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The relationship among consumer vanity trait, materialism and fashion anxiety

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This study focuses on Taiwan adolescent female students' vanity traits, materialism and fashion anxiety. A convenience sample of 591 female college students was used. The outcomes of the relationship hypotheses found that vanity traits are positively related to materialism. Moreover, materialism has a positive significance relationship with fashion anxiety. The most important finding is that materialism mediates between vanity traits and fashion anxiety. The findings of this research may have implications for marketing theory, research methods and practical use.

Key words: Vanity traits, materialism, fashion anxiety, adolescent female students, SEM.

INTRODUCTION

The theory of consumer behavior has been studied quite a bit lately. However, cultural differences and a rapidly changing environment have changed the way people live their daily lives. For example, many people think that utilitarianism and materialism are values representing an individual's success. In addition, due to the advancements in technology, people's purchasing behavior is influenced by advertising (vanity adoration and materialism emphasis). Faber and O'Guinn (1992) mentioned that it is not enough to study only functional consumer behavior. They considered it as being careless, because such behavior could have severe consequences. Therefore, if a sample of college students in Taiwan can be studied, the test result will enrich the consumer behavior theory.

According to Bandura's social learning theory, behavior comes from observing and learning the behavior from family, peers, and the mass media. The mass media has a greater influence than either family or peers (Bandura, 1978). Social learning theory emphasizes the influence of a socialized organization on an individual through modeling, reinforcement and social interaction between the organization and the individual. This allows learners to learn the norm and the skills. On this basis, many observers will have their own stereotype of specific behavior (Yang, 2001). This phenomenon cannot be ignored, because college students are easily influenced, because they many have poor judgment. As a result, they will have doubt regarding behavior such as high vanity.

Netemeyer et al. (1995) stated that the vanity traits include physical appearance and achievement. The vanity traits promote many products and service developments. This can be shown by related physical vanity products and services such as cosmetics, clothing and body treatment (Solomon, 1985, 1992). Related achievement vanity products and services are like a product advertisement. The advertisements for such products always emphasize that they can increase individual charm and elevate individual status in society. Being concerned about physical charm may be a positive consumer behavior (such as sport and correct eating habits) (Schouten, 1991; Bloch and Richins, 1992; Hirschman, 1990). Ultimately, the bad behavior may bring economic and emotional problems to oneself or one's family. It may also result in not being able to pay the incurred debt. In the current period of materialism, physical appearance is essential for marketing researchers and marketing practitioners. However, there are few researches available in the literature on the scale of physical appearance, and very few of these studies are...
done in Taiwan.

Xu (1997) pointed out that the current new generation (born between 1965 and 1985) in Taiwan lives in a period of a vigorously growing economy, and money seems to represent social value and culture. They are more likely to spend money which shows materialism. In addition, this generation is spending more money than the previous generation, and they have little inclination to save money. They have a high cost of living, because they use purchasing goods for reaching self actualization. In Wu’s (1997) research on female college students’ motivation to purchase fashion goods, the study found that they did so only to attract the attention of their friends. Therefore, the trait of materialism by female college students should be investigated in detail.

In addition, fashion anxiety means that because there are more new clothes coming out, one never stop purchasing the new clothes, so that as a result they may have emotional anxiety. Recently, the Taiwanese media over-emphasized the existing materialism in society and in fashion. Most people pursue fashion blindly and are lost in the cycle of purchasing fashion goods (Yang, 2001). Even though fashion causes fashion anxiety, the question remains whether or not female college students in a fashion environment have fashion anxiety? What kind of vanity trait produces anxiety for a consumer? Is there a relationship between vanity trait and materialism? Is there a relationship between materialism and fashion anxiety?

In terms of social learning theory, influenced by the media, female college students with different vanity characteristics may develop a materialism trait and may go a step further than the different fashion anxieties. Hence, adolescent consumer behavior was study, it is essential to study students’ vanity trait, materialism and fashion anxiety. However, the relationship between fashion anxiety, materialism and vanity trait has rarely been studied. Besides, due to the changes in the culture and the values, people hold it is important to test whether or not it is appropriate to use the scale which was developed in the past in a different culture for a different group of people.

