<b>-value</b>
<b>France</b>			
Budget: \$100,000	70	3.17	5.40
	130	2.19	
Budget: \$180,000	70	3.66	2.99
	130	3.18	
<b>Czech Republic</b>			
Budget: \$60,000	70	3.14	4.97
	130	2.21	
Budget: \$80,000	70	3.73	-1.54
	130	3.43	

\* &lt; 0.05; 1 US\$ (US dollar) is around 32 TW\$ (New Taiwan dollars) on 2010/9/9.

\$180,000) on impulse buying is -2.76, given that the location is set in France and the time frame is 70 min. The *value is* smaller than 0.05. There is a significant difference. The t-value of the effect of budgets (\$60,000 and 80,000) on impulse buying is -3.68, given that the location is set in the Czech Republic and the time frame is 70 min. The *value is* smaller than 0.05. There is a significant difference. The t-value of the effect of budgets (\$100,000 and 180,000) on impulse buying is -6.03, given that the location is set in France and the time frame is 130 min. The *value is* smaller than 0.05. There is a significant difference. The T-value of the effect of budgets (\$60,000 and 80,000) on impulse buying is -3.68, given that the location is set in the Czech Republic and the time frame is 130 min. The *value is* smaller than 0.05. There

is a significant difference, as shown in Table 5. As indicated in Table 5, budget limitations had a significant effect on impulse buying behavior regardless of location and time constraint. Specifically, greater budget pressure resulted in less impulsiveness when making purchases, which supports H<sub>3</sub>.

#### **The effect of impulsivity on the level of impulse buying behavior**

The t-value of the effect of impulsivity on impulse buying is -3.45, given that the location is set in France with the time frame of 70 min and the budget is \$100,000. The *value is* smaller than 0.05. There is a significant difference

**Table 5.** Effect of budget on impulse buying behavior.

Control variable (Budget; \$)		Mean	t-value	-value
<b>France</b>				
Length of stay-70 min	100,000	3.17	-2.76	0.008*
	180,000	3.66		
Length of stay-130 min	100,000	2.19	-6.03	0.000*
	180,000	3.18		
<b>Czech Republic</b>				
Length of stay-70 min	60,000	3.14	-3.68	0.001*
	80,000	3.73		
Length of stay- 130 min	60,000	2.21	-5.60	0.000*
	80,000	3.43		

\* <0.05; 1 US\$ (US dollar) is around 32 TW\$ (New Taiwan dollars) on 2010/9/9.

difference. The t- value of the effect of impulsivity on impulse buying is -7.27, given that the location is set in France with the time frame of 130 min and the budget is \$100,000. The *value* is smaller than 0.05. There is a significant difference. The t- value of the effect of impulsivity on impulse buying is -5.29, given that the time frame is set to be 70 min and the budget is \$180,000. The *value* is smaller than 0.05. There is a significant difference. The t-value of impulsivity on impulse buying is -2.64, given that the time frame is to be 130 min and the budget is \$180,000. The *value* is smaller than 0.05. There is a significant difference as shown in Table 6.

The t-value of the effect of impulsivity on impulse buying is -6.43, given that the location is set in the Czech Republic with the time frame of 70 min and the budget is \$60,000. The *value* is smaller than 0.05. There is a significant difference. The t- value of the effect of impulsivity on impulse buying is -5.08, given that the location is set in the Czech Republic with the time frame of 130 min and the budget is \$60,000. The *value* is smaller than 0.05. There is a significant difference. The t-value of the effect of impulsivity on impulse buying is -5.21, given that the time frame is set to be 70 min and the budget is \$80,000. The *value* is smaller than 0.05. There is a significant difference. The t-value of impulsivity on impulse buying is -4.97, given that the time frame is to be 130 min and the budget is \$180,000. The *value* is smaller than 0.05. As shown in Table 6, the level of consumer impulsivity had a significant affect on impulse buying behavior. Specifically, the higher the consumer impulsivity, the higher the tendency for impulse buying behavior, which supports H<sub>4</sub>.

#### **The effect of conformity on the level of impulse buying behavior**

The t-value of the effect of conformity on impulse buying

is 1.392, given that the location is set in France with the time frame of 70 min and the budget is \$100,000. The *value* is greater than 0.05. There is no significant difference. The t-value of the effect of conformity on impulse buying is -0.959, given that the location is set in France with the time frame of 130 min and the budget is \$100,000. The *value* is greater than 0.05. There is no significant difference. The t-value of the effect of conformity on impulse buying is -0.258, given that the time frame is set to be 70 min and the budget is \$180,000. The *value* is greater than 0.05. There is no significant difference. The t-value of conformity on impulse buying is -0.748, given that the time frame is to be 130 min and the budget is \$180,000. The *value* is greater than 0.05. There is no significant difference.

