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Presenting a Model to Explain the Intention of Purchasing Pirated VCDs/DVDs

Afshin Salahian, PhD
Department of Psychology
Payame Noor University (PNU)

Purchasing pirated VCDs/DVDs is a serious and prevalent problem that imposes heavy costs on producer companies in many developing countries, particularly in Iran. The purpose of this research was to propose and test a model that determined the predictors of consumer attitudes and behavioral intentions toward pirated VCDs/DVDs. A research model was established by extending a model used by Wang and et *al* (2005). Survey sample was 343 students and the Structural Equation Modeling technique was used to test the hypothesized relationships. The main contribution of this paper is to show that consumer intentions to buy pirated products are dependent on the attitudes they have toward them which in turn is further influenced by social influence, unethical behavior, and novelty seeking. This paper reinforces the mediator role of attitude in the relationship between these antecedents and behavioral intentions, and confirms that purchasing these products is an unethical behavior. This research informs policy makers and managers about the main predictors of consumer attitudes toward pirated VCDs/DVDs and helps them provide anti-pirated strategies.

***Keywords**:* unethical behavior, consumer, behavior, pirated VCDs/DVDs, intention, purchasing.

Purchasing pirated VCDs/DVDs is a serious and prevalent problem that imposes heavy costs on producers and companies in many developing countries, particularly in Iran. It presents a serious threat to the distribution of legal and original copies, by competing and blocking access of consumers. Usually, consumers are aware during the shopping process that the

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product is pirated (McDonald & Roberts, 1994). Still, they purchase pirated VCDs/DVDs for various reasons. Understanding the influencing factors in consumers' purchase process is an important factor in the design of anti-piracy education and strategies. Surprisingly, insufficient research has been dedicated to understanding this problem, especially from the consumers' perspective. Indeed, to design VCDs/DVDs protection strategies, analyzing VCDs/DVDs piracy from the demand side is necessary (Bloch, Bush and Campbell, 1993; McDonald and Roberts, 1994).Until this time, there hasn't been any research conducted to understand Iranian consumer attitudes and purchasing intention toward VCDs/DVDs piracy. But, some research has been conducted in Asian countries, such as Singapore and Hong Kong. Moores and Dhillon (2000) conducted research in Hong Kong, studying shopper's intention towards purchasing pirated software in various scenarios, and found that lowering the cost of legitimate software may reduce the purchasing of pirated software. Thong and Yap (1998) tested an ethical decision-making theory through a study on entry-level information system (IS) professionals in Singapore, and found that intention to copy software for personal use is determined primarily by ethical judgments. Swinyard *et al.* (1990) conducted research to compare the software piracy morality of students in Singapore and the USA, and discovered differences in moral values between the two groups, as the US group was more influenced by the legality of the copying and the Singaporeans focused on the impact of outcomes. Ang *et al.* (2001) published an important research in the examination of non-financial factors in consumers in purchasing pirated products, based on the theory of planned behavior (TPB). The theory of planned behavior (TPB) contends that a behavioral intention, such as purchase/use intention, is basically determined

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by a consumer's purchasing/use attitude, subjective norms, and perceived behavioral control (Ajzen, 1985, 1991).

In other words, Ang *et al.* (2001) proposed a model that social and personality factors predict attitude toward pirated products. While the results of these researches help to understand the causes of this problem, to clarify the main predictors and present a model, more research needs to be conducted in different situations and countries. Thus, conducting standalone research on Iranian consumers is valuable, because in Iran there is a special condition and culture; for example, copyright laws aren't executed as well as in western countries. This matter has caused the accessibility of pirated VCDs/DVDs for consumers, easily. In fact, in Iran everybody can buy these products from shops, marketplaces and vendors. Moreover, based on Hofstede's study (1984), Iran, among 53 countries, has a middle ranking in five cultural dimensions.

To identify cultural dimensions, Hofstede (1984) collected data from a large multinational corporation (IBM), and analyzed data collected from forty different countries. In addition, he identified four work-related cultural dimensions, including power distance uncertainty avoidance, individualism, and masculinity. So, according to the Hofstede study (1984), Iran ranked among 53 countries, in power distance, individualism-collectivism, masculinity-femininity, and uncertainty avoidance dimensions, 29, 24, 35, and 31, respectively.