Previous research points out that, women pay more attention to achievement and physical appearance than men. In the world of men, a woman’s physical appearance is a tool for success (Striegel-Moore et al., 1986). Guber (1987) also found that many early-maturing girls wish to have a slimmer and more attractive figure. This kind of attention to physical appearance may last well into their future. A lot of research has pointed out that young women are relatively apt to develop a materialism trait (Belk, 1985; Richins and Dawson, 1992; Faber and O’Guinn, 1992). Therefore, research regarding the behavior of female college students as consumers in the substantial fashion market is useful for describing and understanding female college students as consumers. Present research could allow educators, retailers, marketers, and producers of products and services to effectively respond to the needs and preferences of multiple consumer groups. As a result, this study uses female college students as a sample and social learning theory as the foundation to reach the following objectives:

1. To identify the relationship between vanity traits and materialism.
2. To examine the relationship between materialism and fashion anxiety.
3. To recognize the relationship between vanity traits and fashion anxiety.
4. To determine the use of materialism as a mediator between vanity traits and fashion anxiety.

**Literature review and hypotheses building**

**Vanity traits**

Vanity is a human trait and is influenced by social pressure (Durvasula et al., 2001). Netemeyer et al. (1995) divided vanity trait into four traits: A concern for physical appearance, a positive view of physical appearance, a concern for achievement and a positive view of achievement. A concern for physical appearance means that one thinks one has to have a more attractive physical appearance than other people, while a positive view of physical appearance means that other people think one has an attractive physical appearance. A concern for achievement means that one has made a successful achievement, and a view for achievement means that other people think one has made a successful achievement. Chang (2003) argued that a positive view of physical appearance and a positive view of achievement appearance are appropriate for construct for vanity, because they are close to the behavior of materialism and so can predict the behavior of materialism. However, the present research used only physical view dimensions of the vanity trait scale. Several items of achievement concern and achievement view (“Professional achievements are an obsession with me” and “In a professional sense, I am a very successful person”) are inappropriate for university students, because the students in universities are not professional yet and they are just in the learning stage.

**Materialism**

Ward and Wackman (1971) believed that materialism emphasizes the things one possesses, the happiness one pursues and the social status one pursues. However, Richins and Dawson (1992) defined materialism as the belief that possession is one’s center belief and that the process of possessing represents whether one is satisfied with one’s life or not, and divided materialism into
three components: Acquisition centrality, acquisition happiness and possession-defined success (Richins and Dawson, 1992). Acquisition centrality means possession is one’s center of life. Acquisition happiness means acquisition is like happy pursuing. They believe possession will bring good life. Possession-defined success means the amount of possession was used to measure one’s success. However, this research only uses acquisition centrality and possession-defined success, because happiness is not the most important thing students are pursuing. Moreover, materialism often brings up compulsive shopping problem (Ergin, 2010).

Fashion anxiety

Fashion anxiety means that an individual will feel uneasy when facing an uncontrollable fashion environment. Izard et al. (1984) believe that anxiety is a kind of subjective discomfort state. Anxiety consists of fear, worry, shyness, shame etc. Chang (1999) also believes that anxiety is a mood state which is interwoven with nervousness, uneasiness, worry and fear. Belk (1976) thinks that because of overreaction to an occasion, one has the fear to encounter that situation. Rogers (1951) also believes that the inconsistency between personal cognition and actual experience causes uneasiness. Yang (2001) points out that fashion anxiety may come from societal, cognitive, psychological and behavioral factors. Therefore, four fashion anxieties should be studied: Interpersonal anxiety, information anxiety, security anxiety and money anxiety.