The t-value of the effect of conformity on impulse buying is -1.377, given that the location is set in the Czech Republic with the time frame of 70 min and the budget is \$60,000. The *value* is smaller than 0.05. There is a significant difference. The t-value of the effect of conformity on impulse buying is -3.404, given that the location is set in the Czech Republic with the time frame of 130 min and the budget is \$60,000. The *value* is greater than 0.05. There is no significant difference. The t-value of the effect of conformity on impulse buying is -0.194, given that the time frame is set to be 130 min and the budget is \$80,000. The *value* is greater than 0.05. There is no significant difference. The t-value of impulsivity on impulse buying is 1.755, given that the time frame is to be 130 min and the budget is \$80,000. The *value* is greater than 0.05 as shown in Table 7. The study divides conformity into high conformity and low conformity with the median 5.5. The study finds that only in the Czech Republic, there is a significant difference given the time frame is 70 min and the budget is \$100,000. Therefore, conformity does not affect the impulse buying behavior, which does not support H<sub>4</sub>. As

**Table 6.** Effect of impulsivity on impulse buying behavior.

Control variable (Impulsivity)		Mean	t-value	-value
<b>France</b>				
Length of stay- 70 min; Budget \$100,000	High impulsivity	3.46	-3.45	0.004*
	Low impulsivity	2.67		
Length of stay-130 min; Budget \$100,000	High impulsivity	2.92	-7.27	0.000*
	Low impulsivity	1.70		
Length of stay- 70 min; Budget \$180,000	High impulsivity	4.16	-5.29	0.000*
	Low impulsivity	3.16		
Length of stay- 130 min; Budget \$180,000	High impulsivity	3.40	-2.64	0.015*
	Low impulsivity	2.98		
<b>Czech Republic</b>				
Length of stay-70 min; Budget \$60,000	High impulsivity	3.50	-6.43	0.000*
	Low impulsivity	2.83		
Length of stay-130 min; Budget \$60,000	High impulsivity	2.70	-5.08	0.000*
	Low impulsivity	1.47		
Length of stay-70 min; Budget \$80,000	High impulsivity	4.13	-5.21	0.000*
	Low impulsivity	3.06		
Length of stay-130 min; Budget \$80,000	High impulsivity	4.41	-4.97	0.000*
	Low impulsivity	3.14		

\* < 0.05; 1 US\$ (US dollar) is around 32 TW\$ (New Taiwan dollars) on 2010/9/9.

shown in Table 7, conformity had a significant effect on impulse buying behavior in only one out of eight scenarios, and H<sub>5</sub> was not supported.

### The effect of gender on the level of impulse buying behavior

The t-value of the effect of gender on impulse buying is 2.18, given that the location is set in France. The *value* is smaller than 0.05. There is a significant difference. The t-value of the effect of gender on impulse buying is 2.89, given that the location is set in France. The *value* is smaller than 0.05. There is a significant difference. The t-value of the effect of gender on impulse buying is 2.31, given that the location is set to be in the Czech Republic. The *value* is smaller than 0.05. There is a significant difference. The t-value of gender on conformity buying is 2.14 given that the location is set to be in the Czech Republic. The *value* is smaller than 0.05. There is a significant difference as shown in Table 8. As shown in Table 8, the effect of gender on both impulsivity and conformity was significant in both scenarios presented. Specifically, females had a significantly higher tendency toward impulsivity and conformity, which supports H<sub>6</sub>.

### CONCLUSION AND SUGGESTIONS

- (i) The study explores the effect of time and economic pressure on impulse buying as well as the role of consumers' personal traits (impulsivity and conformity) in this behavior. There are eight purchase contexts with different travel destinations, time constraints and economic pressures.
- (ii) The participants are college seniors on overseas group tours. According to the data, the income source of more than 50% of the students is from family. Because of limited budgets and financial support, students on packaged tours typically want to visit as many of the tourist attractions as possible in the short time available and therefore, they will not stay long at each attraction.
- (iii) The study shows that the effect of time pressure on impulse buying is significant. This might be due to the fact that there is not enough time for consumers to take many things into consideration, which is what Belk (1974) finds in his study. The more time pressure consumer experiences, the more the impulsive their buying behaviors.
- (iv) The more economic pressure a consumer perceives, the less impulsive their buying behaviors. This confirms Beatty and Ferrell's research (1998), which indicated that