Accordingly, a problem that appears based on Hofstede's study is in interpreting the culture of countries such as Iran with middle location in his proposed dimensions. This problem will be larger when we want to predict behavior and intention. Moreover, his data was collected 30 years ago and has become dated. These findings indicated a static image of Iranian culture and could not clarify the effects of culture on behavior. So, to

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propose a model, this paper examined the effects of social influence and personality characteristics on purchasing intentions in Iran. In fact, this research had three purposes. First purpose was to test the Wang et al. (2005) model in a different market to understand purchasing intentions, because Iranian consumers are different from Singaporeans and Chinese based on Hofstede's study (1984); and VCDs/DVDs may also differ from purchasing music CDs, because these products are more general in various field. second purpose was to extend and refine the Wang *et al.* (2005) model by adding one more construct (unethical behavior).third purpose was to test the fitness of models because the previous models from Ang *et al*. (2001) and then Wang *et al*. (2005) didn't fit indices. Therefore, we used Amos software to test model by three categories of fit indices. Therefore, this research will explain the main predictors of attitude toward pirated products and purchasing intentions in proposed model, below:

Unethical behavior

In management and psychology literature, researchers have examined many constructs, such as unethical behavior (e.g., Jones and Kavanagh, 1996; Trevino and Youngblood, 1990), theft (Greenberg, 1993, 2002), cyber-loafing (Lim, 2002), workplace deviance (Robinson and Bennett, 1995), and etc. In consumer behavior literature, some research showed that behavior of purchasing is an ethical dilemma. For example, Thong and Yap (1998) proposed that consumer behavior is related to ethical judgments. The consumer's respect for lawfulness and behavior might explain how much engagement he/she will have in buying counterfeits. Since software piracy is illegal, the decision to commit illegal copying or use pirated software will pose a certain ethical dilemma to the consumers.

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Thus, moral issues should be considered in such unethical behavior research. Research showed that the consumer's willingness to purchase counterfeit products is negatively related to attitudes toward lawfulness (Cordell et al., 1996). In this sense, those consumers who have lower ethical standards are expected to feel less guilty when buying a counterfeit product (Ang et al., 2001). Chen et al (2009) indicated that the antecedent constructs proposed in thetheory of planned behavior (TPB) ‘an individual’s attitude and subjective normstoward using pirated software, and perceived behavioralcontrol to use pirated software’ indeed have positiveimpacts on the consumer’s intentionof pirated software and joint moderating effect of moral intensity and moral judgment is manifested in the consumer’s intention. Maldonado and Hume (2005) proposed a model that consumer ethics is one of the predictors of attitude toward piracy and predicts purchasing intention.

On the other hand, Eisend and Schuchert-Guler (2006) provide a review of a large body of empirical work that follows. They point out the lack of a general qualitative framework that can integrate the existing results consistently and build a cognitive-dissonance model to explain the counterfeit purchasing process based on Festinger’s theory. The central proposition of Festinger’s theory is that if a person holds two cognitions that are inconsistent with one another, he will experience the pressure of an aversive motivational state called cognitive dissonance: a pressure which he will seek to remove, among other ways, by altering one of the two dissonant cognitions (Bem, 1967). Despite Festinger’s theory, as mentioned above. (Concern with cognitions), which are internal phenomena; Bem (1967) proposed that people are often unsure of their own attitudes, feeling and motives. To discover these, as the name of the ‘self-perception theory’ suggests, people simply

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watch or monitor their own behavior and then infer, after the fact, what their attitudes and feelings must be given the overall context in which their behavior occurred. In fact, if people have been ambivalent about their attitudes or beliefs, by observing their behavior, their attitudes can be deducted. This process is called 'self-referenced' or 'self judgment'. So, we supposed that unethical behavior could predict attitude toward pirated products.

In this research, we will focus, specifically, on only a few selected, intentional unethical behaviors in the college that are related to some of the scandals and corruptions reported in the college environment. Data was collected by paper-and-pencil survey because it is very difficult to observe people's unethical behaviors that are done mostly in privacy. People are more willing to provide accurate information answering an anonymous paper-and-pencil survey or computer-administered questionnaire than in a face to face interview (Richman et al., 1999). So, based on Bem's theory and literature that was mentioned above it is expected that:

H1. A consumer who has more unethical behaviors has more positive attitudes toward pirated VCDs/DVDs.