Vanity traits versus materialism

Netemeyer et al. (1995) mentioned that there is a strong relationship between physical vanity, achievement vanity and possession-defined success. Chang’s (1999) studies reveal that there is a positive relationship between physical appearance and materialism. Pursuing brand name goods, personalized goods and expecting praise all reveal that consumers use possession as a means to evaluate their success. This may infer that female college students with a physical view are likely to have possession-defined success and are likely to purchase personalized goods. However, some rather go on the internet searching for fashion goods. These students have an achievement view and are likely to have acquisition centrality, but because of financial limitations, they are less likely to have possession-defined success so this research poses the following hypothesis:

\[ H_1: \text{Vanity traits are positively related to materialism.} \]

Materialism versus fashion anxiety

According to the social learning theory (Bandura, 1978), teenagers are influenced by the media. Therefore, female college students with high acquisition centrality are likely to follow fashion. However, due to the rapid changing fashion environment and heavy workload from school, they are likely to get information anxiety. They not only worry about not being able to catch up with the latest fashion, they hope to be at the forefront of fashion. As a result, this infers that female college students who have acquisition centrality or possession-defined success are likely to have information anxiety.

People with high acquisition centrality believe that possession will bring them satisfaction and beauty (Richins and Dawson, 1992). However, since any fashion will eventually disappear from the market, those consumers who do not have a lot of money are likely to have financial pressure. In addition, people that are highly materialistic are likely to have more anxiety, frustration, and feelings of guilt than people that are less materialistic. An acquisition by a possession-defined materialist symbolizes happiness and success.

Richins and Dawson (1992) found that people that are highly materialistic usually do not have a positive attitude and are likely to have anxiety, frustration and compunction. For materialists, acquisition symbolizes happiness and success and they easily end up carrying out long term repeat purchasing activities. According to social learning theory, female college students who have acquisition centrality are likely to have interpersonal anxiety. However, because most female college students do not have much money, most of the fashion goods they purchase are clothes and ornaments. Accordingly, these students have possession-defined success. Since these students always compare clothing with their peers and their purchasing decision is influenced by their friend (Makgosa and Mohube, 2007) they are also likely to have interpersonal anxiety.

In terms of the social learning theory (Bandura, 1978), female college students are influenced by peers and the media and may see materialism as acquisition centrality. When they face financial limitations, they may take a part time job to earn money for purchasing fashion products. However, since their characteristics are acquisition centrality, they are less likely to be afraid of being left behind in fashion. On the other hand, students that have possession-defined success are likely to be lost in the cycle of searching for fashion products and are likely to compare products with other people. This results in security anxiety. Therefore, the studies propose the following hypothesis:

\[ H_2: \text{Materialism is positively related to fashion anxiety.} \]

Vanity traits versus fashion anxiety

Information anxiety shows in the cognitional dimension of fashion anxiety. It is comprised of paying attention to
fashion and fashion information. That is to say, people with high fashion anxiety are likely to place importance on fashion and to collect fashion information. Consequently, they easily have information anxiety (Yang, 2001). Yang (2001) mentioned that people have an internal anxiety because of fashion, because it is always changing. When they are faced with uncertainty in fashion and financial burden, they will have information anxiety.

According to the social learning theory, female college students who have a view for physical appearance are likely to have information anxiety. But, students who have a view for achievement will not spend a lot of time searching for information on new products because they are still in school. As a result, they are less likely to have information anxiety. Money anxiety is shown in the behavioral dimension of fashion anxiety. It consists of pressure caused by financial burden (Yang, 2001). People place importance on fashion goods, and because they are afraid of falling behind, they continually pursue them. This places a financial burden on them. When people feel uncertain regarding their appearance and style, they try to wear what is acceptable in public. According to social learning theory, female college students with a view for physical appearance care about how others view their physical appearance, so they will spend time on their appearance (Netemeyer et al., 1995). However, if these students do not have the money to get these new products, they will have money anxiety. Therefore, people with a view for achievement will concentrate on a product’s function and will not follow fashion in public. Consequently they will not have money anxiety.