**Table 7.** Effect of conformity on impulse buying behavior.

Control variable (conformity)		Mean	t-value	-value
<b>France</b>				
Length of stay- 70 min; Budget \$100,000	High conformity	3.10	-1.39	0.178
	Low conformity	3.38		
Length of stay- 130 min; Budget \$100,000	High conformity	2.30	-0.96	0.347
	Low conformity	2.03		
Length of stay-70 min; Budget \$180,000	High conformity	3.70	-0.26	0.798
	Low conformity	3.63		
Length of stay- 130 min; Budget \$180,000	High conformity	3.26	-0.75	0.461
	Low conformity	3.14		
<b>Czech Republic</b>				
Length of stay-70 min; Budget \$60,000	High conformity	3.26	-1.377	0.180
	Low conformity	3.04		
Length of stay- 130 min; Budget \$60,000	High conformity	2.63	-3.404	0.002*
	Low conformity	1.67		
Length of stay-70 min; Budget \$80,000	High conformity	3.76	-0.194	0.847
	Low conformity	3.70		
Length of stay- 130 min; Budget \$80,000	High conformity	3.20	-1.755	0.090
	Low conformity	3.67		

\* <0.05; 1 US\$ (US dollar) is around 32 TW\$ (New Taiwan dollars) on 2010/9/9.

**Table 8.** Effect of gender on impulse buying behavior.

Control variable (Gender)		Mean	T-value	-value
<b>Impulsivity</b>				
France	Male	2.72	2.18	0.031*
	Female	2.99		
Czech Republic	Male	2.62	2.31	0.023*
	Female	2.91		
<b>Conformity</b>				
France	Male	5.02	2.31	0.023*
	Female	5.66		
Czech Republic	Male	5.07	2.89	0.005*
	Female	5.48		

\* < 0.05.

when the economic pressure is more intense, consumers tend to count every dollar and think rationally; and therefore, there are fewer incidents of impulse buying.

(v) On the whole, the results from the study show that substantial time pressure and little economic pressure lead to impulse buying. Conversely, substantial time and

economic pressure does not discourage impulse buying. The study examines the effect of impulsivity and conformity on impulse buying. The higher the impulsivity, the greater the impulse buying conforms Rook and Fisher's (1995) research findings. However, conformity was not found to affect impulse buying significantly. It might be due to the fact that the context of study questionnaire was not specific enough about the group's expectations and therefore the participants were not manipulated to feel conformity pressure. The study also indicates that impulsivity and conformity are higher in female students than male students. The study results conform to d'Astous' (1990) findings that females display the tendency of impulse buying and are more likely to be the impulsive consumers. The study results on conformity are similar to those of Becker (1986), Eagly and Carli's (1981) findings. In other words, compared to men, women tend to change their attitudes easily and exhibit higher conformity traits.

## Suggestions

The results indicate that a high degree of time pressure and minimal economic pressure tend to lead to impulse buying. Tour guides cannot control consumers' perception of economic pressure; however, they can arrange the length of staying time. They can shorten the shopping time and arrange shopping trips to places where there are many shops to encourage impulse buying. For example, for student groups, trips to big shopping malls and customized shopping points can be arranged.

## Limitations and suggestions for further research

The designed purchase contexts in the questionnaire only explore external factors, such as time and economic pressure; however, there are many other external factors that influence impulse buying, such as the atmosphere in the store, promotions, time-inconsistence preference and payment methods. In addition to conformity and impulsivity there are other internal factors that could be explored, such as additional personal traits, demographics, and purchasing moods. As to the fact that there were no significant findings on conformity, it might be due to the fact that the descriptions in the questionnaire are not appropriately designed to get participants involved and feel strong conformity pressure. Future studies might improve upon the exploration of the effect of conformity on impulse buying.

## REFERENCES

Allen VL 1965. Situational factors in conformity. In L. Berkowitz (Eds.), *Advances in Experimental and Social Psychology*: 133-175. New York: Academic Press.

Asch SE 1951. Effects of Group Pressure upon the Modification and

Distortion of Judgment. In Guetzkow, H. (Eds.), *Groups, Leadership and Men*. PA: Carnegie Press.

Beatty SE, Ferrell EM, 1998. Impulse Buying Modeling its Precursors. *J. Retailing*, 74(2): 169-191.

Becker BJ 1986. Influence again: Another look at studies of gender difference in social influence. In J. S. Hyde, MC Linn (Eds.), *The Psychology of Gender: Advances through Meta-analysis*. Baltimore: Johns Hopkins University Press.