Social Influence

Bearden et al. (1989) argued that consumer susceptibility to interpersonal influence constitutes a stable trait that varies across individuals and is related to other traits and characteristics. In order to measure these inter-individual differences, Bearden et al. (1989) developed a scale that consisted of two separate dimensions: namely, susceptibility to normative influence and susceptibility to informative influence. Consumer susceptibility to interpersonal influence is assumed to be a general trait that exists to varying degrees in different

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individuals. This construct is derived from McGuire's (1968) concept of influenceability and is consistent with early research demonstrating that individuals differ in their response to social influence (Allen, 1965, Asch, 1958; Cox and Bauer, 1964; Janis, 1954; Kelman, 1961). Interpersonal influence has been conceptualized as being either informational or normative: informational influence is defined as the tendency to accept information from others as evidence about reality (Deutsch and Gerard, 1955). Distinguishing between these two kinds of influence is important since they operate through different cognitive processes. Normative influence occurs through compliance and identification processes. Here, individuals are influenced by a social group because they want to obtain certain rewards and enhance their self-concept by associating themselves with a positively evaluated group (Wooten & Reed, 1998). Research building on the work of Bearden et al. (1989) has mainly focused on the scale's normative dimension. Consumers high in normative susceptibility have been shown to prefer products with visible social benefits such as style (Batra, Homer, & Kahle, 2001) to be less skeptical of advertising (Mangleburg & Bristol, 1998) and are more likely to engage in protective self presentation in consumption situations (Wooten & Reed, 2004). Informative susceptibility refers to an individual's tendency to ask friends and relatives for advice and to observe what brands and products other people are using before making a purchase decision (Bearden et al., 1989). In fact, informational influence occurs through a process of internalization.

Consumers who knowingly purchase counterfeits may have favorable attitudes toward pirated goods. They buy such products just for the sake of owning certain goods; the ownership of which makes them belong to a certain social

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status, because they are unwilling to pay the price for genuine items (Wee *et al*., 1996). Ang et al (2001) suggest that intention to buy pirated products is driven by social influence. Nancy (1999) states that people are most likely to engage in illicit behavior if there is peer pressure to do so. Lin et al (1999) indicated that both executives and colleagues play an important role in influencing information system professionals to commit this crime. So, friends and families may act as inhibitors or contributors to purchasing, depending on how much this behavior is confirmed by them. Hence, it is expected that:

H2. There is a significant relationship between social influence and attitudes toward pirated VCDs/DVDs.

Value consciousness

Previous studies identified that financial values are one of the most important reasons for purchasing pirated products (Cheng *et al*., 1997; Moores and Dhillon 2000; Thraphgan and Griffith, 1998; Wee *et al*., 1995). Value consciousness is defined as a concern for paying lower prices, subject to some quality limitations (Ang et al., 2001). As pirated VCDs/DVDs have similar functions to the legal version but with a lower price, consumers who are conscious about values of products may have positive attitudes toward pirated VCDs/DVDs. In fact, previous studies have shown that price difference is an important variable when choosing a pirated product (Cespedes *et al*., 1988; Cordell *et al*., 1996). Shaari and Halim (2006) indicated that value consciousness has a positive significant effect on the percentage of the purchase of pirated VCDs. Nancy (1999) found that willingness to buy is negatively associated with the selling price of the counterfeits goods. In addition, evidence has shown that when a counterfeit product has a distinct price advantage over a genuine product, consumers will

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select the counterfeit product. So, it is expected that:

H3. A consumer to whom financial value is more important has more positive attitudes toward VCDs/DVDs piracy.

Novelty seeking

Cloninger's research (1994) found that temperament has four biological dimensions: novelty seeking, harm avoidance, reward dependence, and persistence. Novelty seeking, or behavioral activation, is the heritable tendency toward exhilaration in response to novel products or cues that have previously been associated with pleasure. In other words, it involves the activation of behavior in response to pleasurable stimuli (Cloninger, 1994). Therefore, when focusing on the novelty of pirated VCDs/DVDs, we expected that:

H4. A consumer who has more novelty seeking features has a more positive attitude toward pirated VCDs/DVDs.