Interpersonal anxiety is shown in the social dimension of fashion anxiety. It consists of being fond of fashion products and interpersonal relationships. That is to say, people with high fashion anxiety are likely to have fashion goods and compare these fashion goods with other people. Consequently, they easily have interpersonal anxiety (Yang, 2001). As life in society becomes busier and the relationships between people become more complex, it is very hard to judge people’s status and their character. Based on this observation and social learning theory, this study believes that female college students who have a view for achievement are likely to wear fashion clothing or ornaments to show off their success, to show their differences from other people and the fact that they have different taste in clothing. They have good relationships with other people, and as a result they do not have interpersonal anxiety.

Security anxiety is shown in the psychological dimension of fashion anxiety. When people make social comparisons, they are likely to have anxiety (Yang, 2001). The social learning theory (Bandura, 1978) shows that the media affects people’s view for physical appearance, and that personalized products represent one’s achievement. Female college students who have a view for physical appearance are likely to have security anxiety. However, female college students do not have time to search for fashion information, so they will not have security anxiety. The study proposes that:

$H_2$: Vanity traits are positively related to fashion anxiety.

**METHODOLOGY**

**Sample and method of sampling**

The sample was taken from female, first and second year university students. A two-stage approach of convenience sampling was used to gather information. First, one university each was chosen from northern and Southern Taiwan as the study population. Second, one department was chosen from each university. The valid rate of questionnaires was 59.1%. The majority of the respondents were between the ages of 19 to 22. Most of them studied business and were first year students. They all attended school during the day. Their average monthly income was less than 5,000 NTD (about 151 USD), and was supplied by their parents. The monthly income of their family ranged between 30,000 NTD (about 900 USD) and 50,000 NTD (about 1,515 USD).

**Measure**

The pretest was done by giving a questionnaire to 93 students. The result of the pretest determined the validity and reliability of the questionnaire. The scale of vanity traits was based on the vanity trait scale from Netemeyer et al. (1995). There were ten questions for the view for physical appearance and the view for achievement. Materialism was based on the scale of materialism from Richins and Dawson (1992) edited by Huang et al. (2003) and consisted of 16 questions including: Acquisition centrality and possession-defined success. Fashion anxiety was based on fashion anxiety from Yang (2001). There were 19 questions including four scales: Interpersonal anxiety, information anxiety, security anxiety and money anxiety. All scales used a Likert-type 5-point scale ranging from 5-strongly agrees to 1-strongly disagree.

**RESULT AND DISCUSSION**

**Reliability and validity**

Cronbach’s $\alpha$ was 0.81 for vanity traits, 0.78 for materialism and 0.90 for fashion anxiety, indicating that the questionnaire had good validity. Even though this scale had been tested in Taiwan, a confirmation factor analysis was done to test the appropriateness for all variables. The results are shown in Table 1. All GFI and AGFI values were greater than .9, and the RMR were below .05 and $\chi^2$/df values were not significant and $\chi^2$/df were less than 3. Thus, it can be concluded that the model fit is acceptable for testing the hypothesized relationship.

Table 2 shows that correlation among relationship between vanity, materialism and fashion anxiety. The results reveal a significant positive relationship between vanity trait, materialism and fashion anxiety. Vanity traits have significant positive relationship with materialism.
### Table 1. Confirmatory factor analysis of vanity traits and perceived price.

<table>
<thead>
<tr>
<th>Factor</th>
<th>GFI</th>
<th>AGFI</th>
<th>RMR</th>
<th>$\chi^2$</th>
<th>$p$-Value</th>
<th>Cronbach’s $\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanity traits</td>
<td>0.99</td>
<td>0.97</td>
<td>0.03</td>
<td>27.48</td>
<td>0.02</td>
<td>0.81</td>
</tr>
<tr>
<td>Materialism</td>
<td>0.99</td>
<td>0.96</td>
<td>0.04</td>
<td>41.03</td>
<td>0.00</td>
<td>0.78</td>
</tr>
<tr>
<td>Fashion anxiety</td>
<td>0.99</td>
<td>0.97</td>
<td>0.03</td>
<td>77.75</td>
<td>0.48</td>
<td>0.90</td>
</tr>
</tbody>
</table>