Belk RW 1974. An Exploratory Assessment of Situational Effect in Buyer. *J. Mark. Res.*, 11: 156- 163.

d'Astous A. 1990. An Inquiry into the Compulsive Side of Normal Consumers. *J. Consum. Policy*, 13(1): 15-31.

Deutsch M, Gerard HB 1955. A Study of Normative and Informational Social Influences Upon Individual Judgment. *J. Abnormal Soc. Psychol.*, 51: 629-636.

Dholakia UM 2000. Temptation and resistance: An integrated model of consumption impulse formation and enactment. *Psychol. Mark.*, 17(11): 955-982.

Dittmar H, Beattie J, Friese S 1995. Gender Identity and Material Symbols: Objects and Decision Considerations in Impulse Purchases. *J. Econ. Psychol.*, 16: 491-511.

Eagly AH, Carli LL 1981. Sex of Researchers and Sextyped Communications as Determinants of Sex Differences in Influenceability: A Meta-analysis of Social Influence Studies. *Psychol. Bull.*, 90: 1-20.

Engel JF, Blackwell RD, Miniard PW 1993. *Consumer Behavior* (7th ed.). Fort Worth, Dryden Press.

Hoch SJ, Loewenstein GF 1991. Time-Inconsistent Preferences and Consumer Self-Control. *J. Consum. Res.*, 17: 493-507.

Huertas SC, Powell L 1986. Effect of Appointed Leadership on Conformity. *Psychol. Rep.*, 59: 679-682.

Iyer ES 1989. Unplanned purchasing: Knowledge of Shopping Environment and Time Pressure. *J. Retailing*, 65: 40-57.

Jackson DN 1976. *Jackson Personality Inventory Manual*. Ann Arbor, MI: Research Psychologists Press.

Kollat DT, Willett RP 1969. Is impulse purchasing really a useful concept in marketing decisions. *J. Market.*, 33: 79-83.

Lascu DN, Zinkhan G 1999. Consumer Conformity: Review and Applications for Marketing Theory and Practice. *J. Market. Theory Pract.*, 7(3): 1-12.

Luo X 2005. How does shopping with others influence impulsive purchase. *J. Consum. Psychol.*, 15(4): 288-294.

Mowen JC, Minor M 1998. *Consumer Behavior* (5th ed.). New Jersey: Prentice-Hall.

Peck J, Childers T.L 2006. If I Touch it I Have to Have it: Individual and Environmental Influence on Impulse Purchasing. *J. Bus. Res.*, 59(6): 765-769.

Piron F 1991. Defining Impulse Purchasing. *Adv. Consum. Res.*, 18: 509-514.

Puri R 1996. Measuring and Modifying Consumer Impulsiveness: A cost-Benefit Accessibility Framework. *J. Consum. Psychol.*, 5(2): 87-113.

Richins ML, Dawson S 1992. A Consumer Values Orientation for Materialism and Its Measurement, Scale Development and Validation. *J. Consum. Res.*, 19: 303-316.

Rindfleisch A, Burroughs JE, Denton F 1997. Family Structure, Materialism, and Compulsive Consumption *J. Consum. Res.*, 23: 312-325.

Rook DW, Hoch SJ 1985. Consuming impulses. *Advance in Consumer Research*, 12: 23-27.

Rook DW, 1987. The Buying Impulse. *J. Consum. Res.*, 14: 189-199.

Rook DW, Fisher RJ 1995. Normative Influences on Impulsive Buying Behavior. *J. Consum. Res.*, 22: 305-313.

Ross L, Bierbrauer G, Hoffman S 1976. The Role of Attribution Processes in Conformity and Dissent - Revisiting the Asch Situation. *Am. Psychol.*, 31: 148-157.

Stern H 1962. The Significance of Impulse Buying Today. *J. Market.*, 26: 59-62.

Weinberg P, Gottwald W 1982. Impulsive Consumer Buying as a Result of Emotions. *J. Bus. Res.*, 10: 43-57.

Welles G 1986. We're in the habit of impulsive buying. *USA Today*, May 21.

Weun S, Jones MA, Beatty SE, 1998. Development and Validation of the Impulse Buying Tendency Scale. *Psychol. Rep.*, 82: 1123-1133.  
Wilkie W. L. 1994. *Consumer Behavior* (3rd ed.). New York: John Wiley and Sons.

Wood M. 1998. Socio-economic Status, Delay of Gratification, and Impulse Buying. *J. Econ. Psychol.*, 19: 295-320.