Attitude and Behavioral Intentions

Attitude is "a learned predisposition to behave in a favorable or unfavorable manner consistently with respect to a given object" (Schiffman and Kanuk, 1997, p. 167). According to Bagozzi et al. (2002, p. 4), the most widely accepted definition of attitude conceives of it as an evaluation, for example: "... a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Eagly and Chaiken, 1993, p. 1). Attitude is considered to be highly correlated with one's intentions, which in turn is a reasonable predictor of behavior (Ajzen and Fishbein, 1980). According to the Theory of Reasoned Action, attitude is positively correlated with behavioral intentions, which in turn is a predictor of real behavior (Ajzen and Fishbein, 1980). Indeed, research has found support for this relationship (Kim and Hunter, 1993). The link

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between attitude and behavioral intention has been extensively examined in the marketing literature. In the U.S., Kwong *et al.* (2003) studied the relationship between attitudes towards piracy and intention to buy pirated CDs using samples from some Chinese markets. Their findings reveal that a consumer's intention to buy pirated CDs is strongly affected by his/her attitude towards piracy. Marketing literature has firmly established that attitudes influence behavioral intentions (Azjen and Fishbein, 1977). So, it is expected that:

H5: Consumers with more favorable (unfavorable) attitudes toward VCD/DVD piracy will have more favorable (unfavorable) behavioral intentions toward these products.

Conceptual Model

We propose a model (Figure 1) based on the Theory of Planned Behavior (TPB) (Ajzen, 1985, 1991) and by adding a new construct, we assessed the model fit, extended the model of Wang et *al* (2005) and incorporated the model developed by Ang *et al*., (2001).

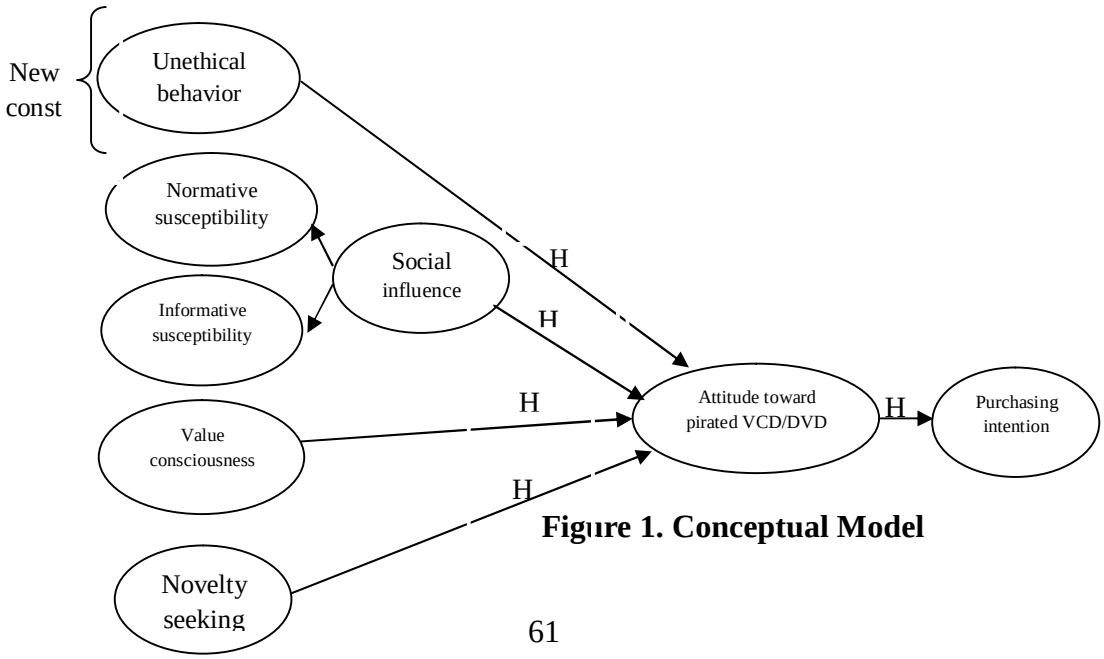


Figure 1. Conceptual Model

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Method

The statistical population was students from universities. Student samples have been used widely in research on pirated products (e.g. Cheng et al., 1997; Logsdon et al., 1994; Moores and Dhillon, 2000; Sims et al., 1996; Simpson et al., 1994; Swinyard et al., 1990; Wagner and Sanders, 2001; Wee et al., 1995). Students have low incomes, so they are an important user group for pirated VCDs/DVDs and research indicated that pirated VCDs/DVDs are prevalent in academia (Cheng et al., 1997). Moreover, university students will dominate future management positions, so their attitudes are important for understanding the future prevalence of pirated VCDs/DVDs. A total of 370 questionnaires were distributed randomly to students on university campuses and 343 questionnaires were received, with a response rate of 92 percent. Data analyzed by the structural equation modeling (SEM) technique, because it is more powerful than other methods such as multiple regression, path analysis, factor analysis, time series analysis, and analysis of covariance (Garson, 2003). SEM also allows more flexible assumptions, the ability of testing models overall rather than individual coefficients, and the ability to model error terms, and etc.