### Table 2. Results of correlation analysis.

<table>
<thead>
<tr>
<th></th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>1.00000</td>
<td>0.36319 (&lt;0.0001)</td>
<td>0.35172 (&lt;0.0001)</td>
</tr>
<tr>
<td>F2</td>
<td>0.36319 (&lt;0.0001)</td>
<td>1.00000</td>
<td>0.59151 (&lt;0.0001)</td>
</tr>
<tr>
<td>F3</td>
<td>0.35172 (&lt;0.0001)</td>
<td>0.59151 (&lt;0.0001)</td>
<td>1.00000</td>
</tr>
</tbody>
</table>

$F_1$: Vanity traits; $F_2$: Materialism; $F_3$: Fashion anxiety.

### Table 3. The results of hypotheses testing.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Relationship</th>
<th>Testing value</th>
<th>$t$-Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_1$: Vanity traits, materialism</td>
<td>+</td>
<td>$\gamma = 0.51^{***}$</td>
<td>4.54</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H_2$: Materialism, fashion anxiety</td>
<td>+</td>
<td>$\gamma = 0.90^{***}$</td>
<td>3.25</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H_3$: Vanity traits, fashion anxiety</td>
<td>+</td>
<td>$\gamma = 0.10$</td>
<td>0.71</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

$^{***}$ signifies $p < 0.001$.

The materialism has significant positive relationship with fashion anxiety.

### Hypotheses testing

This study tested the relationship among vanity traits, materialism and fashion anxiety. The overall model was tested through Lisrel of SAS Calis. The result showed that GFI = 0.99, AGFI = 0.98, RMR = 0.02, $\chi^2$ (245) = 88.74, $p<0.01$, $\chi^2$/df = 0.36 $< 3$. Table 3 shows the results of hypotheses testing on vanity traits, materialism and fashion anxiety. Vanity traits is positively related to materialism ($\gamma = 0.51$, $t = 4.54$) so $H_1$ is supported. Moreover, materialism is positively related to fashion anxiety ($\gamma = 0.90$, $t = 3.25$) so $H_2$ is supported. However, vanity traits are not significant related to fashion anxiety ($\gamma = 0.10$, $t = 0.71$) so $H_3$ is rejected.

### DISCUSSION

Figure 1 shows a linear structure model which provides some important findings. First, female students with vanity traits are likely to have materialism. Second, materialism brings up fashion anxiety. Third, materialism mediates between vanity traits and fashion anxiety.

### CONCLUSION AND IMPLICATIONS

This research used a convenience sample to collect data
and to suggest that the reliability and validity for vanity trait, materialism and that fashion anxiety can be used in different countries as a reference for researchers. The SEM model can build a relation among vanity trait, materialism and fashion anxiety and ensure that there are some impacts among the three factors. The study found that materialism mediates between vanity traits and fashion anxiety.

In the market place, marketers have to watch for what consumers demand and try and satisfy their customers’ needs in order to make a profit. Competitors shorten the life cycle of new products, with the result that fashion trends are always changing. Therefore, market segmentation must focus on small niches, and marketers must search for customers who have different needs. Based on the aforementioned, the sub-construct for vanity trait, materialism and fashion anxiety can be given to different industrial manufacturers as a market segmentation variable since different segmentations are given different marketing strategies. Understanding the cause and effect of vanity trait, materialism and fashion anxiety will help social workers, consumer educators and entrepreneurs to study the causes of fashion anxiety among female college students.

This study contains some limitations relating to data collection and interpretation. First, as the scope of present study is limited to female students in Taiwan universities, future research should be conducted with pools from male students, which might reflect broader demographical characteristics; such a study would add additional credibility to the findings. It would be interesting to expand the study across national borders and compare universities in different countries. Future research should consider other vanity related variables to determine if the variables can predict fashion anxiety and materialism.

REFERENCES