The questionnaires that were used in this research were in Persian and consisted of 5 parts. Part 1 measured the respondent's attitude toward VCD/DVD piracy; Part 2 measured social and personality factors; part 3 measured unethical behavior; part 4 measured purchasing intentions; and part 5, collected demographic information. Seven Point Likert-scales were employed in part 1-5 of the questionnaire, with 1 representing " extremely disagree" and 7 representing "extremely agree".

Unethical behavior was measured by 9 items selected and

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adapted to the college environment from the unethical behavior questionnaire that was developed by Chen and Thang (2006). One such example was " Take no action for students who steal cash/merchandise". Novelty seeking was tested by Wee *et al.* (1995) for piracy research as a variable that includes 4 items. For example, the first item of it was: "I am always one of the first to try new products". Attitude toward pirated VCDs/DVDs questionnaire consists of 10 items developed by Wang *et al*., (2005). To capture consumer attitude unbiased, of 10 attitude measures five were given as negative statements: for example, ' "purchasing pirated VCDs/DVDs is illegal". Another five items were positive statements; for example: "there is little chance of being caught when purchasing pirated VCDs/DVDs. Value consciousness was assessed by 4 items, developed by Ang *et al*., (2001): for example, the first item was, "I am concerned about price and product quality". Informative and normative susceptibility questionnaire was developed by Ang *et al*., (2001) and has 8 items. Hence, a second ordered analysis is needed (Koufteros and et al., 2009). A higher-order model can be posited and can relate the manifest variables to their respective first-order latent variables which can then be related to their second-order latent variable(s). Beyond higher-order modeling being a more elegant representation of hierarchical constructs, it can serve to decrease numerous methodological problems that challenge empirical studies. If normative and informative susceptibility, which are at the first-level of abstraction, are entered concurrently into a model that posits them as antecedents to consumer attitudes, a researcher will soon find that perhaps only one or none of these variables is statistically related to consumer attitudes. One may even find that the path coefficients may assume the opposite sign to what might be expected (Koufteros and et al., 2009). On an individual basis,

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each of these variables can have a statistically significant relationship with an endogenous variable such as consumer attitudes but when tested as a group, such effects might not be manifested. So, the second-order construct, which is now a composite of the first-order constructs, can be posited as an explanatory variable to an endogenous variable such as consumer attitudes. Moreover, employing higher-order modeling can also resolve problems with what Catell (1973) coined as ‘‘bloated specifics’’ factors. One major complication occurs when several exogenous variables can be shown to each exhibit strong effects on a dependent variable, but when all are entered simultaneously in a single structural model the effects may alleviate and/or exhibit an a sign contrary to the one expected. So, we employ 2nd ordered analysis for social influence.

Moreover, Ang *et al*., (2001), and Wang *et al*., (2005) measured purchasing intention through 4 items; we adopted this measurement and selected 3 items of the four.

Results

Distribution of demographical variables shown in Table 1: The following profile was found among the participants: 208 (60.6 percent) were female and 135 (39.4 percent) were male. In terms of education, 309 (90.1 percent) were Bachelors, 9 (2.6 percent) were M. As, and 25 (7.3 percent) were PhD students, and 319 (93 percent) were single. Mean, standard deviation (SD), relationship between variables and the reliability of each questionnaire (measured in this research by Cronbach alpha coefficients) was shown in Table 2. Nunnally (1987) also recommended that the Cronbach alpha of a scale should be greater than .7 for items to be used together as a construct. Results indicated that all measurement except value

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consciousness have acceptable reliability and were more than 0.7. Moreover, the confirmatory factor analysis method was employed.

Considering the predictors of attitude toward pirated VCDs/DVDs, significant paths were found for unethical behavior (p<.000), social influence (p< .001), novelty seeking (p<.003) that supporting H1, H2, H4, respectively. The path of attitude toward pirated VCDs/DVDs with purchasing intention was confirmed (p<.000), and supporting H5. Contrary to expectations, value consciousness (p<.118) was a non-significant antecedent, and failing to support H3.

Table 1

Sample Distribution on Demographic Variables

	Variables	Number	Percent
Gender	Female	208	60.6
	Male	135	39.4
Education	Bachelor	309	90.1
	M.A	9	2.6
	PhDs	25	7.3
Marriage	Single	319	93
	Married	24	7
Age	M=21.59	SD=1.93	

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Table 2

Descriptive Statistics, Cronbach Alpha Coefficients and Pearson Correlation between Variables

(7)PI	(6)A	(5)UB	(4)NS2	(3)NS1	(2)IS	(1)VC	variables
5.8	3.64	4.05	2.47	2.11	3.14	3.34	M
1.8	1.09	1.03	1.1	.87	.52	1.5	SD
.85	.79	.76	.78	.83	.78	.67	α
-.01	.006	-.04	.08	.144**	.09		(1)
-.05	-.07	-.06	.149**	.244**			(2)
.170**	.119**	.08	.24**				(3)
-.03	-.07	.116*					(4)
.427**	.406**						(5)
.531**							(6)

Note: VC: value consciousness; IS: informative susceptibility; NS_1: normative susceptibility; NS_2: novelty seeking; UB: unethical behavior; A: attitude toward pirated VCD/DVD; PI: purchasing intention; * $p < .05$, ** $p < .01$.

Table 3
Standardized Regression Weights: (Default model)

Paths of Default model			Estimate
Attitude toward pirated VCD/DVD	<---	Unethical behavior	.323
Attitude toward pirated VCD/DVD	<---	Value consciousness	-.08
Attitude toward pirated VCD/DVD	<---	Novelty seeking	.226
Attitude toward pirated VCD/DVD	<---	Social influence	.168
Purchasing intention	<---	Attitude toward pirated VCD/DVD	.81

Results revealed also that attitude toward pirated VCDs/DVDs are most significantly affected by the following constructs: unethical behavior (β=.323), social influence (β=.168), novelty seeking (β=.226). In this order, these variables are the most important for explaining consumer attitude toward pirated VCDs/DVDs. Moreover, unethical behavior clearly is one of the best predictors to predict attitude toward pirated VCDs/DVDs. Also, assessing the variables influencing purchasing intention, it was found that attitude toward pirated VCDs/DVDs was significant (β=.81; p< 0.000), and supporting H5. This result is interesting because it shows a mediating effect of attitude toward pirated VCDs/DVDs in the relationship between personality and social factors with purchasing intention to buy pirated VCDs/DVDs. In other words, personality and social factors influence attitude toward pirated VCDs/DVDs, which in turn influence purchasing intention. In order to test which of the exogenous constructs from Figure 1 would have a significant influence on purchasing intention, an alternative model was also tested in which constructs are modeled to influence both attitude and purchasing intention. As a result, it was found that most variables significantly affect attitudes but

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not purchasing intention (i.e. social influence, and novelty seeking). This finding can be interpreted as an indication of parsimony in the original conceptualized model and it also shows the mediating role of attitude in the relationship between the personality and social predictors and the purchasing intentions. Moreover, a summary of Fit Indices for testing the model fitness is shown in table 5. Results from maximum-likelihood (ML) method show that the fit indices (Table 5) approximate acceptable levels; χ^2/df =2.98 and Chi-square parameter was significant (p< .000). Since chi-square is sensitive to sample size, relative chi-square (x^2/df) is suggested in the measurement literature; in this research a value of 2.98 was found for the relative chi-square, which is in the acceptable level of 2 or 3 to 1 (Arbuckle, 1997).

Goodness-of-fit indices (GFIs) of the model were.911, above.9, a commonly used reference point for acceptable fit. Comparative fit indices (CFIs) and Incremental fit index (IFI) of the model were .91 and .935, above the commonly used threshold of .9. Adjusted goodness-of-fit indices (AGFIs) of models are .86, above .8, which has been suggested as an acceptable value. Root mean square errors of approximation (RMSEA) of the models were .06, below the cut off value.08.

To examine the mediation effects of attitude toward pirated VCD/DVD, bootstrapping procedure was used. Bootstrapping procedure (using 1000 re-sampling) was used to determine the 95bias-corrected confidence intervals around these effects. A confidence interval that did not span zero showed a statistically significant effect. Table 6 indicates the results for bootstrapping analysis.

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Table 4

Maximum Likelihood Estimates; Regression Weights: (Default model)

Paths of Default model			Estimate	S.E.	C.R.	P
Attitude toward pirated VCD/DVD	<---	Unethical behavior	.313	.113	2.76	.000
Attitude toward pirated VCD/DVD	<---	Value consciousness	-.281	.235	-1.19	.118
Attitude toward pirated VCD/DVD	<---	Novelty seeking	.218	.117	1.86	.003
Attitude toward pirated VCD/DVD	<---	Social influence	.221	.11	2.09	.001
Purchasing intention	<---	Attitude toward pirated VCD/DVD	.438	.069	6.34	.000

Table 5

A Summary of Fit Indices for the Structural Model

χ^2	χ^2/df	*P*	GFI	IFI	AGFI	CFI	RMSEA
285.9	2.98	.000	.911	0.915	0.86	.913	.06

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Table 6
Results of Bootstrapping Analysis with Mediator: Effects on Purchasing Intention

Paths	data	boot	Bias	SE	95% Confidence interval
1: Unethical behavior-attitude-intention	.43	.42	.0002	.031	.231,.532
2:Social influence-attitude-intention	.36	.35	.0004	.041	.339,.678
3:Value consciousness-attitude-intention	.11	.12	-.0005	.081	-.431,.132
4: Novelty seeking-attitude-intention	.34	.35	.0009	.031	.231,.532

As shown in Table 6, the four confidence intervals, with mediator (attitude toward pirated VCD/DVD) did not span zero. That indicates statistically significant mediating effect, except the third path (value consciousness-attitude-purchasing intention).

Discussion

Counterfeits have been widely spread over the world and growing rapidly in recentyears. The Internet seems to provide an efficient means for users around the world to download pirated software, program, music, film and so on, more easily than ever before. So, conduct research to clarify the predictive and causes from the demand side are valuable. This research is one of the

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first in Iran; it was conducted to understand the predictive variables of attitudes toward pirated VCDs/DVDs and purchasing intention, based on theory of planned behavior (TPB) proposed by Ajzen (1985). In addition, this research extended to a previous model (Wang *et al*., 2005) by adding a new construct (unethical behavior) and using structural equation modeling (SEM) to test the model's fit indices because the previous research such as Wang et al., (2005) hasn't fit indices.

As results showed, there is a positive relationship between unethical behavior and attitudes toward pirated VCDs/DVDs, this finding is consistent with Thong and Yap finding's (1998); they found that moral intentions to pursue 'soft lifting' (illegal copying of software for personal use) behavior is determined primarily by ethical judgments. Findings illustrated that purchasing VCDs/DVDs is determined by ethical factors, and a person who observes normative laws hasn't deception or corruption and resource abusing behavior (unethical behavior's factors) has a negative attitude toward pirated VCDs/DVDs. Of course, these findings are different from the findings of some studies (Logsdon *et al*., 1994; Simpson *et al*., 1994) and confirming Chen and et al (2009) findings. Positive relationships between attitudes toward pirated VCDs/DVDs and unethical behaviors result in another explanation that shows consistency between attitudes and behaviors of students. This finding is consistent with Bem's theory; in fact, students who have unethical behaviors in their behavioral treasury have positive attitudes toward illegal behavior, such as purchasing pirated VCDs/DVDs. Generally, people value consistency in their attitudes and behavior; they seek to avoid tension and contradiction, and change their attitudes to be consistent with their behavior. This was confirmed in this research.

Another path that tested was the relationships between social

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influence and attitudes toward pirated VCDs/DVDs. Consumers who knowingly purchase pirated products may have favorable or positive attitudes toward pirated goods. They buy pirated products just for the sake of owning certain goods. This ownership makes them belong to a certain social status, and act according to the existing information because they are unwilling to pay the price for genuine items. This hypothesis was confirmed in our research and it confirmed the Ang *et al*., (2001), Nancy (1999), Lin et al (1999), and Shaari & Halim (2006) findings. Indeed, statistical samples of this research (college students) normatively and informatively accepted the pirated VCDs/DVDs and ignored copyright laws. A problem that can be shown in the Wang *et al,* (2005) study due to the use the the regression method is not significant in the relationship between informative susceptibility and attitudes toward piracy: just normative susceptibility was significant. Informative and normative susceptibility are two forms of social influence. Hence, 2nd ordered analysis is needed (Koufteros and et al., 2009) and it can serve to alleviate numerous methodological problems that challenge empirical studies. If normative and informative susceptibility, which are at the first-level of abstraction, are entered concurrently into a model that posits them as antecedents to consumer attitudes, a researcher will soon find that perhaps only one or none of these variables is statistically related to consumer attitudes(Wang *et al.,* 2005). Moreover, employing higher-order modeling can also resolve other problems that were mentioned in the method part. Inasmuch, 2nd ordered analysis was employed in this study; both forms of social influence were in the final model.

Literature indicated that VCD/DVD piracy isn't legal or ethical and doesn't have a positive social image. Therefore, consumers with higher susceptibility to social influence may

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have negative attitudes toward such products. But our findings showed that there is a positive relationship between attitudes toward pirated VCDs/DVDs and social influence. It means despite the findings of Wang *et al.,* (2005), in Iran there is positive information and confirmations about pirated VCDs/DVDs by reference groups that can be caused by the lack of genuine VCDs/DVDs, accessibility of pirated VCDs/DVDs, cultural factors, ethical standards, and etc. Of course, intercultural study needs to examine these differences to illustrate the causes of this phenomenon in the next study. Moreover, despite the Moores & Dhillon (2000), Ang *et al*., (2001), and Wang *et al*., (2005); Matos, et al., (2007) findings, in this research we proposed that lowering the cost of legitimate VCDs/DVDs may not effectively reduce the purchasing of such products, because the relationship between attitudes toward pirated VCDs/DVDs and value consciousness wasn't significant. It seems in Iran, the lack of original VCDs/DVDs in marketplaces is due to the legal restrictions and lack of their accessibility and distributions. There isn't any competition between original and pirated VCDs/DVDs. Meanwhile, lack of competitions and availability of pirated VCDs/DVDs in marketplaces and the Internet result in situations in which price and value consciousness isn't significant for Iranian consumers. In fact, we proposed that with the lack of sufficient competition, value consciousness isn't important for consumers. Another variable that predicted the attitudes toward pirated VCDs/DVDs was novelty seeking. This was consistent with the Wang *et al*. (2005) findings. In light of the definition of novelty seeking as behavioral activation and the heritable tendency toward exhilaration in response to novel stimuli or cues and the abundance and variety of pirated VCDs/DVDs, this finding seems logical. In other words, our findings indicated that a

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person who has a novelty seeking temperament has positive attitudes toward pirated VCDs/DVDs and a high intention to purchase them. Particularly, in Iran due to the accessibility of pirated VCDs/DVDs in marketplaces, the Internet and informal networks, these products can be provided by consumers, and thus satisfy their novelty seeking temperament.

Moreover, our finding indicated that there is a positive relationship between positive attitudes toward pirated VCDs/DVDs and purchasing intention. This finding is consistent with previous studies such as Ajzen and Fishbein (1980); Kwong *et al*., (2003); Wang *et al*., (2005). So, based on our study and previous studies, if we want to change the purchasing intention, we should focus on the attitudes of consumers.

Generally, our study indicated that attitudes toward pirated VCDs/DVDs are predicted by personality and social factors, and purchasing intention is predicted by attitudes. This research is a cross-sectional study; a longitudinal study would have to be conducted to discover changes in the factors that influence consumer purchase behavior in relation to pirated VCDs/DVDs. Moreover, we recommend researchers to clarify cultural factors and conduct intercultural study between different countries.Summarizing the findings and limitations of this research, we suggest a new model to be tested in future research.

Managerial Implications

To achieve success in anti-piracy in Iran, companies need to hold a comprehensive view of Iranian consumers. Our findings indicated that consumers need to be instructed about copyright laws and the social consequences of purchasing pirated products to change their attitudes. Consumers should be persuaded that purchasing pirated VCDs/DVDs is illegal behavior that imposes huge losses on producers. In fact, changing behavior and attitude

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is possible by changing normative susceptibility, with television instructions, and etc. Therefore, in order to reduce consumers' use intention of pirated software, it is important for the government authorities concerned and software industries to reinforce moral education to influence individuals' moral intensity and moral judgment. So, to reduce the purchasing of such products, managers should focus on instruction in ethical anti-piracy education and strategies domains. Moreover, to achieve success in Iran, companies must extend the range of distribution and availability of genuine VCDs/DVDs. This strategy can provide new products and satisfy the novelty seeking temperament of consumers.

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